



# **OCCUPATIONAL STRUCTURE**

## **OIL, GAS AND PETROCHEMICAL INDUSTRY**





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JABATAN PEMBANGUNAN KEMAHIRAN  
KEMENTERIAN SUMBER MANUSIA

Department of Skills Development  
Ministry of Human Resources, Malaysia



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## 1. EXECUTIVE SUMMARY

The petroleum and petrochemicals industry is one of the leading industries in Malaysia. Presently, Malaysia is a major exporter of petrochemical products within the ASEAN region, exporting both commodity grade polymers, as well as petrochemical derivatives. In early 1970s, oil and gas were discovered in the offshore of Malaysia. They rapidly grow to become our main exports nowadays.

As one of the nation's main commodities, oil and gas a very strong impact on the Malaysian economy. As a sector however, it is not spared global price volatility, regulatory changes, competitive market forces and the challenges of opening new exploration areas. This sector covers the many segments in the petroleum and natural gas industry, from upstream areas like exploration, drilling, production and services through transportation, and downstream areas including refining, wholesale, and retail marketing.

A wide range of petrochemicals are produced in Malaysia, such as olefins, polyolefin, aromatics, ethylene oxides, glycols, oxo-alcohols, exthoxylates, acrylic acids, phthalic anhydride, acetic acid, styrene monomer, polystyrene, ethylbenzene, vinyl chloride monomer, and polyvinyl chloride. Overall Malaysian investments in the industry amounted to RM34.8 billion (63%) (*as at 2009*), with PETRONAS being the major investor. Foreign investments, mainly from the USA and Germany, accounted for 36.7% of the total investments in the industry. The rapid growth Malaysian-German Chamber of Commerce & Industry, Market Watch 2009 – The Petrochemical Sector of the industry is mainly attributed to the availability of oil and gas as feedstock, a well developed infrastructure, a strong base of supporting services, and the country's cost competitiveness, as well as Malaysia's strategic location within ASEAN and its close proximity to major markets in the Far East. The long term reliability and security of gas supply ensures the sustainable development of the country's petrochemical industry.



Mining in a wider sense comprises extraction of any non-renewable resource, therefore including oil and gas and minerals. The oil and gas industry is one of the major contributors to Malaysian economy. The oil and gas industry by itself is large and comprises upstream and downstream activities. This Occupational Analysis is an analysis conducted for the Oil, Gas and Petrochemical industry to identify the current and future requirement for skilled worker needed to help developing and lowering dependency from foreign expertise in this sector.

To sustain the competitiveness of the Malaysian petrochemical industry, value integration through inter-plant synergies is promoted. The development of petrochemical zones where petrochemical plants are clustered together has created a value chain, which ensures the progressive development of downstream petrochemicals activities.

Needs of the workforce require a comprehensive development of all sectors including the education and skills training as well as input from industry. Support from all quarters, especially from the government is essential to ensure that the needs of workers in this field will always be enough.

## **2. CONCEPT AND STRUCTURE OF THE MALAYSIAN OCCUPATIONAL SKILLS QUALIFICATION FRAMEWORK (MOSQF)**

### **2.1 Objectives of the Malaysian Occupational Skills Qualification Framework (MOSQF)**

- i) Skills Qualification Framework of Occupations (MOSQF) is a framework that unites the skills and qualifications linked to the country and overseas.
- ii) MOSQF develops instruments and classifies qualifications based on a set of criteria agreed at the national level and is benchmarked with international practice and explains the level of learning, standards-based learning outcomes. These criteria are accepted and adopted for all skills training institutions recognised by the Department of Skill Development (DSD).
- iii) MOSQF also provides access to education for individuals who want to improve themselves through Recognition of Prior Achievement (RPA) obtained from formal education, non formal and informal, regardless of the time and place in the context of Life Long Learning (LLL).

### **2.2 Benefits MOSQF**

Some of the qualifications set out in accordance with the Standard and the principles and criteria that are formulated in accordance with international and industry best practices. Thus, a reference intended MOSQF:

- i) To increase public confidence about the quality of skills and qualifications in Malaysia by providing clear information on each qualification to various parties such as individuals, parents, training institutions, employers, industry, inside and outside the country.
- ii) Unite the public and private skills training under a system of quality control. Strengthen the training system by providing clear guidelines for the design and naming program eligibility based on the Standard. MOSQF in a close relationship and in line with the requirements of the job market facilitates the development of relevant skills training.

- iii) Providing a clear career path, this allows individuals to increase the level of qualifications of higher skills.
- iv) To facilitate the process of recognition and negotiation with two and multilateral recognition of skills both in and outside the country.
- v) LLL in realising the policy of providing RPA through education, training in the workplace, and self-learning or life experiences.

## **2.3 Formation and Development of MOSQF**

MOSQF is developed by benchmark key national qualifications framework of the Malaysian Qualifications Framework (MQF) and also uses the same external reference of England, Wales and Northern Ireland, Australia, New Zealand and Europe. Thus, MOSQF facilitates communication with various frames and education and training systems in major countries of the world. It also can addresses the education and training systems become more complex to ensure cooperation in education and training across the border.

MOSQF has dynamic structures that grow in accordance with priorities and rapid changes in the economy. Framework developed to foster confidence and trust among all stakeholders who use it as individuals, training providers, government, associations, professional bodies, industry, and community. MOSQF provides national training system and improves access training for all stakeholders.

## **2.4 General Principles of MOSQF**

### **1. Skill requirements definition**

Skills qualification is a certificate, diploma or advanced diploma awarded by the DSD to confirm the individual was competent in a field of standard-based employment. Given the award after meeting the certification requirements, whether through training or other methods prescribed by the DSD.



## 1. Levels of qualification

Qualification in MOSQF is divided into eight levels of skills, Malaysian Skills Certificate at Level 1-3, Malaysian Skills Diploma at Level 4, Malaysian Skills Advanced Diploma at Level 5, Malaysian Skills Higher Advanced Diploma at Level 6, Malaysian Skills Meister at Level 7, and Malaysian Skills Higher Meister at Level 8. Qualification levels are shown in Figure 2.1. The level indicates the capability and qualifications are described in Figure 2.2. Capabilities include:

- i) depth and complexity of competence and understanding;
- ii) application of knowledge and skills;
- iii) degree of autonomy and creativity in decision making;
- iv) communication skills; and
- v) breadth and sophistication of the practice.

## 2. Learning outcomes

Learning outcomes are statements that describe things competencies that individuals need to know, understand and can do after completing a training period at a certain level. Learning outcomes covering all the competencies specified in the standard according to skill level.

MOSQF emphasises three domains of learning are significant, namely:

- i) knowledge and technology;
- ii) skills and capacity building work; and
- iii) core capabilities.

Core competence is divided into four sub-domains of:

- i) skills and social responsibility
- ii) autonomy and responsibility
- iii) learning competencies
- iv) professional and vocational skills

The advantage of learning is its emphasis on individual learning and achievement, not merely how to achieve it. Thus, the method of achieving learning outcomes is not limited to formal education and training and is opened only to past achievements gained through formal education, non formal and informal.

3. Learning period

Eligibility MOSQF priority learning outcomes covering the individual must show competency after successfully completed the program. Complexity and scope of competence increased with increasing levels of qualifications. Minimum training period for each level were set and must be filled in accordance with the standard.

4. Education path for individual development

MOSQF emphasises meeting and overlapping competencies among the different skills qualifications in terms of scope and level. This is done by means of mutual recognition to meet the requirements of the award certificate or admission to a higher level.

When successfully completed a level, the individual is entitled to apply for and be considered for admission to a higher level. However, the right of admission is not automatic because the individual might need to meet additional eligibility requirements are higher as determined by the Standard or associated organisations.

In linking the qualifications, MOSQF facilitates the process and supports the individual to show all possible and probable route of learning for the advancement of the individual. MOSQF generates an alternative path that recognises the achievements of the increase individual.

The educational path of MOSQF Livelong Learning is vital because it allows individuals who have knowledge and skills acquired from their own experience and learning to be evaluated and given the opportunity to obtain a higher qualification without basic qualifications.

## 5. Implementation of MOSQF

Implementation MOSQF strengthens the quality of skills training opportunities in line with the country's industry and globalisation. Held in the principles MOSQF, all skill qualifications must meet the standards and quality assurance as determined by the DSD.

Quality assurance processes can be classified as follows:

### i) Approval of training providers and accreditation program

Training providers must be accredited by the DSD Director before implementing any training. Accreditation involves self-assessment skills training providers that followed the visit to affirm the assessment of whether the program or the eligibility of training providers have achieved the criteria specified. Assessment visit report will be considered by a committee appointed by the Director General.

### ii) Monitoring and improvement

Once the program is approved, continuous monitoring for improvements will be implemented by the DSD. The process involves monitoring quality assurance activities undertaken by the training providers, visit the External Verification Officers for verification and audit visits by officers of DSD.

### iii) Enforcement

If there are things that violate the laws, policies and regulations during the process of monitoring and improvement, it will be reported to the monitoring and enforcement under the responsibility of the Director General of DSD.



iv) Government recognition

The process of granting the status of eligibility by the Public Services Department (PSD) for the register of approved qualifications for service in government.

v) Licensing and registration expert

The process that allows qualified individuals are recognised for carrying out activities related to training and skills assessment for certification in MOSQF.

vi) Development standards

Standards development process by working practitioners and approved by a committee composed of the most competent in the areas evaluated.

**Malaysian Occupational Skills Qualification Framework In  
Malaysian Qualification Framework (MQF)**

Qualification Levels	Sector			Life Long Learning
	Skills	Vocational and Training	Higher Education	
8	Malaysian Skills Higher Meister		Doctoral Degree	Accreditation for Prior Experiential Learning (APEL)
7	Malaysian Skills Meister		Master's Degree	
			Postgraduate Certificate & Diploma	
6	Malaysian Skills Higher Advanced Diploma		Bachelor's Degree	
			Graduate Certificate & Diploma	
5	Malaysian Skills Advanced Diploma	Advanced Diploma	Advanced Diploma	
4	Malaysian Skills Diploma	Diploma	Diploma	
3	Malaysian Skills Certificate 3	Vocational & Technical Certificate	Certificate	
2	Malaysian Skills Certificate 2			
1	Malaysian Skills Certificate 1			

Figure 2.1: MOSQF – Four (4) Higher Education Sectors and Eight (8) Qualifications

*Source: MOSQ Division, Department of Skills Development*

*Date Reviewed: June 2008*

**MALAYSIA OCCUPATIONAL SKILLS QUALIFICATION FRAMEWORK  
(MOSQF)**

<b>Level</b>	<b>Level Description</b>
<b>1</b>	Achievement at this level reflects the ability to use relevant knowledge, skills and procedures to <b>complete routine and predictable tasks</b> that include responsibility for completing tasks and procedures subject to <b>direction or guidance</b>
<b>2</b>	Achievement at this level reflects the ability to select and use relevant knowledge, <b>ideas</b> , skills and procedures to <b>complete well-defined tasks and address straightforward problem</b> . It includes <b>taking responsibility</b> for completing tasks and procedures, <b>and exercising autonomy and judgment</b> subject to overall direction or guidance
<b>3</b>	Achievement at this level reflects the ability to <b>identify and use relevant understanding</b> , methods and skills to <b>complete task</b> and address problems that are well defined with a <b>measure of complexity</b> . It includes taking responsibility for initiating and completing tasks and procedures as well as exercising autonomy and judgments <b>within limited parameter</b> . It also reflects awareness of different perspectives or approaches within an area of study or work
<b>4</b>	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to address problems that are well defined but <b>complex and non-routine</b> . It includes taking responsibility for overall courses of action as well as exercising autonomy and <b>judgment within fairly broad parameters</b> . It also reflects <b>under-standing of different perspective or approaches</b> within an area of study or work
<b>5</b>	Achievement at this level reflects the ability to identify and use relevant understanding, methods and skills to address <b>broadly-defined, complex problems</b> . It includes taking responsibility for <b>planning and developing</b> courses of action as well as exercising autonomy and judgment within broad parameters. It also reflects <b>understanding of different perspectives, approaches or schools of thought and the reasoning behind them</b>
<b>6</b>	Achievement at this level reflects the ability to <b>refine</b> and use relevant understanding, methods and skills to address <b>complex problems that have limited definition</b> . It includes taking responsibility for planning and developing courses of action <b>that are able to underpin substantial change or development</b> , as well as <b>exercising broad autonomy and judgment</b> . It also reflects an understanding of different perspectives, <b>approaches of schools of thought and the theories that underpin them</b>
<b>7</b>	Achievement at this level reflects the ability to <b>reformulate</b> and use relevant understanding, methodologies and approaches to address <b>problematic situations</b> that involve many interacting factors. It includes taking responsibility for <b>planning and developing</b> courses of action that initiate or underpin substantial change or development, as well as exercising broad autonomy and judgment. It also reflects an understanding of <b>theoretical and relevant methodological perspectives, and how they affect their area of study or work</b>

Level	Level Description
8	Achievement at this level reflects the <b>ability to develop original understanding</b> and extend an area of knowledge or professional practice. It reflects the ability to address problematic situations that involve many complexes, interacting factors through initiating, designing and undertaking research, development or strategic activities. It involves the exercise of broad autonomy, judgement and leadership in sharing responsibility for the development of a field of work or knowledge, or for creating substantial professional or organisational change. It also reflects a critical understanding of relevant theoretical and methodological perspectives and how they affect the field of knowledge or work.

Figure 2.2: Malaysia Occupational Skills Qualification Framework (MOSQF)  
Levels Description

*Source: MOSQ Division, Department of Skills Development*  
*Date Reviewed: 2 April 2009*

### **3. OIL, GAS AND PETROCHEMICAL INDUSTRY IN MALAYSIA – BACKGROUND OF THE SECTOR**

#### **3.1 Preamble**

The petroleum and petrochemicals industry is one of the leading industries in Malaysia. Presently, Malaysia is a major exporter of petrochemical products within the ASEAN region, exporting both commodity grade polymers, as well as petrochemical derivatives.

During the period of the Third Industrial Master Plan (IMP3), 2006-2020, the industry will be encouraged to further develop its potential. Areas of focus include expanding its current manufacturing activities, as well as developing new products and diversifying into manufacturing-related services and facilities. These developments will assist in achieving the full integration of the industry.

Oil and gas have been the main energy sources in Malaysia. The country's gas reserves estimated to last for another 33 years and oil reserves another 19 years. Malaysia's commercial demand for energy is projected to continue its upward trend, from 1,244 Petajoule (PJ) in 2000 to an estimated 2,218 PJ in 2010. This consumption growth is mainly driven by industrialisation. Currently, the energy supply mix in the country is made up of gas (70 percent), coal (22 percent), oil (2 percent) and hydro power (6 percent) (*as at 2010*).

#### **3.2 Scope of Analysis**

Oil and gas sector is a large sector involves various activities. In addition, the industrial sector is also getting a lot of support to complement the operation and production of crude oil and gas. The scope of the analysis that has been conducted and presented in this document is the main scope of work defined in the oil and gas sector. It covers the activities of Upstream or Exploration and Production (E&P) and Downstream. In addition, the scope of this analysis also contains an analysis of employment in the petrochemical field, but only held up until to the production of raw materials on petrochemical only.



### 3.3 Definition of the Oil and Gas Sector

The petroleum industry includes the global processes of exploration, extraction, refining, transporting (often by oil tankers and pipelines), and marketing petroleum products. The largest volume products of the industry are fuel oil and gasoline (petrol). Petroleum is also the raw material for many chemical products, including pharmaceuticals, solvents, fertilisers, pesticides, and plastics. The industry is usually divided into two major components; upstream and downstream.

Oil and Gas industry is a total process of refining business starts at the oil field or gas field and runs all the way to the sending of processed hydrocarbon to a final user.

**Upstream** applies to the operation of exploration, drilling, hydrocarbon production, and transmission via truck, rail or ship or pipe line to the refinery intake valve. The upstream is sometimes known as the exploration and production (E&P) sector.

**Downstream** includes all work done at the refinery, distillation, cracking, reforming, blending storage, mixing, and shipping.

**Petroleum** is a naturally occurring liquid found in rock formations. It consists of a complex mixture of hydrocarbons of various molecular weights, plus other organic compounds. It is generally accepted that oil, like other fossil fuels, formed from the fossilised remains of dead plants and animals by exposure to heat and pressure in the earth's crust over hundreds of millions of years. Over time, the decayed residue was covered by layers of mud and silt, sinking further down into the earth's crust and preserved there between hot and pressured layers, gradually transforming into oil reservoirs.

**Petrochemicals** are chemical products derived from petroleum. Some chemical compounds made from petroleum are also obtained from other fossil fuels such as coal or natural gas.



**Natural gas** is a gas consisting primarily of ethane and methane. It is found associated with other fossil fuels, in coal beds, as methane clathrates, and is created by methanogenic organisms in marshes, bogs, and landfills. It is an important fuel source, a major feedstock for fertilisers, and a potent greenhouse gas. Natural gas is often informally referred to as simply gas, especially when compared to other energy sources such as oil or coal.

### 3.4 Current Analysis of the Oil, Gas and Petrochemical Industry

The six gas processing plants located in Kertih, Terengganu ensure the industry sufficient supply of petrochemical feedstock's while Malaysia's Peninsular Gas Utilisation (PGU) trans-peninsular gas transmission pipeline channels gas to industries around the country. The following exhibit shows the locations of Oil Refineries in Malaysia.

#### Location of Oil Refineries in Malaysia

Oil Refineries	Location
Petronas Penapisan (Terengganu) Sdn Bhd	Kertih, Terengganu
Petronas Penapisan (Melaka) Sdn Bhd	Tangga Batu, Melaka
Malaysia Refining Company Sdn Bhd	Tangga Batu, Melaka
Shell Refining Company (FOM) Bhd	Port Dickson, Negeri Sembilan
Esso (Malaysia) Bhd	Port Dickson, Negeri Sembilan

*Source: Malaysian Industrial Development Authority (MIDA)*

The total capacity of the five (5) refineries and one (1) gas-to-liquid plant in operation is 635,000 barrels of crude oil per day. The refineries supply mainly to the domestic market. The total investment in these projects amounted to RM6.9 billion of which 87% is domestic investment. The investors are PETRONAS, Shell, Esso, and Conoco (as at 2006).

#### Petrochemical Zones

Development of the industry is concentrated mainly in dedicated petrochemical areas throughout Malaysia. These areas are developed as petrochemical areas due to the availability of feedstock for the industry such as natural gas, petroleum and access to ports and other infrastructure facilities as most of the products are for export market.

Petrochemical zones in Malaysia are:-

- i) Gebeng Industrial Area
- ii) Kertih Industrial Area (Kertih Integrated Petroleum Complex (KIPC))
- iii) Pasir Gudang/Tg. Langsat Industrial Area

These areas are equipped with supporting services and industries catering to the specific needs of the petrochemical industry.

Major petrochemical multinationals that have invested in the industry include Dow Chemicals, Conoco Phillips, BP, BASF, Toray, Kaneka, Idemitsu, Polyplastics, Titan, Mitsubishi, Mitsui, Eastman Chemical, Shell, ExxonMobil and etc.

Natural gas is mainly used for the production of liquefied natural gas (LNG), power generation and as feedstock to the petrochemical industry. Malaysia is currently the third largest producer of LNG in the world after Algeria and Indonesia with a capacity of 23 million mtpa. The Bintulu complex in Sarawak consists of three LNG plants with a total investment of RM13 billion. It is the single largest site for LNG in the world. Eighty (80) per cent of the investment is owned by PETRONAS and the Sarawak State Government. Foreign investors involved in these projects are Shell, Mitsubishi and Nippon Oil LNG. The entire LNG production is exported, mainly to Japan, South Korea and Taiwan. Currently, the Bintulu complex also produces 450,000 mtpa of LPG, also mainly for the export market.

### **3.5 Policies and Development Plan For Oil, Gas and Petrochemical Industry**

#### **1. Policies**

- (a) Environmental Impact Assessment Order 1987 (EIA)

Environmental Quality Act of 1974

An environmental impact assessment is required for oil and gas lease areas that are more than 250 hectares.

- (b) Petroleum Development Act 1974

An Act to make provision for exploring and petroleum exploitation in either the coastal or offshore by a corporation which will be vested in the ownership and the rights, powers, liberties and privileges exclusive with respect to petroleum, and to control carrying out activities relating to the use and development with petroleum and products, to make provision the establishment of a corporation under the Companies Act 1965 [Act 125] or under the law relating to the incorporation of the company and the power of the Corporation it, and to provide for related matters or incidental thereto.

- (c) Mineral Development Act 525 of 1994

This Act defines the powers of the Federal Government for inspection and regulation of mineral exploration and oil and gas and other related issues.

- (d) The Occupational Safety and Health Act 1994 (Act 514)

The Occupational Safety and Health Act 1994 (Act 514) is a piece of Malaysian legislation which has been gazetted on the 25 February 1994 by the Malaysian Parliament. The principle of the Act is "To make further provision for securing that safety, health and welfare of persons at work, for protecting others against risks to safety or health in connection with the activities of persons at work, to establish the National Council for Occupational Safety and Health and for matters connected therewith".

The Act applies throughout Malaysia to the industries specified in the First Schedule, nothing in this act shall apply to work

aboard ships governed by the Merchant Shipping Ordinance 1952, the Merchant Shipping Ordinance 1960 of Sabah or Sarawak or the armed forces.

## 2. Development Plan

### The Third Industrial Malaysia Plan (IMP3)

The petroleum and petrochemicals industry is one of the leading industries in Malaysia. Presently, Malaysia is a major exporter of petrochemical products within the ASEAN region, exporting both commodity grade polymers, as well as petrochemical derivatives. Factors contributing to the development of the industry include:

- availability of resources in hydrocarbon feedstock from oil and gas;
- cumulative investments of RM55 billion in the industry, with Malaysian investments contributing RM34.8 billion, or 63.3 per cent, and foreign investments, RM20.2 billion (36.7 per cent) (*as at 2005*); and
- presence of 40 petrochemical companies in operation, with a combined capacity of 12.8 million metric tonnes per annum. As at the end of 2005, investments by these companies totalled RM31.5 billion. PETRONAS is the major domestic investor in the industry. The United States of America (USA) is the largest source of foreign investments, contributing 40.3 percent of the total foreign investments, followed by Germany (22.8 per cent) and Japan (14 per cent) (*as at 2005*)

During the period of the Third Industrial Master Plan (IMP3), 2006-2020, the industry will be encouraged to further develop its potential.

Areas of focus include expanding its current manufacturing activities, as well as developing new products and diversifying into manufacturing-related services and facilities. These developments will assist in achieving the full integration of the industry.

### 10<sup>th</sup> Malaysian Plan



- i) In the 10th Plan, the government will continue to give emphasis to the development of oil and gas industry in order to lower the dependency on foreign expertise and also to support local company and experts.

Malaysia's prime minister Datuk Seri Najib Razak unveiled the 10th Malaysia Plan in a speech at the Dewan Rakyat, illustrating Malaysia's medium-term plans to become an advanced and high-income nation. The plan also outlined the government's vision for the energy sector over the next five years.

Firstly, the plan clearly states that the government is looking towards the oil and gas sector as a key driver for future economic growth. The oil and gas sector has been designated as one of 12 National Key Economic Areas (NKEA) under the plan, with the potential to generate high income to support the government's targeted 6% annual GDP growth rate. Under the plan, operations related to exploration and production of hydrocarbons is expected to generate 43 billion ringgits (US\$13.08 billion) in 2015, according to the Economic Planning Unit (EPU). The 10th Malaysia Plan also envisages PETRONAS playing a major role in driving growth in the oil and gas sector by accelerating and optimising development of remaining reserves, which could explain the company's recent strategy adjustment towards the domestic market. PETRONAS believes it has spent too heavily on drilling dry wells in high-risk frontier areas and has now

redefined its business model to concentrate on using novel technologies to ramp up production from existing fields. With average recovery rates only around 23% in Malaysia, according to CEO Shamsul Azhar Abbas, compared to rates of over 40% in the North Sea, there is believed to be significant potential for enhancing output.

The EPU plan also indicates that PETRONAS should take measures to enhance technical and management training skills in partnership with others in the industry. PETRONAS is now actively looking to enhance relationships with IOCs, both in developing skills in enhanced oil



recovery (EOR) and in developing high-pressure and high-temperature projects in other prospective areas (see **Malaysia: 9 June 2010: ExxonMobil Plans Major EOR Project at Malaysia's Tapis Oilfield**). In view of a less-than-rosy financial performance, PETRONAS has also installed a new management structure. New vice presidents are now subject to regular performance reviews while taking greater responsibility over particular divisions of operations, which the new CEO hopes, will improve performance. The 10th Malaysia Plan also focuses on creating opportunities for local oil and gas service providers to build their expertise and capacities, which often take a prominent role in bidding for engineering contracts for new upstream projects. Being one of the largest owners and operators of LNG carriers in the world, the potential for generating income from the logistics sector has also been mentioned, which could result in additional investment in LNG tankers. The 10th Malaysia Plan envisages downstream operations contributing 39.8 billion ringgits to GDP in 2015. To achieve this goal, the government has set an annual investment target of 11.3 billion ringgits for the petrochemical sector. This indicates an expansion in petrochemical capacity going forward and in exports, which are due to hit 27.7 billion ringgits in 2015. With regards to oil and gas, a key plank of the government's 10th Malaysia Plan is strengthening supplies and improving sustainability, to be achieved through a gradual reduction in subsidies and incremental moves towards market pricing over the next five years.

#### ii) Petroleum Nasional Berhad - PETRONAS

PETRONAS, short for Petroleum Nasional Berhad, is a Malaysian owned oil and gas company that was founded on August 17, 1974. Wholly owned by the Government, the corporation is vested with the entire oil and gas resources in Malaysia and is entrusted with the responsibility of developing and adding value to these resources. PETRONAS is ranked among Fortune Global 500's largest corporations in the world. Fortune ranks PETRONAS as the 95th largest company in the world in 2008 and 80th largest in 2009. It also ranks PETRONAS as the 8th most profitable company in the world and the most profitable in Asia.

The PETRONAS Group is engaged in a wide spectrum of petroleum activities including upstream exploration and production of oil and gas to downstream oil refining; marketing and distribution of petroleum products; trading; gas processing and liquefaction; gas transmission pipeline network operations; marketing of liquefied natural gas; petrochemical manufacturing and marketing; shipping; automotive engineering; and property investment.

### **3.6 SKILLED WORKER REQUIREMENT IN THE LOCAL INDUSTRY SECTOR**

The oil, gas and petrochemical industry in Malaysia has experienced and will continue to experience for many years to come unprecedented levels of activity, with major projects requiring unprecedented numbers of skilled and specialist workers.

One of the most significant challenges for the oil, gas and petrochemical industry in Malaysia and indeed worldwide is being able to access the number of skilled and specialised workers required for these future and ongoing projects. For the oil, gas and petrochemical, which reaches into the four corners of the world and consequently has a globalised workforce, the most pressing matter is to have the right people in the right place at the right time.

### **3.7 INDUSTRIAL POSITION AT INTERNATIONAL LEVEL**

The investment in the Petroleum Industry in Malaysia stood at a very competitive value. This industry includes petroleum products, petrochemicals, and natural gas. The rapid expansion of the industry is chiefly credited to the accessibility of oil and gas as feedstock, a strong foundation of supporting services, well-developed infrastructure, and the country's strategic location within ASEAN and its closeness to the key markets in Asia Pacific.

Malaysia has the 14th largest natural gas reserves and 23rd largest crude oil reserves in the world. Last year, the country produced 5,891 million standard cubic feet of natural gas and 691,600 barrels of oil equivalent of crude oil per day. The country is also has the largest production unit at a single location of liquefied natural gas with production capacity of 23 million metric tons per year.

The long term dependability and security of gas supply guarantees the sustainable development of Malaysia's petroleum industry. The survival of

a trans-peninsular gas transmission pipeline system and six gas processing plants has effected in a ready supply of gas to the industry.

To match the present gas reserves and to ensure further security of gas supply, Malaysia has partnered with other members of ASEAN for the supply of gas. Gas supply will be further improved with the execution of the ASEAN gas grid, a mission to make gas available to all the ten ASEAN countries.

According to the Malaysian Industrial Development Authority (MIDA) reports (*as at 2009*), Malaysia has the world's 24th largest crude oil reserves (inclusive condensates), which comes to 5.25 billion barrels. Malaysia has also the world's 13th largest natural gas reserves, which accounts to 14.66 billion barrels. As at January 2007, the Peninsular Malaysia produced 35.9 trillion cubic feet of natural gas, Sarawak, 53.0 and Sabah 11.1 each respectively. Malaysia also has the world's largest production facility at a single location of liquefied natural gas with production capacity of 23 million metric tons per year.

With the full operation of the ASEAN Free Trade Area (AFTA), petroleum manufacturers will profit from a single market. They will also benefit from the access to a larger Asia Pacific market. China being a net importer of petrochemicals, Malaysia's Free Trade Agreement with China will have new business opportunities for petrochemicals manufacturers in Malaysia.

As a result of the country's long-term trend toward declining oil reserves, PETRONAS, the state oil and gas company, has embarked on an international exploration and production strategy. Malaysia exports the majority of its oil to markets in Japan, Thailand, South Korea, and Singapore.

PETRONAS will search for more oil and gas reserves in Malaysia at the expense of overseas exploration and has changed its management structure to have its executive vice-presidents in charge of key operations to shoulder more responsibility.

Domestic oil exploration would see PETRONAS drill deeper for oil and gas on the shallow waters of Malaysia but the company is also looking to increase the amount of oil it pumps out from existing wells in Malaysia.

PETRONAS will also be pouring more management time on its oil and gas business and would be looking to scale back and divest operations which it considers non-core to the crux of PETRONAS.

MALAYSIA is now well on track to become the fourth deepwater oil and gas hub in the world after Houston, Rio de Janeiro and Europe.

In terms of subsea industry, Malaysia is already a hub by itself. Malaysia's deepwater industry is largely developed and soon to be one of the four deepwater hubs in the world. In the past two or three years, demand for deepwater in Asia Pacific has been great and Malaysia is quite fast in developing this industry.

There are supported by a number of fabrication works for Malaysia's deepwater oilfields, namely Kikeh and Gumusut including the manufacturing of flexible and umbilical pipes, spar and semi-submersible, installations of vessels as well as manufacturing of subsea well.

Key players in deepwater Malaysia include Technip, Malaysian Marine Heavy Engineering, Sapura and Aker Kvaerner. Some of the major projects include the Gumusut-Kakap oil development and the Keabangan

Northern Hub gas development project (KBB) in Sabah. The Gumusut-Kakap oil development is expected to start in 2012, while the KBB gas development, that will supply 750 million cubic feet per day of gas to MLNG in Bintulu, Sarawak and Sabah domestic market, is slated for startup in 2014. (*Summary from Bernama, 8 June 2010*)



#### 4. **METHODOLOGY OF OCCUPATIONAL ANALYSIS – OIL, GAS AND PETROCHEMICAL SECTOR**

In conducting the Occupational Analysis, a kick off meeting was held primarily to strategise the Plan of Action in accordance with guidelines as stated by the Department of Skills Development (DSD) in terms of scope of study, time frame and representation by the panel of oil, gas and petrochemical experts from both the public and private sector as stipulated in the letter of offer. After the kick off meeting, a Plan of Action was formulated taking into consideration the activities and time frame required.

This chapter is divided into two (2) sections: the proposed methodology to construct the Occupational Definition for the respective job titles and the methodology of the overall occupational analysis process.

##### 4.1 **Methodology to Construct Occupational Definition**

This is a standard development methodology undertaken to develop a job analysis. This methodology is used in order to produce an Occupational Definition that is clear on the main job scope of the job title, the verb used is according to level of difficulty and the object is clearly described.

Below are the main steps in producing the Occupational Definition for the respective job titles obtained in the Occupational Analysis:

- (i) Determine the main sub sectors and areas in the sector
- (ii) Identify the job titles
- (iii) Identify the job scope

To describe the Occupational Definition clearly, the statement must consist of a *Verb*, *Object* and *Qualifier*. The rationale of determining the definition attributes are, to ensure consistency and continuity of using those attributes right from Occupational Analysis, Job Analysis to Task Analysis Developmental.



# 1) Object

Firstly, the object is determined before the other two attributes. The object of any job is the main determinant of distinguishing one job from another. For example, a demi-chef (kitchen sub-sector of the Hotel Industry), deals with food and cooking utensils as the objects in performing tasks. While a hairdresser deals with client's hair, hairdressing chemical, etc.

The Objects are acquired from the expert panel members during a brainstorming session and written on DACUM cards so that all panel members can see the Objects identified. Objects of those in the related area or sub sector of the Mining industry are determined such as in the example below:

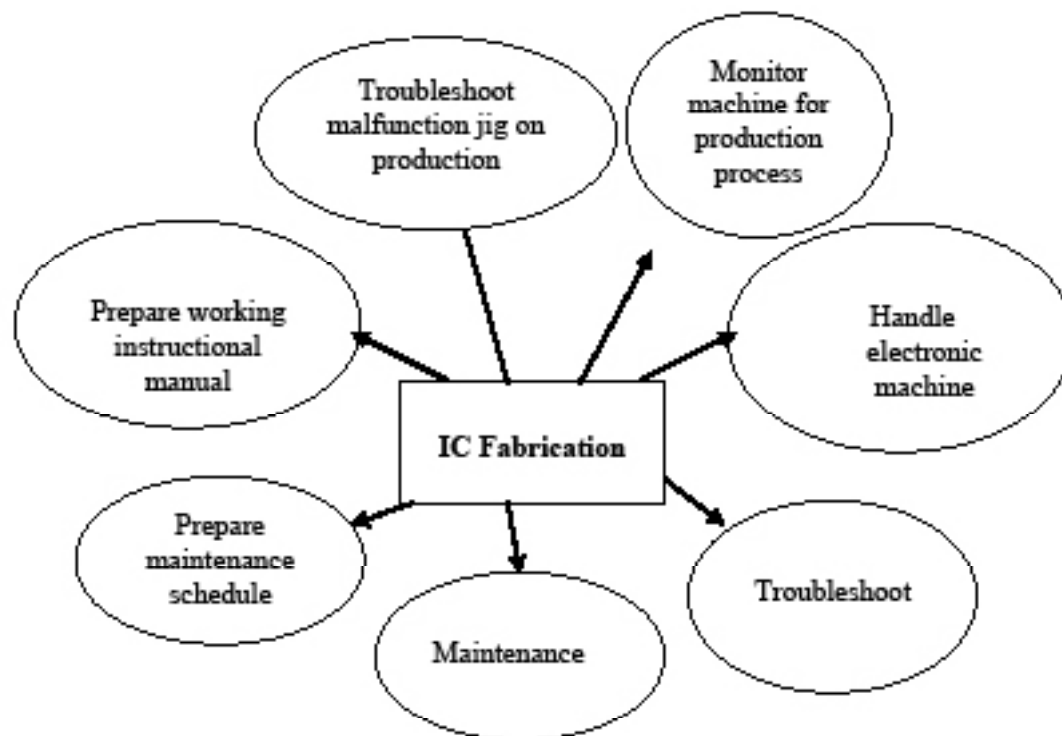


Figure 4.1: Example of Identifying Objects

## Legend:

**Instrumentation** : Sector / Subsector / Area / Subarea

**Troubleshoot** : Object : Object

## 2) Verb

The verb is then determined based on the level of difficulty of the identified job titles, such as below:

- *Object : maintenance schedule*
- *Verb for Level 6 : Prepare*
- *Verb for Level 7 : Analyse*
- *Verb for Level 8 : Evaluate*

Hence, the contents of the job definitions will be as below:

- **IC Fabrication Assistant Manager (Level 6)**
  - ✓ *Prepare maintenance schedule + (qualifier)*
- **IC Fabrication Manager (Level 7)**
  - ✓ *Analyse maintenance schedule + (qualifier)*
- **Microelectronic Specialist (Level 8)**
  - ✓ *Evaluate maintenance schedule + (qualifier)*

## 3) Qualifier

Based on the example above, the statement is not clear as there is no qualifier for the object, therefore a qualifier must be added to further clarify it. Below is an example:

- *Analyse maintenance schedule for the electronics productions equipment*

## **4.2 Methodology of the Overall Occupational Analysis Process**

### **1) Literature survey**

As outlined by the guidelines, a literature survey on the oil, gas and petrochemical industry was carried out to get some insight on the scope, policy, program, activities in the context of the Malaysian scenario. The scope covered under this search includes definitions, current analysis of the sector/sub-sector, current status of the oil, gas and petrochemical industry sector, skilled workers requirement in the local industry and the industrial competition at international level.

### **2) Identifying industry and public experts**

The literature search findings were used as a guide to identify the scope of occupational study and analysis. Experts from the oil, gas and petrochemical sector were identified and short listed for further communication and contact.

### **3) Establish contact with the oil, gas and petrochemical sector experts**

A pool of oil, gas and petrochemical experts from the industry and public sector were contacted. The list of experts is in Annex 1.

### **4) Information gathering**

In the process of gathering the information, two methods were adopted, namely; brainstorming and the Developing a Curriculum (DACUM) session. The brainstorming and DACUM session was attended by expert panels who discussed the different sub sectors and areas. The information gathered was then used as input for the occupational analysis of the said industry.

## 5) Analysing the Information

Based on the activities done as above, substantial data and information were collected. The data and information were discussed and analysed in several in-house workshops attended by selected key person or experts from the public and industry sector. The presence of the key persons or experts was to help in the development of the Occupational Analysis for this sector. During this session, attempts to reframe the oil, gas and petrochemical sub sector in Malaysia were done using the following framework:

- (a) Scope of the oil, gas and petrochemical sector and its sub sector
- (b) Main area
- (c) Major occupational group of the industry
- (d) Job title
- (e) Hierarchy structure (Level 1 – 8)
- (f) Occupational definition

## 6) Organise workshop with expert panels

Several workshops were conducted throughout the development of the Occupational Analysis of the oil, gas and petrochemical sector. The details of the workshops are as below:

- (a) Held on the 15<sup>th</sup> and 16<sup>th</sup> May, 2010 at the Singgahsana Hotel, Petaling Jaya. The objectives of the workshop were:
  - Presentation of preliminary findings;
    - ✓ Outline of Job Title
    - ✓ Career structure
    - ✓ Hierarchy structure (Level 1 – 8)
    - ✓ Occupational Definition
  - Occupational Analysis Session; and
  - Validation of the findings.

## **5. FINDINGS**

### **5.1 Newly Identified Sub-Sectors**

During brainstorming conducted with a panel of experts, the input sectors, sub-sectors and areas of work were classified according to category. Here are the sectors, sub-sectors and areas of work identified: -

Sector	Sub-sector	Area	Job Area	Description
Oil, Gas and Petrochemical	Upstream	Exploration	Prospecting Drilling	Hydrocarbon exploration (or oil and gas exploration) is the search by petroleum geologists and geophysicists for hydrocarbon deposits beneath the earth's surface, such as oil and natural gas. Oil and gas exploration are grouped under the science of petroleum geology.
		Appraisal	Logging Well Completion Reservoir Production Economic	Appraisal area covers job specification which are specialise to assess characteristics (such as flow rate) of a proven hydrocarbon accumulation. It covers activity including logging, well completion, reservoir, production and economic.
		Engineering	(a) Piping (b) Pipeline (c) Mooring (d) Riser (e) Fire Fighting (f) Heating Ventilating and Air Conditioning (g) Rotating Specialist (h) Static (i) Civil (j) Structure (k) Process	The application and installation of almost all types of engineering to the drilling for and production of oil, gas, and liquefiable hydrocarbons.



			(l) Process and Safety (m) Electrical (n) Instrumentation and Control (o) Telecommunication (p) Engineering Project Management		
				Surface Facilities Operation (a) Fixed (b) Floater (c) Subsea	Surface Facilities Operation area is focusing on the management of the oil and gas facilities on surface.
				Plant Operation (a) Oil Processing (b) Gas Processing (c) Petrochemical	Plant operation covers the management side of the processing plant (oil, gas and petrochemical).
	Downstream		Quality Assurance (a) Oil Processing (b) Gas Processing (a) Petrochemical		Quality assurance, or QA for short, refers to a systematic controlling and evaluation of the material (oil, gas and petrochemical material) in accordance with the standard.
				(a) Instrumentation (b) Electrical (c) Mechanical (d) Civil (e) Structure (f) Pipeline	Maintenance is an interdisciplinary field primarily devoted to the maintenance and care for the plant operation (oil, gas and petrochemical).
	Maintenance				

**List of Panel Expert for the Development of  
Occupational Analysis for Oil, Gas and  
Petrochemical Industry Sector**

**LIST OF COMMITTEE MEMBERS  
FOR OCCUPATIONAL ANALYSIS FOR OIL, GAS AND  
PETROCHEMICAL**

<b>No.</b>	<b>Name</b>	<b>Organization</b>
1	Azdi Bin Abass	Octagon Petroleum Technology Sdn Bhd (Managing Director)
2	Jayaaman Bin Hj Tarmidi	Octagon Petroleum Technology Sdn Bhd (Associate Consultant)
3	Shahrulnizam Bin Ismail	Ramonia Fabricator Sdn Bhd (Quality Offshore Engineer)
4	Tuan Ahmad Bin Tuan Besar	Anf Synergy Sdn Bhd (Managing Director)
5	Hafizan Bin Lamin	Jutasama Sdn Bhd (Quality Control Manager)
6	Dr Mat Husin Bin Saleh	SIRIM Sdn Bhd (Senior Researcher, Advanced materials Research Centre-AMREC)
7	Abdul Rahman Bin Yusoff	Institut Teknologi Petroleum (INSTEP) Petronas (Manager Mechanical and Inspection)
8	Mazlan Bin Muhammad	SIRIM Sdn Bhd (Senior Researcher, Advanced materials Research Centre-AMREC)
9	Mohd Asri Bin Ibrahim	ESSO Malaysia Berhad (LPG Manager)
<p style="text-align: center;"><b>Facilitator</b> Basharudin Mohamed</p> <p style="text-align: center;"><b>Co-Facilitator</b> Engku Mohd Azmi Bin Engku Hatim Khairul Anuar Bin Yahya</p> <p style="text-align: center;"><b>Proofreader</b> Abu Musa Bin Mohd Isa</p>		

## **ANNEX 2**

### **Job Titles and Hierarchy in Oli, Gas and Petrochemical Industry Sector**

## 5.2 Proposed Framework

OIL, GAS AND PETROCHEMICAL INDUSTRY										
UPSTREAM										
EXPLORATION										
PROSPECTING										
DRILLING										
SECTOR	SUB-SECTOR	AREA	JOB AREA	PROSPECTING	EXPLORATION	DRILLING	NO LEVEL	NO LEVEL	NO LEVEL	NO LEVEL
LEVEL 8			*PETROPHYSIC PRINCIPAL	*GEOPHYSIC PRINCIPAL	*GEOLOGIST PRINCIPAL	*DIRECTIONAL DRILLING PRINCIPAL	*DIRECTIONAL DRILLING PRINCIPAL	*DIRECTIONAL DRILLING PRINCIPAL	*DIRECTIONAL DRILLING PRINCIPAL	*DIRECTIONAL DRILLING PRINCIPAL
LEVEL 7			PETROPHYSIC SPECIALIST	GEOPHYSIC SPECIALIST	GEOLOGY SPECIALIST	DRILLING FLUID SENIOR TECHNOLOGIST	DRILLING FLUID SENIOR TECHNOLOGIST	DRILLING FLUID SENIOR TECHNOLOGIST	DRILLING FLUID SENIOR TECHNOLOGIST	DRILLING FLUID SENIOR TECHNOLOGIST
LEVEL 6			*PETROPHYSICIST	*GEOPHYSICIST	*GEOLOGIST	*MUD LOGGING GEOLOGIST	*TOOL PUSHER	*MUD TECHNOLOGIST	*DIRECTIONAL DRILLING FIELD TECHNOLOGIST	*DIRECTIONAL DRILLING FIELD TECHNOLOGIST
LEVEL 5			ASSISTANT PETROPHYSICIST	ASSISTANT GEOPHYSICIST	ASSISTANT GEOLOGIST	RIG TECHNOLOGIST	DRILLER	DRILLING SUPERVISOR	DIRECTIONAL DRILLING FOREMAN	DIRECTIONAL DRILLING FOREMAN
LEVEL 4			PROSPECTING SUPERVISOR	PROSPECTING SUPERVISOR	PROSPECTING SUPERVISOR	MAINTENANCE SUPERVISOR (DRILLING)	ASSISTANT DRILLER	DRILLING OPERATOR	DRILLING OPERATOR	DRILLING OPERATOR
LEVEL 3			PROSPECTING TECHNICIAN	PROSPECTING TECHNICIAN	PROSPECTING TECHNICIAN	RIG SENIOR TECHNICIAN	*DERRICKMAN	*DERRICKMAN	*DERRICKMAN	*DERRICKMAN
LEVEL 2			NO LEVEL	NO LEVEL	NO LEVEL	RIG TECHNICIAN	ROUGHNECK	ROUGHNECK	ROUGHNECK	ROUGHNECK
LEVEL 1			NO LEVEL	NO LEVEL	NO LEVEL	ROUSTABOUT	ROUSTABOUT	ROUSTABOUT	ROUSTABOUT	ROUSTABOUT

Pre- Requisite \*\* highlighted box are the critical occupations\*\*

Figure 5.1: Proposed Oil, Gas and Petrochemical Industry OA Matrix for Upstream – Exploration

OIL , GAS AND PETROCHEMICAL INDUSTRY						
SECTOR		UPSTREAM				
SUB-SECTOR						
AREA		APPRAISAL				
JOB AREA		LOGGING	WELL COMPLETION	RESERVOIR	PRODUCTION	ECONOMICS
LEVEL 8		*WIRELINE PRINCIPAL	*WELL COMPLETION PRINCIPAL	*RESERVOIR PRINCIPAL	*PRODUCTION PRINCIPAL	NO LEVEL
LEVEL 7		WIRELINE SPECIALIST	WELL COMPLETION SPECIALIST	RESERVOIR ENGINEERING SPECIALIST	PRODUCTION SPECIALIST	PETROLEUM SPECIALIST
LEVEL 6		*WIRELINE TECHNOLOGIST	*WELL COMPLETION TECHNOLOGIST	*RESERVOIR ENGINEERING TECHNOLOGIST	*PRODUCTION TECHNOLOGIST	*PETROLEUM ECONOMICS
LEVEL 5		WIRELINE SENIOR SUPERVISOR	WELL COMPLETION SENIOR SUPERVISOR	NO LEVEL	PRODUCTION ENGINEERING SUPERVISOR	
LEVEL 4		WIRELINE SUPERVISOR	WELL COMPLETION SUPERVISOR	NO LEVEL	PRODUCTION ENGINEERING TECHNICIAN	
LEVEL 3		*WIRELINE SENIOR OPERATOR	*WELL COMPLETION SENIOR OPERATOR	NO LEVEL	*PRODUCTION SENIOR OPERATOR	
LEVEL 2		LOGGING AND WELL COMPLETION OPERATOR		NO LEVEL	PRODUCTION OPERATOR	
LEVEL 1		NO LEVEL	NO LEVEL	NO LEVEL	NO LEVEL	

Figure 5.2: Proposed Oil, Gas and Petrochemical Industry OA Matrix for Upstream – Appraisal



OIL, GAS AND PETROCHEMICAL INDUSTRY												
SECTOR	UPSTREAM											
SUB-SECTOR	ENGINEERING											
AREA	ENGINEERING											
JOB AREA	PIPING			PIPELINE		MOORING	RISER	FIRE FIGHTING		HEATING, VENTILATING AND AIR CONDITIONING (HVAC)		ROTATING SPECIALIST
LEVEL 8	*PIPING CUSTOMER/PRINCIPAL			*PIPELINE CUSTOMER/PRINCIPAL		*MOORING CUSTOMER/ PRINCIPAL	*RISER CUSTOMER/ PRINCIPAL	*FIRE FIGHTING CUSTOMER/PRINCIPAL	*HVAC CUSTOMER/PRINCIPAL		*ROTATING CUSTOMER/ PRINCIPAL	
	PIPING DESIGN SPECIALIST	PIPING MATERIALS SPECIALIST	PIPING STRESS SPECIALIST	PIPELINE SPECIALIST		MOORING SPECIALIST	RISER SPECIALIST	FIRE FIGHTING SPECIALIST	HVAC SPECIALIST		ROTATING SPECIALIST	
LEVEL 7	*PIPING TECHNOLOGIST			*PIPELINE TECHNOLOGIST		*MECHANICAL TECHNOLOGIST		*FIRE FIGHTING TECHNOLOGIST		*HVAC TECHNOLOGIST		*ROTATING TECHNOLOGIST
LEVEL 6	PIPING DESIGNER			*PIPELINE DESIGNER		*MECHANICAL DESIGNER		*FIRE FIGHTING DESIGNER	*HVAC DESIGNER		*ROTATING DESIGNER	
	PIPING FABRICATION SUPERINTENDENT			PIPELINE CONSTRUCTION SUPERINTENDENT		MECHANICAL SENIOR DRAFTER		PIPING FIGHTING CONSTRUCTION SUPERINTENDENT	HVAC FABRICATION SUPERINTENDENT		ROTATING FABRICATION SUPERINTENDENT	
LEVEL 5	PIPING SENIOR DRAFTER			PIPELINE SENIOR DRAFTER		MECHANICAL SENIOR DRAFTER		PIPING FIGHTING SENIOR DRAFTER	HVAC SENIOR DRAFTER		ROTATING SENIOR DRAFTER	
LEVEL 4	*PIPING DRAFTER			*PIPELINE DRAFTER		*MECHANICAL DRAFTER		*FIRE FIGHTING DRAFTER	HVAC DRAFTER		ROTATING DRAFTER	
LEVEL 3	PIPING SENIOR FITTER			PIPELINE SENIOR FITTER		MECHANICAL SENIOR FITTER		PIPING FIGHTING SENIOR FITTER	HVAC SENIOR FITTER		ROTATING SENIOR FITTER	
LEVEL 2	PIPING SENIOR FITTER			PIPELINE SENIOR FITTER		MECHANICAL SENIOR FITTER		PIPING FIGHTING SENIOR FITTER	HVAC SENIOR FITTER		ROTATING SENIOR FITTER	
LEVEL 1	DRAUGHTSMAN			PIPELINE FITTER		MECHANICAL FITTER		PIPING FIGHTING FITTER	HVAC FITTER		ROTATING FITTER	

\* entry level from draughtsman level

Note : Draughtsman for L1 have a same skills with another draughtsman L1

Figure 5.3: Proposed Oil, Gas and Petrochemical Industry OA Matrix for Upstream – Engineering

OIL, GAS AND PETROCHEMICAL INDUSTRY									
SECTOR	UPSTREAM								
SUB-SECTOR	ENGINEERING								
JOB AREA	STATIC	CIVIL	STRUCTURE		PROCESS	PROCESS SAFETY	ELECTRICAL		
LEVEL 8	*STATIC CUSTODIAN/PRINCIPAL	CIVIL CUSTODIAN/PRINCIPAL	*STRUCTURE CUSTODIAN/PRINCIPAL	*HULL CUSTODIAN/PRINCIPAL	*PROCESS CUSTODIAN/PRINCIPAL	*PROCESS CUSTODIAN/PRINCIPAL	*ELECTRICAL CUSTODIAN/PRINCIPAL		
LEVEL 7	STATIC SPECIALIST	CIVIL SPECIALIST	FIXED PLATFORM SPECIALIST	HULL SPECIALIST (FLOATERS)	PROCESS SPECIALIST	PROCESS SAFETY SPECIALIST	ELECTRICAL SPECIALIST		
LEVEL 6	*STATIC TECHNOLOGIST	*CIVIL TECHNOLOGIST	*STRUCTURE TECHNOLOGIST		*PROCESS TECHNOLOGIST		*ELECTRICAL TECHNOLOGIST		
LEVEL 5	*STATIC DESIGNER	*CIVIL DESIGNER	*STRUCTURE DESIGNER	*HULL STRUCTURE DESIGNER	*PROCESS DESIGN COORDINATOR		*ELECTRICAL DESIGNER	*ELECTRICAL FABRICATOR SUPERINTENDENT	
LEVEL 4	STATIC SENIOR DRAFTER	CIVIL SENIOR DRAFTER	STRUCTURE SENIOR DRAFTER	HULL STRUCTURE SENIOR DRAFTER	PROCESS SENIOR DRAFTER		ELECTRICAL SENIOR DRAFTER	ELECTRICAL FABRICATOR SUPERVISOR	
LEVEL 3	STATIC DRAFTER	CIVIL DRAFTER	*STRUCTURE DRAFTER	*HULL STRUCTURE DRAFTER	*PROCESS DRAFTER		*ELECTRICAL DRAFTER	*ELECTRICAL FABRICATOR	
LEVEL 2	STATIC JUNIOR DRAFTER	CIVIL JUNIOR DRAFTER	STRUCTURE JUNIOR DRAFTER	HULL STRUCTURE JUNIOR DRAFTER	MECHANICAL JUNIOR DRAFTER		ELECTRICAL JUNIOR DRAFTER	ELECTRICAL SENIOR FITTER	
LEVEL 1	DRAUGHTSMAN	DRAUGHTSMAN	STRUCTURE FITTER	HULL STRUCTURE FITTER	DRAUGHTSMAN		DRAUGHTSMAN	ELECTRICAL FITTER	

Note : Draughtsman for L1 have a same skills with another draughtsman L1

Figure 5.4: Proposed Oil, Gas and Petrochemical Industry OA Matrix for Upstream – Engineering (cont.)

OIL, GAS AND PETROCHEMICAL INDUSTRY										
SECTOR		UPSTREAM								
SUB-SECTOR		ENGINEERING								
AREA		ENGINEERING PROJECT MANAGEMENT								
JOB AREA		ENGINEERING PROJECT MANAGEMENT								
LEVEL 8		NO LEVEL								
LEVEL 7		PROJECT MANAGER								
LEVEL 6		TELECOMMUNICATION SPECIALIST	TELECOMMUNICATION TECHNOLOGIST	PROJECT COORDINATOR	COMPUTER AIDED DESIGN (CAD) ADMIN MANAGER	QA/QC MANAGER	PROJECT SENIOR PLANNER	* COST SENIOR CONTROLLER	HEALTH SAFETY & ENVIRONMENTAL SENIOR MANAGER	REGULATORY / PERMITTING MANAGER
LEVEL 5		* INSTRUMENTATION & CONTROL DESIGNER	* TELECOMMUNICATION DESIGNER	* DOCUMENT AND CONTROL SENIOR CIRCULATION (DCC)	CAD ADMINISTRATOR	QA/QC COORDINATOR	* PROJECT PLANNER	* COST CONTROLLER	HSE COORDINATOR	PERMITTING LICENCE OFFICER
LEVEL 4		INSTRUMENTATION & CONTROL SENIOR DRAFTER	TELECOMMUNICATION SENIOR DRAFTER	TELECOMMUNICATION FABRICATOR SUPERVISOR	TELECOMMUNICATION FABRICATOR SUPERVISOR	INSPECTOR QA/QC	PROJECT JUNIOR PLANNER	CUSTOMER CONTROLLER	HSE EXECUTIVE	PERMITTING OFFICER
LEVEL 3		* INSTRUMENTATION & CONTROL DRAFTER	* TELECOMMUNICATION DRAFTER	* TELECOMMUNICATION FABRICATOR	* ADMINISTRATOR					
LEVEL 2		INSTRUMENTATION & CONTROL JUNIOR DRAFTER	TELECOMMUNICATION JUNIOR DRAFTER	TELECOMMUNICATION SENIOR FITTER	ENGINEERING PROJECT MANAGEMENT SENIOR CLERK					
LEVEL 1		DRAUGHTSMAN CONTROL FITTER	DRAUGHTSMAN	TELECOMMUNICATION FITTER	ENGINEERING PROJECT MANAGEMENT CLERK					

Note : Draughtsman for L1 have a same skills with another draughtsman L1

Figure 5.5: Proposed Oil, Gas and Petrochemical Industry OA Matrix for Upstream – Engineering (cont.)

SECTOR	OIL, GAS AND PETROCHEMICAL INDUSTRY			
SUB-SECTOR	UPSTREAM			
AREA	SURFACE FACILITIES OPERATION			
JOB AREA	FIXED PLATFORM	FLOATERS	SUBSEA FACILITIES	
LEVEL 8	NO LEVEL	NO LEVEL	NO LEVEL	
LEVEL 7	*PLATFORM OPERATION SPECIALIST	*FLOATERS OPERATION SPECIALIST	*SUBSEA OPERATION SPECIALIST	
LEVEL 6	PLATFORM SUPERINTENDENT	FLOATERS SUPERINTENDENT	SUBSEA SUPERINTENDENT	
LEVEL 5	PLATFORM PRODUCTION SUPERVISOR	FLOATERS PRODUCTION SUPERVISOR	SUBSEA PRODUCTION SUPERVISOR	
LEVEL 4	LEAD PRODUCTION TECHNICIAN			
LEVEL 3	*PRODUCTION SENIOR TECHNICIAN			
LEVEL 2	PRODUCTION TECHNICIAN			
LEVEL 1	PRODUCTION JUNIOR TECHNICIAN			

Figure 5.6: Proposed Oil, Gas and Petrochemical Industry OA Matrix for Upstream – Surface Facilities

OIL, GAS & PETROCHEMICAL INDUSTRY									
SECTOR		DOWNSTREAM							
SUB-SECTOR		PLANT OPERATION							
AREA		PLANT OPERATION							
JOB AREA		GAS PROCESSING		GAS PIPELINE TRANSMISSION		OIL REFINERY		PETROCHEMICAL	
LEVEL 8		NO LEVEL		NO LEVEL		NO LEVEL		NO LEVEL	
LEVEL 7		GAS PLANT SPECIALIST		GAS PLANT TRANSMISSION SPECIALIST		OIL REFINERY PLANT SPECIALIST		PETROCHEMICAL PLANT SPECIALIST	
LEVEL 6		GAS PLANT MANAGER	*GAS PLANT OPERATION TECHNOLOGIST	GAS PIPELINE TRANSMISSION REGIONAL MANAGER	*GAS PIPELINE TRANSMISSION TECHNOLOGIST	OIL REFINERY PLANT OPERATION MANAGER	*OIL REFINERY PLANT OPERATION TECHNOLOGIST	PETROCHEMICAL PLANT OPERATION MANAGER	*PETROCHEMICAL PLANT OPERATION TECHNOLOGIST
LEVEL 5		SHIFT MANAGER		GAS PIPELINE TRANSMISSION CHIEF MANAGER		SHIFT MANAGER			
LEVEL 4		PLANT PRODUCTION SUPERVISOR		GAS PIPELINE TRANSMISSION SUPERVISOR		PLANT PRODUCTION SUPERVISOR			
LEVEL 3		PRODUCTION SENIOR TECHNICIAN (PANEL OPERATOR)		GAS PIPELINE TRANSMISSION SENIOR TECHNICIAN(FIELD OPERATOR)		PRODUCTION SENIOR TECHNICIAN (PANEL OPERATOR)			
LEVEL 2		PRODUCTION TECHNICIAN (FIELD OPERATOR)		GAS PIPELINE TRANSMISSION TECHNICIAN		PRODUCTION TECHNICIAN (FIELD OPERATOR)			
LEVEL 1		PRODUCTION JUNIOR TECHNICIAN		GAS PIPELINE TRANSMISSION JUNIOR TECHNICIAN		PRODUCTION JUNIOR TECHNICIAN			

Figure 5.7: Proposed Oil, Gas and Petrochemical Industry OA Matrix for Downstream – Plant Operation

SECTOR SUB-SECTOR AREA	OIL, GAS & PETROCHEMICAL INDUSTRY		
	DOWNSTREAM		
	QUALITY ASSURANCE		
JOB AREA	GAS PROCESSING	OIL PROCESSING	PETROCHEMICAL
LEVEL 8	NO LEVEL	NO LEVEL	NO LEVEL
LEVEL 7	GAS PROCESSING SPECIALIST	OIL REFINERY SPECIALIST	PETROCHEMICAL SPECIALIST
LEVEL 6	*GAS PROCESSING TECHNOLOGIST	OIL REFINERY TECHNOLOGIST	PETROCHEMICAL TECHNOLOGIST
LEVEL 5	GAS PROCESSING ASSISTANT CHEMIST	OIL REFINERY ASSISTANT CHEMIST	PETROCHEMICAL ASSISTANT CHEMIST
LEVEL 4	GAS PROCESSING LAB SUPERVISOR	OIL REFINERY LAB SUPERVISOR	PETROCHEMICAL LAB SUPERVISOR
LEVEL 3	GAS PROCESSING LAB SENIOR TECHNICIAN	OIL REFINERY LAB SENIOR TECHNICIAN	PETROCHEMICAL LAB SENIOR TECHNICIAN
LEVEL 2	GAS PROCESSING LAB TECHNICIAN	OIL REFINERY LAB TECHNICIAN	PETROCHEMICAL LAB TECHNICIAN
LEVEL 1	GAS PROCESSING LAB JUNIOR TECHNICIAN	OIL REFINERY LAB JUNIOR TECHNICIAN	PETROCHEMICAL LAB JUNIOR TECHNICIAN

Figure 5.8: Proposed Oil, Gas and Petrochemical Industry OA Matrix for Downstream – Quality Assurance



OIL, GAS & PETROCHEMICAL INDUSTRY										
SECTOR	SUB-SECTOR	MAINTENANCE								
		MAINTENANCE								
JOB AREA	INSTRUMENTATION		ELECTRICAL		CIVIL		STRUCTURE		MECHANICAL	PIPELINE
LEVEL 8	NO LEVEL		NO LEVEL		NO LEVEL		NO LEVEL		NO LEVEL	NO LEVEL
LEVEL 7	INSTRUMENTATION MAINTENANCE SPECIALIST		ELECTRICAL MAINTENANCE SPECIALIST		CIVIL MAINTENANCE SPECIALIST		STRUCTURE INTEGRITY SPECIALIST		MECHANICAL MAINTENANCE SPECIALIST	PIPELINE MAINTENANCE SPECIALIST
LEVEL 6	INSTRUMENTATION MAINTENANCE MANAGER	*INSTRUMENTATION MAINTENANCE TECHNOLOGIST	ELECTRICAL MAINTENANCE MANAGER	*ELECTRICAL MAINTENANCE TECHNOLOGIST	CIVIL MAINTENANCE MANAGER	*CIVIL MAINTENANCE TECHNOLOGIST	STRUCTURE MAINTENANCE MANAGER	*STRUCTURE MAINTENANCE TECHNOLOGIST	MECHANICAL MAINTENANCE MANAGER	*PIPELINE MAINTENANCE TECHNOLOGIST
LEVEL 5	INSTRUMENTATION MAINTENANCE SENIOR SUPERVISOR		ELECTRICAL MAINTENANCE SENIOR SUPERVISOR		CIVIL MAINTENANCE SENIOR SUPERVISOR		STRUCTURE MAINTENANCE SENIOR SUPERVISOR		MECHANICAL MAINTENANCE SENIOR SUPERVISOR	PIPELINE MAINTENANCE SENIOR SUPERVISOR
LEVEL 4	INSTRUMENTATION MAINTENANCE SUPERVISOR		ELECTRICAL MAINTENANCE SUPERVISOR		CIVIL MAINTENANCE SUPERVISOR		STRUCTURE MAINTENANCE SUPERVISOR		MECHANICAL MAINTENANCE SUPERVISOR	PIPELINE MAINTENANCE SUPERVISOR
LEVEL 3	*INSTRUMENTATION MAINTENANCE SENIOR TECHNICIAN		*ELECTRICAL MAINTENANCE SENIOR TECHNICIAN		*CIVIL MAINTENANCE SENIOR TECHNICIAN		*STRUCTURE MAINTENANCE SENIOR TECHNICIAN		*MECHANICAL MAINTENANCE SENIOR TECHNICIAN	*PIPELINE MAINTENANCE SENIOR TECHNICIAN
LEVEL 2	INSTRUMENTATION MAINTENANCE TECHNICIAN		ELECTRICAL MAINTENANCE TECHNICIAN		CIVIL MAINTENANCE TECHNICIAN		STRUCTURE MAINTENANCE TECHNICIAN		MECHANICAL MAINTENANCE TECHNICIAN	PIPELINE MAINTENANCE TECHNICIAN
LEVEL 1	ELECTRICAL AND INSTRUMENTATION MAINTENANCE JUNIOR TECHNICIAN		ELECTRICAL AND INSTRUMENTATION MAINTENANCE JUNIOR TECHNICIAN		CIVIL AND STRUCTURE MAINTENANCE JUNIOR TECHNICIAN		CIVIL AND STRUCTURE MAINTENANCE JUNIOR TECHNICIAN		MECHANICAL AND PIPELINE MAINTENANCE JUNIOR TECHNICIAN	

Figure 5.9: Proposed Oil, Gas and Petrochemical Industry OA Matrix for Downstream – Maintenance

### 5.3 Entry Level and Career Path

(i) Sub-Sector : Upstream

Area : Exploration

No.	Job Area	Entry Level	Career Path To
1.	Prospecting	Level 2	Level 7
2.	Drilling	Level 1	Level 8

Area : Appraisal

No.	Job Area	Entry Level	Career Path To
1.	Logging	Level 2	Level 7
2.	Well Completion	Level 1	Level 8
3.	Reservoir	Level 6	Level 8
4.	Production	Level 2	Level 8
5.	Economics	Level 2	Level 7

Area : Engineering

No.	Job Area	Entry Level	Career Path To
1.	Piping	Level 1	Level 8
2.	Pipeline	Level 1	Level 8
3.	Mooring	Level 1	Level 8
4.	Riser	Level 1	Level 8
5.	Heating, Ventilating And Air Conditioning (HVAC)	Level 1	Level 8
6.	Rotating Specialist	Level 1	Level 8
7.	Static	Level 1	Level 8
8.	Civil	Level 1	Level 8
9.	Structure	Level 1	Level 8

10.	Process	Level 1	Level 8
11.	Process Safety	Level 1	Level 8
12.	Electrical	Level 1	Level 8
13.	Instrumentation & Control	Level 1	Level 8
14.	Telecommunication	Level 1	Level 8
15.	Engineering Project Management	Level 1	Level 8

**Area : Surface Facilities Operation**

No.	Job Area	Entry Level	Career Path To
1.	Fixed Platform	Level 1	Level 8
2.	Floater	Level 1	Level 8
3.	Subsea Facilities	Level 1	Level 8

**(ii) Sub-Sector: Downstream**

**Area : Plant Operation**

No.	Job Area	Entry Level	Career Path To
1.	Gas Processing (Plant Operation)	Level 1	Level 7
2.	Gas Pipeline Transmission (Plant Operation)	Level 1	Level 7
3.	Oil Refinery (Plant Operation)	Level 1	Level 7
4.	Petrochemical (Plant Operation)	Level 1	Level 7

**Area : Quality Assurance**

No.	Job Area	Entry Level	Career Path To
1.	Gas Processing (Quality Assurance)	Level 1	Level 7
2.	Oil Refinery (Quality Assurance)	Level 1	Level 7
3.	Petrochemical (Quality Assurance)	Level 1	Level 7

**(ii) Sub-Sector: Maintenance****Area : Maintenance**

No.	Job Area	Entry Level	Career Path To
1.	Instrumentation	Level 1	Level 7
2.	Electrical	Level 1	Level 7
3.	Mechanical	Level 1	Level 7
4.	Civil	Level 1	Level 7
5.	Structure	Level 1	Level 7
6.	Pipeline	Level 1	Level 7

## 5.4 Occupational Definition

Under the Oil, Gas and Petrochemical sector, there are 362 job titles are identified and defined. Each of the job title is given a job definition as specified. The definition for all job titles can be seen in *Annex 4*.

## 5.5 Critical Job Title

The critical job titles have been determined based on the analysis of the Oil, Gas and Petrochemical industry conducted with the panel experts. In the process of gathering the critical job title, four methods were adopted. The methods is questionnaire/surveys, face to face interview with industry sector, observation and committee process (DACUM). These critical job titles have been defined as critical because they are currently in demand. Formal skills training and certification is required in order to recognise and maintain the competency standards of the workforce in the mining industry. There are 126 critical job titles that have been identified are mostly for level 3 for every job area and also for 6 at technologist level. Below are the lists of the critical job titles:

NO.	JOB TITLE	LEVEL	JOB AREA
1.	PETROPHYSICIST	L6	PROSPECTING
2.	PETROPHYSIC PRINCIPAL	L8	
3.	GEOPHYSICIST	L6	
4.	GEOPHYSIC PRINCIPAL	L8	
5.	GEOLOGIST	L6	
6.	MUDLOGGING GEOLOGIST	L6	
7.	GEOLOGIST PRINCIPAL	L8	
8.	DERRICKMAN	L3	DRILLING
9.	TOOL PUSHER	L6	
10.	MUD TECHNOLOGIST	L6	
11.	DRILLING FLUID PRINCIPAL	L8	
12.	DRILLING BIT APPLICATION TECHNOLOGIST	L6	
13.	DRILLING BIT PRINCIPAL	L8	

NO.	JOB TITLE	LEVEL	JOB AREA
14.	DRILLING TECHNOLOGIST	L6	
15.	DRILLING DESIGN PRINCIPAL	L8	
16.	DIRECTIONAL DRILLING FIELD TECHNOLOGIST	L6	
17.	DIRECTIONAL DRILLING PRINCIPAL	L8	
18.	WIRELINE SENIOR OPERATOR	L3	LOGGING
19.	WIRELINE TECHNOLOGIST	L6	
20.	WIRELINE PRINCIPAL	L8	
21.	WELL COMPLETION SENIOR OPERATOR	L3	WELL COMPLETION
22.	WELL COMPLETION TECHNOLOGIST	L6	
23.	WELL COMPLETION PRINCIPAL	L8	
24.	RESERVOIR ENGINEERING TECHNOLOGIST	L6	RESERVOIR
25.	RESERVOIR PRINCIPAL	L8	
26.	PRODUCTION SENIOR OPERATOR	L3	PRODUCTION
27.	PRODUCTION TECHNOLOGIST	L6	
28.	PRODUCTION PRINCIPAL	L8	
29.	PETROLEUM ECONOMICS	L6	ECONOMICS
30.	PIPING DRAFTER	L3	PIPING
31.	PIPING FABRICATOR	L3	
32.	PIPING TECHNOLOGIST	L6	
33.	PIPING CUSTODIAN/ PRINCIPAL	L8	
34.	PIPELINE DRAFTER	L3	PIPELINE
35.	PIPELINE DESIGNER	L5	
36.	PIPELINE CONSTRUCTOR	L3	
37.	PIPELINE CONSTRUCTION SUPERINTENDENT	L5	
38.	PIPELINE TECHNOLOGIST	L6	
39.	PIPELINE CUSTODIAN/ PRINCIPAL	L8	
40.	MECHANICAL DRAFTER	L3	MOORING AND RISER
41.	MECHANICAL DESIGNER	L5	
42.	MECHANICAL TECHNOLOGIST	L6	
43.	MOORING CUSTODIAN/ PRINCIPAL	L8	
44.	RISER CUSTODIAN/PRINCIPAL	L8	
45.	FIRE FIGHTING DRAFTER	L3	FIRE FIGHTING
46.	FIRE FIGHTING DESIGNER	L5	
47.	FIRE FIGHTING CONSTRUCTION SUPERINTENDENT	L5	
48.	FIRE FIGHTING TECHNOLOGIST	L6	
49.	FIRE FIGHTING CUSTODIAN/ PRINCIPAL	L8	
50.	HVAC DESIGNER	L5	HEATING, VENTILATING AND AIR CONDITIONING (HVAC)
51.	HVAC FABRICATION SUPERINTENDENT	L5	



NO.	JOB TITLE	LEVEL	JOB AREA
52.	HVAC TECHNOLOGIST	L6	
53.	HVAC CUSTODIAN/ PRINCIPAL	L8	
54.	ROTATING DESIGNER	L5	
55.	ROTATING FABRICATION SUPERINTENDENT	L5	ROTATING SPECIALIST
56.	ROTATING TECHNOLOGIST	L6	
57.	ROTATING CUSTODIAN/PRINCIPAL	L8	
58.	STATIC DESIGNER	L5	
59.	STATIC FABRICATION SUPERINTENDENT	L5	STATIC
60.	STATIC TECHNOLOGIST	L6	
61.	STATIC CUSTODIAN/ PRINCIPAL	L8	
62.	CIVIL DESIGNER	L5	
63.	CIVIL CONSTRUCTION SUPERINTENDENT	L5	CIVIL
64.	CIVIL TECHNOLOGIST	L6	
65.	STRUCTURE DRAFTER	L3	
66.	STRUCTURE DESIGNER	L5	STRUCTURE
67.	STRUCTURE FABRICATOR	L3	
68.	STRUCTURE FABRICATION SUPERINTENDENT	L5	
69.	HULL STRUCTURE DRAFTER	L3	
70.	HULL STRUCTURE DESIGNER	L5	
71.	STRUCTURE TECHNOLOGIST	L6	
72.	STRUCTURE CUSTODIAN/PRINCIPAL	L8	
73.	HULL CUSTODIAN/PRINCIPAL	L8	
74.	PROCESS DRAFTER	L3	PROCESS
75.	PROCESS DESIGN/COORDINATOR	L5	
76.	PROCESS TECHNOLOGIST	L6	
77.	PROCESS CUSTODIAN/PRINCIPAL	L8	
78.	PROCESS SAFETY CUSTODIAN/ PRINCIPAL	L8	PROCESS SAFETY
79.	ELECTRICAL DRAFTER	L3	ELECTRICAL
80.	ELECTRICAL DESIGNER	L5	
81.	ELECTRICAL FABRICATOR	L3	
82.	ELECTRICAL FABRICATOR SUPERITENDENT	L5	
83.	ELECTRICAL TECHNOLOGIST	L6	
84.	ELECTRICAL CUSTODIAN/ PRINCIPAL	L8	
85.	INSTRUMENTATION & CONTROL DRAFTER	L3	INSTRUMENTATION & CONTROL
86.	INSTRUMENTATION & CONTROL DESIGNER	L5	
87.	INSTRUMENTATION & CONTROL FABRICATOR	L3	

NO.	JOB TITLE	LEVEL	JOB AREA
88.	INSTRUMENTATION & CONTROL FABRICATOR SUPERITENDENT	L5	
89.	INSTRUMENTATION & CONTROL TECHNOLOGIST	L6	
90.	INSTRUMENTATION & CONTROL CUSTODIAN/ PRINCIPAL	L8	
92.	TELECOMMUNICATION DESIGNER	L5	TELECOMMUNICATION
93.	TELECOMMUNICATION FABRICATOR	L3	
94.	TELECOMMUNICATION FABRICATOR SUPERITENDENT	L5	
95.	TELECOMMUNICATION TECHNOLOGIST	L6	
96.	TELECOMMUNICATION CUSTODIAN/ PRINCIPAL	L8	
97.	ADMINISTRATOR	L3	ENGINEERING PROJECT MANAGEMENT
98.	DOCUMENT AND CONTROL SENIOR CIRCULATION (DCC)	L5	
99.	PROJECT COORDINATOR	L6	
100.	COMPUTER AIDED DESIGN ADMIN (CAD) MANAGER	L6	
101.	PROJECT PLANNER	L5	
102.	PROJECT SENIOR PLANNER	L6	
103.	COST CONTROLLER	L5	
104.	COST SENIOR CONTROLLER	L6	
105.	PROJECT MANAGER	L7	
106.	PRODUCTION SENIOR TECHNICIAN	L3	SURFACE FACILITIES OPERATION
107.	PLATFORM OPERATION SPECIALIST	L7	FIXED PLATFORM
108.	FLOATERS OPERATION SPECIALIST	L7	FLOATERS
109.	SUBSEA OPERATION SPECIALIST	L7	SUBSEA FACILITIES
110.	GAS PLANT OPERATION TECHNOLOGIST	L6	GAS PROCESSING
111.	GAS PIPELINE TRANSMISSION TECHNOLOGIST	L6	GAS PIPELINE TRANSMISSION
112.	OIL REFINERY PLANT OPERATION TECHNOLOGIST	L6	OIL REFINERY
113.	PETROCHEMICAL PLANT OPERATION TECHNOLOGIST	L6	PETROCHEMICAL
114.	GAS PROCESSING TECHNOLOGIST	L6	GAS PROCESSING- (QUALITY ASSURANCE)
115.	INSTRUMENTATION MAINTENANCE SENIOR TECHNICIAN	L3	INSTRUMENTATION
116.	INSTRUMENTATION MAINTENANCE TECHNOLOGIST	L6	

NO.	JOB TITLE	LEVEL	JOB AREA
117.	ELECTRICAL MAINTENANCE SENIOR TECHNICIAN	L3	ELECTRICAL
118.	ELECTRICAL MAINTENANCE TECHNOLOGIST	L6	
119.	MECHANICAL MAINTENANCE SENIOR TECHNICIAN	L3	MECHANICAL
120.	MECHANICAL MAINTENANCE TECHNOLOGIST	L6	
121.	CIVIL MAINTENANCE SENIOR TECHNICIAN	L3	CIVIL
122.	CIVIL MAINTENANCE TECHNOLOGIST	L6	
123.	STRUCTURE MAINTENANCE SENIOR TECHNICIAN	L3	STRUCTURE
124.	STRUCTURE MAINTENANCE TECHNOLOGIST	L6	
125.	PIPELINE MAINTENANCE SENIOR TECHNICIAN	L3	PIPELINE
126.	PIPELINE MAINTENANCE TECHNOLOGIST	L6	

## **ANNEX 3**

### **Critical and Non Critical Job Titles for Oil, Gas and Petrochemical Industry Sector**

Summary of Critical and Non Critical Job Titles

SUB SECTOR		LEVEL								Total			
		NL	L1	L2	L3	L4	L5	L6	L7		L8		
Oil, Gas And Petrochem ical	Upstream	Critical	0	0	0	22	0	26	31	4	26	109	
		Non-Critical	0	17	32	11	42	20	6	31	1		160
	Downstream	Critical	0	0	0	0	0	0	5	0	0	5	
		Non-Critical	0	6	6	6	6	6	6	7	0	43	
	Maintenance	Critical	0	0	0	6	0	0	6	0	0	12	
		Non-Critical	0	3	6	0	6	6	6	6	0	33	
	TOTAL	Critical								126			
		Non-critical								236			
	TOTAL JOB TITLES												362

Figure 5.10: Critical and Non Critical Schedule

## **6. CONCLUSION AND RECOMMENDATION**

Based on preliminary analysis carried out, the oil, gas and petrochemical industry is an industry that requires a comprehensive development on producing skilled worker.

Further analysis for this sector analysis should be done comprehensively, taking into account that all aspects of development that can contribute to this industry is included, not only in Malaysia but also for the proceedings of all operations carried out by Malaysian oil, gas and petrochemical based operation companies overseas.

The oil, gas and petrochemical sector is an industry with a great potential. Within the industrial oil, gas and petrochemical segment, Malaysian-owned companies have ventured into the manufacture of other petrochemicals products for both the domestic and export markets.

While conducting the mapping session with other industry it was discovered there are overlapping job area with marine industry. It is recommended and suggested by all the development panels that the occupational analysis for the marine industries need to be done as soon as possible so that this will allow for the workforce in this industry to be formally trained at all levels specified and in turn develop a more progressive and competent workforce for the industry.

Endowed with strong government support and a substantial human resource, this industry could expand by the tight corporation between government, oil, gas and petrochemical companies and education centre.



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## **ANNEX 4**

### **Occupational Definition in Oil, Gas and Petrochemical Industry Sector**



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **PROSPECTING TECHNICIAN**

A PROSPECTING TECHNICIAN IS DESIGNATED TO MEASURE GEOLOGICAL CHARACTERISTICS USED IN PROSPECTING FOR OIL OR GAS, USING MEASURING INSTRUMENTS, RECORD READINGS IN ORDER TO COMPILE DATA USED IN PROSPECTING FOR OIL OR GAS AND EVALUATE AND INTERPRET CORE SAMPLES AND CUTTINGS.

**A Prospecting Technician will be able to:**

1. Measure geological characteristics used in prospecting for oil or gas, using measuring instruments.
2. Record readings in order to compile data used in prospecting for oil or gas.
3. Evaluate and interpret core samples and cuttings, and other geological data used in prospecting for oil or gas.
4. Operate and adjust equipment and apparatus used to obtain geological data.
5. Read and study reports in order to compile information and data for geological and geophysical prospecting.
6. Set up instruments used to collect geological data.
7. Collect samples and cuttings, using equipment and hand tools.
8. Interview individuals and research public databases in order to obtain information.
9. Assemble, maintain, and distribute information for library or record systems.
10. Develop and print photographic recordings of information, using equipment.
11. Diagnose and repair malfunctioning instruments and equipment, using manufacturers' manuals and hand tools.
12. Develop and design packing materials and handling procedures for shipping of objects.
13. Prepare and attach packing instructions to shipping containers.
14. Prepare notes, sketches, geological maps and cross-sections.
15. Adhere to company standard operating procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PROSPECTING SUPERVISOR**

A PROSPECTING SUPERVISOR IS DESIGNATED TO PLAN AND DIRECT ACTIVITIES OF FIELD PARTY ENGAGED IN COLLECTING SEISMIC DATA USED IN PROSPECTING FOR OIL OR GAS, OBSERVE REACTION OF RECORDING INSTRUMENTS TO DETECT IRREGULARITY AND MONITOR REPAIR WORK FOR INSTRUMENTS AND EQUIPMENT, USING MANUFACTURERS' MANUALS AND HANDTOOLS.

**A Prospecting Supervisor will be able to:**

1. Plan and direct activities of field party engaged in collecting seismic data used in prospecting for oil or gas.
2. Designate location of shot holes and placement of seismometers and connect cables over blast area according to plot drawn by Surveyor, Geophysical Prospecting (oil and gas).
3. Plan and direct activities of workers engaged in laying out seismographic measuring apparatus over test area.
4. Survey area to verify that equipment is in position specified and tests electrical circuits for continuity.
5. Direct Shooter, Seismograph (petrol. and gas) to detonate charges placed in shot holes, using short wave radio.
6. Observe reaction of recording instruments to detect irregularity.
7. Develop picture of seismic wave pattern in photographic developing solution.
8. Examine wave pattern on subterranean strata for evidence of distortion caused by electronic crossfeed, short circuit, or loose connection.
9. Order redrilling of shot holes and equipment layout to repeat shot.
10. Monitor repair work for instruments and equipment, using manufacturers' manuals and handtools.
11. Perform supervisory function.
12. Adhere to company standard operating procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **ASSISTANT PETROPHYSICIST**

AN ASSISTANT PETROPHYSICIST IS DESIGNATED TO CARRY OUT PETROPHYSICAL EVALUATION OF ROCK AND FLUID PROPERTIES UTILISING THE FULL ARRAY OF DATA AND TOOLS, SUCH AS OPEN HOLE LOGS, SPECIAL AND ROUTINE CORE ANALYSIS, IMAGE LOG ANALYSIS, WELL TESTS, DRILLING DATA, AND FORMATION PRESSURES, PREPARE FULLY INTEGRATED PETROPHYSICAL FIELD STUDIES AND CONDUCT RESERVOIR DESCRIPTIONS FOR CHARACTERISATION STUDIES.

**An Assistant Petrophysicist will be able to:**

1. Carry out petrophysical evaluation of rock and fluid properties utilising the full array of data and tools, such as open hole logs, special and routine core analysis, image log analysis, well tests, drilling data, and formation pressures.
2. Integrate petrophysical reservoir properties into geologic and simulation models.
3. Prepare fully integrated petrophysical field studies.
4. Conduct reservoir descriptions for characterisation studies.
5. Experienced user of standard industry formation evaluation software.
6. Perform any assignment as may be given from time to time by superior.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 6  
PETROPHYSICIST**

A PETROPHYSICIST IS DESIGNATED TO CARRY OUT PETROPHYSICAL EVALUATION OF DRILLING WELLS AND WELL WORK SUPPORT FOR DEVELOPMENT TEAM ON AN AS NEEDED BASIS, PROVIDE PETROPHYSICAL SUPPORT FOR EXPLORATION PROGRAM ON AN AS NEEDED BASIS, AND PROCESS, ANALYSE AND INTERPRET GEOLOGICAL DATA WITHIN WELLS.

**A Petrophysicist will be able to:**

1. Carry out petrophysical evaluation of drilling wells and well work support for development team on an as needed basis.
2. Interact with completion teams to help plan well completions.
3. Provide petrophysical support for exploration program on an as needed basis.
4. Provide petrophysical modeling capabilities interacting with geologists, geophysicists and reservoir engineers.
5. Serve as a principal integrator on a team of petroleum professions.
6. Provide guidance and support to team members in adapting and including relevant data into their interpretations.
7. Process, analyse and interpret geological data within wells.
8. Perform formation evaluation tasks.
9. Conduct computerised analysis of log data.
10. Perform well test interpretations.
11. Provide rock physics input to inversion studies.
12. Perform managerial function.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.





OIL, GAS AND PETROCHEMICAL

**LEVEL 7**

**PETROPHYSIC SPECIALIST**

A PETROPHYSIC SPECIALIST IS DESIGNATED TO PLAN, PREPARE AND SUPERVISE ALL PETROPHYSICAL DATA ACQUISITION, RESPONSIBLE FOR MANAGEMENT AND PRESERVATION OF PETROPHYSICAL DATA, AND PERFORM PETROPHYSICAL INTERPRETATION OF OPERATED AND NON-OPERATED WELL DATA.

**A Petrophysic Specialist will be able to:**

1. Plan, prepare and supervise all petrophysical data acquisition including Wireline and MWD/LWD logs, core measurements (conventional and SCAL), formation pressure measurements (including fluid sampling) and production logging.
2. Evaluate Log Data Acquisition, Editing and Interpretation of standard and special log data like NMR/CMR, TDT/RST, pressure tests and cement evaluation.
3. Carry out QA / QC procedures for log and core data on operated wells.
4. Responsible for management and preservation of petrophysical data.
5. Perform petrophysical interpretation of operated and non-operated well data.
6. Support the exploration and production and development departments in preparation of data collection programs.
7. Contribute to multi-disciplinary teams for projects in licensed acreage, license application rounds and new business development opportunities.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 8**

**PETROPHYSIC PRINCIPAL**

A PETROPHYSIC PRINCIPAL IS DESIGNATED TO INITIATE AND LEAD CONSULTATION AND CONDUCT RESEARCH AND DEVELOPMENT IN PETRO-PHYSICAL, CARRY OUT RESERVOIR MONITORING AND QUANTIFICATION OF SATURATION, FOCUS ON FORMATION EVALUATION AND ADVANCED PETRO-PHYSICS AND ABILITY AND PROVIDE CONSULTATION SERVICE ON PETROPHYSIC.

**A Petrophysic Principal will be able to:**

1. Initiate and lead consultation and conduct research and development in petro-physical.
2. Focus on formation evaluation and advanced petro-physics areas individually and/or along with a team.
3. Carry out reservoir monitoring and quantification of saturation.
4. Perform own modeling using either commercial tools or build own programs.
5. Generate new ideas and projects, and contribute substantially to existing efforts is required.
6. Plan training program for staff.
7. Provide consultation service on petrophysic.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 5**

**ASSISTANT GEOPHYSICIST**

AN ASSISTANT GEOPHYSICIST IS DESIGNATED TO STUDY PHYSICAL ASPECTS OF EARTH, INCLUDING ITS ATMOSPHERE AND HYDROSPHERE, INVESTIGATE ORIGIN AND ACTIVITY OF GLACIERS, VOLCANOES, AND EARTHQUAKES AND COMPILE DATA TO PREPARE NAVIGATIONAL CHARTS AND MAPS, PREDICT ATMOSPHERIC CONDITIONS, PREPARE ENVIRONMENTAL REPORTS, AND ESTABLISH WATER SUPPLY AND FLOOD-CONTROL PROGRAMS.

**An Assistant Geophysicist will be able to:**

1. Study physical aspects of earth, including its atmosphere and hydrosphere.
2. Investigate and measure seismic, gravitational, electrical, thermal, and magnetic forces affecting earth, utilising principles of physics, mathematics, and chemistry.
3. Assist geophysicist in analyse data obtained to compute shape of earth.
4. Assist geophysicist in estimate composition and structure of earth's interior.
5. Assist geophysicist in determine flow pattern of ocean tides and currents.
6. Study physical properties of atmosphere.
7. Assist in locating petroleum and mineral deposits.
8. Investigate origin and activity of glaciers, volcanoes, and earthquakes.
9. Compile data to prepare navigational charts and maps.
10. Predict atmospheric conditions.
11. Prepare environmental reports.
12. Establish water supply and flood-control programs.
13. Perform any assignment as may be given from time to time by superior.
14. Adhere to company standard operating procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 GEOPHYSICIST**

A GEOLPHYSICIST IS DESIGNATED TO STUDY PHYSICAL ASPECTS OF EARTH, INCLUDING ITS ATMOSPHERE AND HYDROSPHERE, INVESTIGATE ORIGIN AND ACTIVITY OF GLACIERS, VOLCANOES, AND EARTHQUAKES, ANALYSE DATA OBTAINED TO COMPUTE SHAPE OF EARTH, STUDY PHYSICAL PROPERTIES OF ATMOSPHERE, ESTIMATE COMPOSITION AND STRUCTURE OF EARTH'S INTERIOR, AND ESTABLISH WATER SUPPLY AND FLOOD-CONTROL PROGRAMS.

#### **A Geophysicist will be able to:**

1. Study physical aspects of earth, including its atmosphere and hydrosphere.
2. Investigate and measure seismic, gravitational, electrical, thermal, and magnetic forces affecting earth, utilising principles of physics, mathematics, and chemistry.
3. Analyse data obtained to compute shape of earth.
4. Estimate composition and structure of earth's interior.
5. Determine flow pattern of ocean tides and currents.
6. Study physical properties of atmosphere.
7. Locate petroleum and mineral deposits.
8. Investigate origin and activity of glaciers, volcanoes, and earthquakes.
9. Compile data to prepare navigational charts and maps.
10. Predict atmospheric conditions.
11. Prepare environmental reports.
12. Establish water supply and flood-control programs.
13. Carry out staff training.
14. Perform managerial function.
15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 7**

**GEOPHYSIC SPECIALIST**

A GEOPHYSIC SPECIALIST IS DESIGNATED TO CONDUCT SUBSURFACE MAPPING AND INTERPRETATION USING WELL DATA AND TIME AND DEPTH SEISMIC DATASETS TO CHARACTERISE THE FULL RANGE OF SUBSURFACE UNCERTAINTIES, DEVELOP A STRATEGIC EXPLORATION/EXPLOITATION BUSINESS PLAN TO CAPTURE NEW OPPORTUNITIES AND ADD VALUE, EVALUATE/ASSESS SEISMIC REPROCESSING PLANS, GEOPHYSICAL BUDGETS AND GEOPHYSICAL STUDIES, AND ASSIST WITH STRUCTURAL RECONSTRUCTION, MAPPING (RESERVOIR, FACIE), RESERVOIR CHARACTERISATION STUDIES AND 3D GEOLOGICAL MODEL CONSTRUCTION.

**A Geophysic Specialist will be able to:**

1. Conduct subsurface mapping and interpretation using well data and time and depth seismic datasets to characterise the full range of subsurface uncertainties.
2. Develop a strategic exploration/exploitation business plan to capture new opportunities and add value.
3. Assist with structural reconstruction, mapping (reservoir, facie), reservoir characterisation studies and 3D geological model construction.
4. Evaluate/Assess seismic reprocessing plans, geophysical budgets and geophysical studies (e.g. geophysical contractor selection, processing flows to improve imaging, velocity model construction, time-depth conversion etc.).
5. Assist with constructing development plan documents as needed especially in regard to well placement.
6. Collaborate with geophysical technology team and project geologist, implement workflows and processes to condition geocellular models using seismic attributes and inversion data.

7. Verify that all seismic and geophysical-related data is accurately housed in the appropriate project and corporate databases and prepared for efficient handover(s) and data transfers.
8. Help communicate the team's technical results, conclusions and recommendations in both formal and informal forums.
9. Perform any assignment as may be given from time to time by superior.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8 GEOPHYSIC PRINCIPAL**

A GEOPHYSIC PRINCIPAL IS DESIGNATED TO CARRY OUT DETAIL G&G INTERPRETATION, CARRY OUT MAPPING INTEGRATING ALL AVAILABLE GEOLOGICAL/GEOPHYSICAL DATA FOR REGIONAL PLAY ANALYSIS, PROSPECT EVALUATION, APPRAISAL AND DEVELOPMENT ACTIVITIES, PROVIDE TECHNICALLY SOUND PROPOSALS BY CONDUCTING DETAILED ACREAGE/BLOCK, PROSPECTS AND ASSETS EVALUATION, PLAN, DESIGN AND SUPERVISE 2D/3D SEISMIC ACQUISITION, PROCESSING/REPROCESSING AND OTHER GEOPHYSICAL PROGRAMS, AND MONITOR WORK PROGRESS IN ORDER TO GET THE BEST QUALITY DATA FOR INTERPRETATION.

#### **A Geophysic Principal will be able to:**

1. Carry out detail G&G interpretation.
2. Carry out mapping integrating all available geological/geophysical data for regional play analysis, prospect evaluation, appraisal and development activities.
3. Design and conduct G&G modelling work and specialised studies.
4. Conduct systematic and integrated prospect and resource evaluation.
5. Provide technically sound proposals by conducting detailed acreage/block, prospects and assets evaluation.
6. Carry out detailed full field review of green and brown fields.
7. Generate accurate reservoir maps, stratigraphic correlation and structural cross-sections.
8. Plan, design and supervise 2D/3D seismic acquisition, processing/reprocessing and other geophysical programs.
9. Monitor work progress in order to get the best quality data for interpretation.
10. Provide consultation service on geophysics.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.





**OIL, GAS AND PETROCHEMICAL**

**LEVEL 5  
ASSISTANT GEOLOGIST**

AN ASSISTANT GEOLOGIST IS DESIGNATED TO ASSIST GEOLOGIST TO PERFORM WELL SITE DUTIES ON EXPLORATION AND DEVELOPMENT WELLS, ASSIST GEOLOGIST TO COMPLETE LOG ANALYSIS TO DETERMINE POROSITY, NET PAY, AND LITHOLOGIES CARRY OUT BOTH REGIONAL, BLOCK WIDE AND DETAILED ASSESSMENT OF HYDROCARBON POTENTIAL, AND DEVELOP PROGNOSES AND RESERVES ESTIMATES FOR WELL PROPOSALS.

**An Assistant Geologist will be able to:**

1. Assist Geologist to perform well site duties on exploration and development wells.
2. Assist Geologist to prepare and distributes well completion reports..
3. Assist Geologist to complete log analysis to determine porosity, net pay, and lithologies.
4. Assist Geologist to interpret log wirelines to pick formation tops.
5. Assist Geologist to construct geological cross sections, stratigraphic and structural using wireline or lithology descriptions
6. Carry out both regional, block wide and detailed assessment of hydrocarbon potential.
7. Assist Geologist in developing oil and gas prospects in coordination with team geophysicist, providing geological input to seismic interpretation.
8. Develop prognoses and reserves estimates for well proposals.
9. Perform QC digitisation of log and other geological data.
10. Monitor and control the execution of approved budgeted and work program.
11. Assist Geologist to manage the accomplishment of Key Performance Indicators of Exploration's section on his assigned area.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 GEOLOGIST**

A GEOLOGIST IS DESIGNATED TO PERFORM WELL SITE DUTIES ON EXPLORATION AND DEVELOPMENT WELLS, CONSTRUCT GEOLOGICAL CROSS SECTIONS, STRATIGRAPHIC AND STRUCTURAL USING WIRELINE OR LITHOLOGY DESCRIPTIONS, AND DEVELOP OIL AND GAS PROSPECTS IN COORDINATION WITH TEAM GEOPHYSICIST, PROVIDING GEOLOGICAL INPUT TO SEISMIC INTERPRETATION.

#### **A Geologist will be able to:**

1. Perform well site duties on exploration and development wells.
2. Prepare and distributes well completion reports.
3. Perform complete log analysis to determine porosity, net pay, and lithologies.
4. Interpret log wirelines to pick formation tops.
5. Construct geological cross sections, stratigraphic and structural using wireline or lithology descriptions.
6. Carry out both regional, block wide and detailed assessment of hydrocarbon potential.
7. Develop oil and gas prospects in coordination with team geophysicist, providing geological input to seismic interpretation.
8. Develop prognoses and reserves estimates for well proposals.
9. Perform QC digitisation of log and other geological data.
10. Monitor and control the execution of approved budgeted and work program.
11. Manage the accomplishment of Key Performance Indicators of Exploration's section on his assigned area.
12. Perform managerial function.
13. Adhere to company standard operating procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **MUDLOGGING GEOLOGIST**

A MUDLOGGING GEOLOGIST IS DESIGNATED TO WORK IN WELL SITE UNITS, COLLECT, PROCESS, LOG AND ANALYSE GEOLOGICAL SAMPLES, MONITOR COMPUTER RECORDINGS OF DRILLINGS, EVALUATE DETAILED AND COMPLEX DATA FOR SIGNS OF OIL OR GAS USING VARIOUS LABORATORY TECHNIQUES, AND OPERATE AND MAINTAIN A REAL-TIME COMPUTER-BASED DATA ACQUISITION AND GAS ANALYSIS SYSTEM.

**A Mudlogging Geologist will be able to:**

1. Work in well site units, collect, process, log and analyse geological samples.
2. Evaluate detailed and complex data for signs of oil or gas using various laboratory techniques.
3. Monitor computer recordings of drillings.
4. Interpret information and feed this back to enhance safety and success.
5. Operate and maintain a real-time computer-based data acquisition and gas analysis system, which records all aspects of rig activity.
6. Undertake some on-site maintenance.
7. Predict dangerous situations, such as over-pressured formations.
8. Report back to the geologist and to the oil company in written reports.
9. Train assistant geologist.
10. Perform any assignment as may be given from time to time by superior.
11. Perform managerial function.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 GEOLOGY SPECIALIST**

A GEOLOGY SPECIALIST IS DESIGNATED TO ESTABLISH GOALS BASED ON EXPLORATION DEPARTMENT'S GOALS FOR PLANNING AND EXECUTING EXPLORATION ACTIVITIES, GENERATE BUDGET AND WORK PROGRAM FOR EXECUTING EXPLORATION ACTIVITIES, PREPARE LOGGING PROGRAMS FOR EXPLORATION AND DEVELOPMENT WELLS, AND COLLABORATE WITH RESERVOIR TECHNOLOGIST TO DEVELOP TESTING PROCEDURES AND ANALYSE TESTING RESULTS.

#### **A Geology Specialist will be able to:**

1. Establish goals based on Exploration Department's goals for planning and executing exploration activities.
2. Set key performance indicators for exploration section on his assigned.
3. Generate budget and work program for executing exploration activities.
4. Prepare logging programs for exploration and development wells.
5. Perform log analysis to determine reservoir quality and depositional environment
6. Collaborate with Reservoir Technologist to develop testing procedures and analyze testing results.
7. Produce all required geologic maps including cross sections.
8. Collaborate with Geophysicist to develop drillable oil and gas prospects.
9. Provides geological input for seismic interpretation.
10. Collaborate with Reservoir Technologist to recommend development well for oil and gas fields.
11. Prepare Authorized for Expenditure (AFE) as a basis for executing exploration and development well and obtain its approval from management and partners.
12. Monitor drilling operations and recommend changes or improvement to ensure maximum data recovery from samples and logs.
13. Prepare and obtain approval AFE Close out Report.
14. Prepare recommendation for relinquishment of Company's concessions.

15. Prepare final relinquishment report and returns data to local government.
16. Evaluate bids for services required to carry out exploration effort and review recommendation.
17. Generate development programs for subordinate and execute it through annual formal performance review, on-the-job coaching, training and mentoring.
18. Approve Material and Service Requisition (MSR), PO, Contract and other items as outlined on Authority Limitation Manual.
19. Monitor and control the execution of approved budgeted and work program.
20. Manage the accomplishment of Key Performance Indicators of Exploration's section.
21. Adhere to company standard operating procedure.
22. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8 GEOLOGIST PRINCIPAL**

A GEOLOGIST PRINCIPAL IS DESIGNATED TO CARRY OUT DETAIL G&G INTERPRETATION, CARRY OUT MAPPING INTEGRATING ON ALL AVAILABLE GEOLOGICAL/GEOPHYSICAL DATA FOR REGIONAL PLAY ANALYSIS, PROSPECT EVALUATION, APPRAISAL AND DEVELOPMENT ACTIVITIES, PROVIDE TECHNICALLY SOUND PROPOSALS BY CONDUCTING DETAILED ACREAGE/BLOCK, PROSPECTS AND ASSETS EVALUATION, PLAN, DESIGN AND SUPERVISE 2D/3D SEISMIC ACQUISITION, PROCESSING/REPROCESSING AND OTHER GEOPHYSICAL PROGRAMS, AND MONITOR WORK PROGRESS IN ORDER TO GET THE BEST QUALITY DATA FOR INTERPRETATION.

**A Geologist Principal will be able to:**

1. Carry out detail G&G interpretation.
2. Carry out mapping integrating on all available geological/geophysical data for regional play analysis, prospect evaluation, appraisal and development activities.
3. Design and conduct G&G modelling work and specialised studies.
4. Conduct systematic and integrated prospect and resource evaluation.
5. Provide technically sound proposals by conducting detailed acreage/block, prospects and assets evaluation.
6. Carry out detailed full field review of green and brown fields.
7. Generating accurate reservoir maps, stratigraphic correlation and structural cross-sections.
8. Plan, design and supervise 2D/3D seismic acquisition, processing/reprocessing and other geophysical programs.
9. Monitor work progress in order to get the best quality data for interpretation.
10. Provide consultation service on geology.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 ROUSTABOUT**

A ROUSTABOUT IS DESIGNATED TO DIG PITS AND LINES, CARRY OUT GENERAL CLEANUP, INSTALL MOTORS ON EQUIPMENT, SET WELL EQUIPMENT AT WELL LOCATIONS, INSTALL AND REPAIR PIPELINES SUCH AS DRISCO, STEEL, AND PVC, AND CARRY OUT GENERAL YARD MAINTENANCE OF GROUND AND BUILDINGS.

**A Roustabout will be able to:**

1. Dig pits and lines.
2. Carry out general cleanup.
3. Install motors on equipment.
4. Set well equipment at well locations which includes cement pads and pumping units.
5. Responsible for tie-down of pumping units and installing counter weights for balancing pumping units.
6. Install and repair pipelines such as drisco, steel, and pvc.
7. Haul pipe and rods.
8. Carry out general yard maintenance of ground and buildings.
9. Haul gravel for tank battery location and road upkeep.
10. Clean up oil spills.
11. Perform any assignment as may given from time to time by superior.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2 RIG TECHNICIAN**

A RIG TECHNICIAN IS DESIGNATED TO MAINTAIN DRILLING RIG ENGINES, TRANSMISSIONS, HEATING SYSTEMS, DIESEL ELECTRIC GENERATORS AND MOTORS, HYDRAULIC SYSTEMS AND OTHER MECHANICAL EQUIPMENT, MONITOR INVENTORIES OF FUELS, OIL FILTERS, LUBE OILS, GREASES AND OTHER SERVICE ITEMS.

#### **A Rig Technician will be able to:**

1. Maintain drilling rig engines, transmissions, heating systems, diesel electric generators and motors, hydraulic systems, and other mechanical equipment.
2. Maintain equipment logs and
3. Carry out preventative maintenance as required.
4. Monitor inventories of fuels, oil filters, lube oils, greases and other service items.
5. Participate in rig mobilisation and de-mobilisation (rig-up and tear-out).
6. Perform any assignment as may be given from time to time by superior.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2 ROUGHNECK**

A ROUGHNECK IS DESIGNATED TO ASSIST IN SETTING UP, TAKING DOWN AND TRANSPORTING DRILLING AND SERVICE RIGS AND SERVICE EQUIPMENT, MAINTAIN DRILLING EQUIPMENT ON THE DRILL FLOOR AND MANIPULATE SECTIONS OF PIPE OR DRILL STEM AT THE RIG FLOOR DURING DRILLING AND DURING THE REMOVAL AND REPLACEMENT OF STRINGS OF PIPE OR DRILL STEM AND DRILL BIT.

**A Roughneck will be able to:**

1. Assist in setting up, taking down and transporting drilling and service rigs and service equipment.
2. Clean up drill rig area.
3. Handle, sort and move drill tools, pipe, cement and other materials.
4. Maintain drilling equipment on the drill floor.
5. Manipulate sections of pipe or drill stem at the rig floor during drilling and during the removal and replacement of strings of pipe or drill stem and drill bit.
6. Transport materials and well service equipment using transportation vehicle.
7. Perform any assignment as may be given from time to time by superior.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **RIG SENIOR TECHNICIAN**

A RIG SENIOR TECHNICIAN IS DESIGNATED TO MAINTAIN DRILLING RIG ENGINES, TRANSMISSIONS, HEATING SYSTEMS, DIESEL ELECTRIC GENERATORS AND MOTORS, HYDRAULIC SYSTEMS AND OTHER MECHANICAL EQUIPMENT, MONITOR INVENTORIES OF FUELS, OIL FILTERS, LUBE OILS, GREASES AND OTHER SERVICE ITEMS.

**A Rig Senior Technician will be able to:**

1. Maintain drilling rig engines, transmissions, heating systems, diesel electric generators and motors, hydraulic systems, and other mechanical equipment.
2. Maintain equipment logs and preventative maintenance records as required.
3. Monitor inventories of fuels, oil filters, lube oils, greases and other service items.
4. Participate in rig mobilisation and de-mobilisation (rig-up and tear-out).
5. Train rig technician.
6. Perform any assignment as may be given from time to time by superior.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 3  
DERRICKMAN**

A DERRICKMAN IS DESIGNATED TO ALIGN AND MANIPULATE SECTIONS OF PIPE OR DRILL STEM FROM A PLATFORM ON THE RIG DERRICK DURING THE REMOVAL AND REPLACEMENT OF STRINGS OF PIPE, OR DRILL STEM AND DRILL BIT AND ASSIST IN SETTING UP, TAKING DOWN AND TRANSPORTING DRILLING AND SERVICE RIGS.

**A Derrickman will be able to:**

1. Align and manipulate sections of pipe or drill stem from a platform on the rig derrick during the removal and replacement of strings of pipe, drill stem and drill bit.
2. Assist in setting up, taking down and transporting drilling and service rigs.
3. Operate and maintain drilling rig diesel motors, transmissions, pumps and drilling mud systems, and mix mud chemicals, cements and additives.
4. Monitor pressure, density, rate and concentration.
5. Adjust pumping procedure as required.
6. Record mud flows and volumes.
7. Carry out sampling activities.
8. Perform any assignment as may be given from time to time by superior.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **RIG MAINTENANCE SUPERVISOR (DRILLING)**

A RIG MAINTENANCE SUPERVISOR (DRILLING) IS DESIGNATED TO ADVISE MODIFICATION AND CHANGES TO PROCEDURES AND FREQUENCIES, COORDINATE PLANNING OF ALL MAINTENANCE ACTIVITIES, VERIFY ENTRIES ON PERMITS, ISOLATION TAGS, AND LOGS REFLECT THE CURRENT STATUS AND VERIFY ENTRIES ON PERMITS, ISOLATION TAGS, AND LOGS REFLECT THE CURRENT STATUS.

**A Rig Maintenance Supervisor (Drilling) must be able to:**

1. Advice modification and changes to procedures and frequencies.
2. Coordinate planning of all maintenance activities.
3. Verify replacement parts are kept to an optimum level.
4. Verify entries on permits, isolation tags, and logs reflect the current status.
5. Verify material requisitions reflect the desired materials and services and that unused materials are properly documented and returned to inventory.
6. Participate in training as required both onshore and offshore.
7. Verify maintenance activity.
8. Comply with local regulations requirement.
9. Perform any assignment as may be given from time to time by superior.
10. Perform supervisory functions.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4 ASSISTANT DRILLER**

AN ASSISTANT DRILLER SHOULD BE ABLE TO SET UP, DISMANTLE AND TRANSPORT EQUIPMENT, INCHARGE OF TRANSPORT VARIOUS MATERIALS AND NECESSARY EQUIPMENT, AND ASSIST DRILLER TO PLAN AND CONDUCT RIG-FLOOR AND RELATED ACTIVITIES SO AS TO MEET THE HIGHEST APPLICABLE STANDARD OF INTERNATIONAL OILFIELD PRACTICE.

**An Assistant Driller must be able to:**

1. Set up, dismantle, and transport equipment.
2. Maintain and clean up of the drilling area.
3. Handle, sort and move drill tools, pipes, cement and other materials.
4. Operate sections of pipe, drill stem during drilling and removal.
5. In charge of transporting various materials and necessary equipment.
6. Assist Driller to plan and conduct rig-floor and related activities so as to meet the highest applicable standard of international oilfield practice.
7. Assist Driller to monitor and adjust the drilling parameters and take those necessary actions so as to optimise the drilling process and safeguard the integrity of the well.
8. Perform any assignment as may be given from time to time by superior.
9. Perform supervisory functions.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.





**OIL, GAS AND PETROCHEMICAL**

**LEVEL 4**

**DRILLING OPERATOR**

A DRILLING OPERATOR IS DESIGNATED TO START AND CONTROL DRILLING ACTION AND LOWERING OF WELL CASING INTO WELL BORE, FABRICATE WELL CASINGS AND MONITOR OPERATION OF DRILLING EQUIPMENT TO DETERMINE CHANGES IN STRATA OR VARIATIONS IN DRILLING.

**A Drilling Operator will be able to:**

1. Start and control drilling action and lowering of well casing into well bore.
2. Withdraw drill rod from hole and extracts core sample.
3. Couple additional lengths of drill rod as bit advances.
4. Change drill bits as needed.
5. Pour water into well or pumps water or slush into well to cool drill bit and remove drillings.
6. Retrieve lost equipment from bore holes, using retrieval tools and equipment.
7. Record drilling progress and geological data.
8. Fabricate well casings.
9. Lubricate machine, splices worn or broken cables, replace parts, and builds up and repairs drill bits.
10. Drive or guide truck-mounted equipment into position, levels and stabilises rig, and extends telescoping derrick.
11. Inspect core samples to determine nature of strata, or takes samples to laboratory for analysis.
12. Assemble non-truck-mounted drilling equipment, using hand tools and power tools.
13. Monitor operation of drilling equipment to determine changes in strata or variations in drilling.
14. Perform any assignment as may be given from time to time by superior.
15. Perform supervisory functions.
16. Adhere to company standard operating procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **DIRECTIONAL DRILLING OPERATOR**

A DIRECTIONAL DRILLING OPERATOR IS DESIGNATED TO PROVIDE PHYSICAL LABOR FOR DIRECTIONAL DRILLING, MIX DRILLING FLUIDS BASED ON DRILLING AND SOIL CONDITIONS, RUN VAC-TRUCKS, MUD TRUCKS, BACKHOES, EXCAVATORS, AND TRENCHERS, AND MOBILISE AND DEMOBILISE RESOURCES OF MATERIAL, LABOR, AND EQUIPMENT TO JOB SITES BASE ON PROJECT REQUIREMENTS.

**A Directional Drilling Operator will be able to:**

1. Provide physical labour for Directional Drilling, locating and related excavation for the installation of telecommunication cables, ducts, and utility infrastructure.
2. Clean and place duct, sand, flow-fill, asphalt, sod, concrete and other materials required to complete an installation of trench.
3. Mix drilling fluids based on drilling and soil conditions.
4. Run VAC-Trucks, mud trucks, backhoes, excavators, and trenchers.
5. Operate directional drill (20/20 through 70/20).
6. Complete all daily paperwork to include time cards, dailies, job box safety meeting, inventory transfers, expense reports, etc.
7. Mobilise and demobilise resources of material, labor, and equipment to job sites base on project requirements.
8. Perform supervisory functions.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 RIG TECHNOLOGIST**

A RIG TECHNOLOGIST IS DESIGNATED TO OVERSEE RIG OPERATIONS INCLUDING THE WORK ACTIVITIES OF ALL RIG EMPLOYEES ASSIGNED TO EACH RIG, PROVIDE PROPER GUIDANCE AND DIRECTION TO RIG CREW ON SPECIFIC TASKS, CONDUCT MONTHLY RIG INSPECTIONS AND PREPARE REQUIRED DRILLING REPORTS, RIG OPERATIONS RELATED REPORTS AND JOB SAFETY ANALYSIS FORMS.

#### **A Rig Technologist will be able to:**

1. Oversee rig operations including the work activities of all rig employees assigned to each rig.
2. Prepare/monitor work schedule ensuring work is completed on schedule and safety processes and procedures are followed.
3. Monitor employees' performance and progress.
4. Provide crew with appropriate tools/supplies.
5. Provide proper guidance and direction to rig crew on specific tasks.
6. Plan and coordinate job procedures with customers, vendors and other contractors.
7. Verify supplies are adequate and work is carried out according to established specifications.
8. Conduct monthly rig inspections.
9. Prepare required drilling reports, rig operations-related reports and job safety analysis forms.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 DRILLER**

A DRILLER IS DESIGNATED TO DEMONSTRATE AND PROMOTE SAFETY LEADERSHIP AND TO ENSURE THAT THE CREW WORKS IN THE SAFEST POSSIBLE MANNER, PLAN AND CONDUCT RIG-FLOOR AND RELATED ACTIVITIES SO AS TO MEET THE HIGHEST APPLICABLE STANDARD OF INTERNATIONAL OILFIELD PRACTICE, AND MONITOR AND ADJUST THE DRILLING PARAMETERS AND TAKE THOSE NECESSARY ACTIONS SO AS TO OPTIMISE THE DRILLING PROCESS AND SAFEGUARD THE INTEGRITY OF THE WELL.

**A Driller will be able to:**

1. Demonstrate and promote safety leadership and to ensure that the crew works in the safest possible manner.
2. Lead and direct the crew in fulfilling their designated duties.
3. Plan and conduct rig-floor and related activities so as to meet the highest applicable standard of international oilfield practice.
4. Monitor and adjust the drilling parameters and take those necessary actions so as to optimize the drilling process and safeguard the integrity of the well.
5. Work constructively with the Operators representative and with third party service companies so as to contribute to collaborative working relationships at the rig site.
6. Advise the Rig Manager and Operators representative of any issues as appropriate safety.
7. Apply safety policies and practices in rig operations and act as a role model to other crew members in all safety matters.
8. Conduct and record Tool Box Talks for the rig crew and achieve the participation and contribution of crew members.
9. Conduct safety inspections of rig equipment and hold training drills as directed by supervisor.

10. Verify that all activities, including those of third party contractors, are conducted using safe working practices and using the designated Personal Protection Equipment (PPE) Operations.
11. Plan the tourly operations and conduct pre-job briefings or J.S.A.'s for the crew on activities.
12. Operate the rig equipment within its designed parameters in a manner to optimize the drilling process and associated activities.
13. Supervise the Assistant Driller and Derrickman in control.
14. Supervise recording of mud properties.
15. Keep accurate and complete records as required and detailed in the RMS.  
These include:
  - Keep accurate BHA Worksheet records of the drill string including details of equipment run in-hole
  - Accurately complete the IADC tour sheet
  - Keep records of Tool Box Safety Talks
16. Ensure that the rig crew conduct and record their assigned tasks in the rig Planned Maintenance System (PMS).
17. Provide recommendations to the Rig Manager for improved procedures.
18. Report any unforeseen or unusual events to the Rig Manager or Operator's representative as appropriate.
19. Direct, supervise and coach the crew members in their activities.
20. Assign crew members to conduct specific tasks during periods of routine activity and during special operations such as rigging-up/down and rig-moving.
21. Perform any assignment as may be given from time to time by superior.
22. Adhere to company standard operating procedure.
23. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 DRILLING SUPERVISOR**

A DRILLING SUPERVISOR IS DESIGNATED TO MANAGE THE OPERATIONS ASSOCIATED WITH THE WELL INCLUDING PLANNING, SCHEDULING AND RESOURCE ALLOCATION, CLEAR AND CONCISE REPORTING OF ALL WELL SITE ACTIVITIES AND EVENTS, AND COORDINATE AND PREPARE THE COLLATION OF LESSONS LEARNED WHICH CAN BE INCORPORATED IN FUTURE OPERATIONS.

#### **A Drilling Supervisor will be able to:**

1. Manage the operations associated with the well including planning, scheduling and resource allocation, clear and concise reporting of all well site activities and events
2. Coordinate and prepare the collation of lessons learned which can be incorporated in future operations.
3. Support the optimisation of operational performance through the rigorous implementation of "limit methodologies" without compromising HSE, well integrity or the integrity of the drilling unit.
4. Monitor compliance of the Safety Case and regulatory requirements and lead initial assist with incident investigations.
5. Monitor all health and social aspects on the drilling unit, and make recommendations to enhance the work environment and personnel welfare.
6. Verify the drilling unit and all associated systems are managed and operated within their integrity envelope.
7. Monitor the quality assurance program within all areas of responsibility including contractor's documentation, certification, procedures and drilling unit audits and inspections.
8. Assist with the coaching and mentoring of trainee staff assigned to the drilling unit and competency of experienced staff with feedback.
9. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 DIRECTIONAL DRILLING FOREMAN**

A DIRECTIONAL DRILLING FOREMAN IS DESIGNATED TO COORDINATE DELIVERIES OF MATERIALS TO THE WELL TO ENSURE IT IS AVAILABLE WHEN REQUIRED, PLANT AND EXECUTE ACTIVITIES RELATED TO OIL AND GAS DIRECTIONAL DRILLING AS PART OF HIGH PERFORMANCE TEAM, AND COLLABORATE WITH ENGINEERING, SUBSURFACE TEAMS AND ENVIRONMENT TO CONTRIBUTE, CHALLENGE AND PARTICIPATE IN DRILLING ACTIVITIES.

**A Directional Drilling Foreman will be able to:**

1. Coordinate deliveries of materials to the well to ensure it is available when required.
2. Verify that contractor meets all requirements of his contract.
3. Plant and execute activities related to oil and gas directional drilling as part of high performance team.
4. Safe completion of projects within planned cost and time goals.
5. Collaborate with engineering, subsurface teams and environment to contribute, challenge and participate in drilling activities.
6. Perform other miscellaneous duties as directed by superintendant.
7. Verify that contractor rig and equipment are properly maintained to avoid downtime.
8. Perform any assignment as may be given from time to time by superior.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 TOOLPUSHER**

A TOOLPUSHER IS DESIGNATED TO CONDUCT OR VERIFY THAT MONTHLY RIG INSPECTIONS ARE PERFORMED, PROVIDE DRILLERS AND CREW MEMBERS WITH THE ASSISTANCE AND GUIDANCE AS NEEDED, ASSIST RIG MANAGER AS NEEDED AND ASSIST RIG MANAGER IN THE PLANNING AND PREPARATION OF UPCOMING JOBS ON RIG.

#### **A Toolpusher will be able to:**

1. Conduct or verify that monthly rig inspections are performed.
2. Maintain a good relation with the operator representative.
3. Assist rig manager as needed.
4. Provide drillers and crew members help and guidance as needed.
5. Assist rig manager in the planning and preparation of upcoming jobs on rig.
6. Participate and be involved in all safety meetings and drills.
7. Always practice good leadership habits.
8. Perform managerial functions.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



**OIL, GAS, AND PETROCHEMICAL**

**LEVEL 6  
MUD TECHNOLOGIST**

A MUD TECHNOLOGIST IS DESIGNATED TO PROVIDE ONSITE SERVICES UNDER GENERAL SUPERVISION BY TESTING, MEASURING AND SUPERVISING THE OPERATION OF FLUID PUMPING AND MIXING, CARRY OUT TECHNICAL ANALYSIS IN ADDITION TO SPECIFIC PRODUCT AND PRACTICAL RECOMMENDATIONS FOR THE CONTROL OF FLUID PROPERTIES, AND MAINTAIN FLUID PROPERTIES ON RIG SITES BY ACCURATELY TESTING THE PROPERTIES OF THE FLUID.

**A Mud Technologist will be able to:**

1. Provide onsite services under general supervision by testing, measuring and supervising the operation of fluid pumping and mixing.
2. Carry out technical analysis in addition to specific product and practical recommendations for the control of fluid properties.
3. Maintain fluid properties on rig sites by accurately testing the properties of the fluid.
4. Maintain the inventory at customer well sites.
5. Provide effectual customer service by giving coordinators and rig-site customers information related to the progress of a rig site.
6. Create and implement solutions to various rig site problems.
7. Provide constant support to aid operations in providing customers the most efficient, environmentally safe drilling fluids that are available.
8. Perform managerial functions.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **DRILL BIT APPLICATION TECHNOLOGIST**

A DRILL BIT APPLICATION TECHNOLOGIST IS DESIGNATED TO TRACK PROTOTYPE APPLICATIONS, FIELD TEST RESULTS AND NEW PRODUCT MARKET, MEASURE BIT PERFORMANCE, PLAN AND SCHEDULE ACTIVITIES AND CONTRACTOR RESOURCES ALLOCATION TO ACHIEVE THE OPERATIONAL OBJECTIVES, AND RECOMMEND IMPROVEMENT OF DESIGN MODIFICATION.

**A Drill Bit Application Technologist must be able to:**

1. Track prototype applications, field test results and new product market.
2. Plan and schedule activities and contractor resources allocation to achieve the operational objectives.
3. Implement programs to improve HSSE in the offshore environment.
4. Measure bit performance.
5. Recommend improvement of design modification.
6. Mobilise and demobilise resources of material, labor, and equipment to job sites base on project requirements.
7. Investigate unusual bit performance to determine the cause and preventive action.
8. Lead engineering and technical position.
9. Perform any assignment as may be given from time to time by superior.
10. Perform managerial functions.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **DRILLING TECHNOLOGIST**

A DRILLING TECHNOLOGIST IS DESIGNATED TO MONITOR DAILY DRILLING AND WORK OVER WELL SITE ACTIVITIES, PROVIDE DOCUMENTARY REVIEW OF DRILLING PERFORMANCE TO HIGHLIGHT PROBLEM AREAS WITH RECOMMENDATIONS FOR IMPROVEMENT, AND DEVELOP AND EVALUATE NEW METHODS FOR POTENTIAL COST AND TIME SAVINGS TO DRILLING PROGRAMS.

**A Drilling Technologist will be able to:**

1. Monitor daily drilling and work over well site activities.
2. Provide documentary review of drilling performance to highlight problem areas with recommendations for improvement.
3. Verify daily drilling reports are submitted on time and are complete and accurate.
4. Promote and ensure implementation of good HS&E practices.
5. Develop and evaluate new methods for potential cost and time savings to drilling programs.
6. Mentor and work with drilling engineers.
7. Perform post well analysis identifying successes and potential areas for improvement.
8. Perform any assignment as may be given from time to time by superior.
9. Perform managerial functions.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **DIRECTIONAL DRILLING FIELD TECHNOLOGIST**

A DIRECTIONAL DRILLING FIELD TECHNOLOGIST IS CARRY OUT BOTTOM HOLE ASSEMBLY (BHA) SELECTION TO USE IN DIRECTIONAL DRILLING PROJECTS, PERFORM DRILLING SIMULATION USING DIRECTIONAL DRILLING COMPUTER SOFTWARE, VERIFY WELL PROFILE PLOTS ARE KEPT UP TO DATE AND PROVIDE DIRECTIONAL SURVEY DATA, AND ASSIST IN THE PROVISION OF ADVICE AND ANALYSIS TO ENGINEERS AT THE WORK SITE.

**A Directional Drilling Field Technologist will be able to:**

1. Carry out bottom hole assembly (BHA) selection to use in directional drilling projects.
2. Perform drilling simulation using directional drilling computer software.
3. Assist in the provision of advice and analysis to engineers at the work site.
4. Verify drilling performance to be as planned.
5. Verify well profile plots are kept up to date and provide directional survey data.
6. Assist with inspection of work related equipment.
7. Collaborate with Measurement While Drilling (MWD) Technologist to ensure that BHA compatibility and planned operating parameters are within specifications.
8. Maintain records of all directional drilling equipment at well site.
9. Perform managerial functions.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 RIG SUPERINTENDENT**

A RIG SUPERINTENDENT IS DESIGNATED TO PROVIDE DRILLERS AND CREW MEMBERS HELP AND GUIDANCE AS NEEDED, ACT AS DEPUTY FOR RIG MANAGER WHEN THE RIG MANAGER IS ABSENT FROM AREA OF OPERATIONS, PARTICIPATE IN DRILLING RELATED AUDITS, AND ASSIST IN DAY TO DAY DRILLING OPTIMIZATION AND TROUBLE SHOOTING IN THE COOPERATION WITH THE RIG MANAGER.

**A Rig Superintendent will be able to:**

1. Provide drillers and crew members help and guidance as needed.
2. Act as a deputy for Rig Manager when the Rig Manager is absent from area of operations.
3. Be well acquainted with the relevant national and international acts and regulations in respect of the drilling operations of the rig.
4. Assist the Rig Manager with other tasks related to the drilling operations as requested.
5. Participate in drilling related audits.
6. Assist in day to day drilling optimiSation and trouble shooting in the cooperation with the Rig Manager.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **DRILLING FLUID SENIOR TECHNOLOGIST**

A DRILLING FLUID SENIOR TECHNOLOGIST IS DESIGNATED TO PARTICIPATE IN THE DEVELOPMENT OF DRILLING FLUIDS PROGRAMS OF THE WELL TO BE DRILLED, PLAN AND MONITOR OF DRILLING FLUIDS AND FLUID OPERATIONS OF RUNNING WELLS AND MONITOR THE CONSUMPTION OF ADDITIVES, CHEMICALS AND TO KEEP CLOSE WATCH ON THE COST/ECONOMICS OF THE DRILLING FLUIDS.

**A Drilling Fluid Senior Technologist will be able to:**

1. Participate in the development of drilling fluids programs of the well to be drilled.
2. Plan and monitor of drilling fluids and fluid operations of running wells.
3. Monitor the consumption of additives, chemicals and to keep close watch on the cost/economics of the drilling fluids.
4. Monitor activities that involve the movement of SBM drilling fluids and base oils, on board drilling rig and on board supply boats in coordination with Fluids Supervisor on the rig.
5. Participate in Base Coordination team meeting.
6. Comply with Company and Regulatory environmental standards.
7. Participate in the preparation of drilling fluids FWR.
8. Perform any assignment as may be given from time to time by superior.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 BIT SPECIALIST**

A BIT SPECIALIST IS DESIGNATED TO SUPPORT THE AREAS PRODUCT DEVELOPMENT ACTIVITIES AND MONITOR BIT PERFORMANCE IN AN ASSIGNED AREA, ASSIST IN HANDLING OPERATIONAL ISSUES IN ORDER TO MAINTAIN AND IMPROVE SERVICE QUALITY, INVESTIGATE UNUSUAL BIT PERFORMANCE TO DETERMINE THE CAUSE AND PREVENTIVE ACTION, AND PERFORM BIT EVALUATION WORK AND PROVIDE ASSISTANCE TO OTHERS.

#### **A Bit Specialist will be able to:**

1. Support the areas Product Development activities and monitor bit performance in an assigned area.
2. Provide technical and operational assistance to both internal and external customers.
3. Generate technical papers and performance profiles.
4. Investigate unusual bit performance to determine the cause and preventive action.
5. Lead engineering and technical position.
6. Assist in handling operational issues in order to maintain and improve service quality.
7. Perform drill bit evaluation.
8. Perform bit evaluation work and provide assistance to others.
9. Perform any assignment as may be given from time to time by superior.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 DRILLING SPECIALIST**

A DRILLING SPECIALIST IS DESIGNATED TO SUPPORT PROJECT MANAGER ON DRILLING ACTIVITIES AND OPERATIONS, PROVIDE TRAINING TO CLIENT ABOUT A WIDE RANGE OF DRILLING SUBJECTS, IDENTIFY NEEDED IMPROVEMENT IN CURRENT PRACTICES AND CONTRIBUTE TO BEST PRACTICES AND EVALUATE, SELECT AND APPLY ADAPTATIONS AND MODIFICATIONS FOR DRILLING OPERATIONS UTILISING KNOWLEDGE OF DRILLING METRICS AND DRILLING TECHNOLOGY.

**A Drilling Specialist will be able to:**

1. Support project manager on drilling activities and operations.
2. Provide training to client about a wide range of drilling subjects.
3. Evaluate, select and apply adaptations and modifications for drilling operations utilising knowledge of drilling metrics and drilling technology.
4. Participate as an advisor to client HSE engineers.
5. Conduct audits, assist in development of audit protocols, manuals, checklist.
6. Identify needed improvement in current practices and contributes to best practices.
7. Conduct training and drill as applicable.
8. Perform any assignment as may be given from time to time by superior.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **DIRECTIONAL DRILLING SPECIALIST**

A DIRECTIONAL DRILLING SPECIALIST IS DESIGNATED TO SUPPORT PROJECT MANAGER ON TECHNICAL ASPECTS OF DIRECTIONAL DRILLING, EVALUATE, SELECT AND APPLY ADAPTATIONS AND MODIFICATIONS FOR DRILLING OPERATIONS UTILISING KNOWLEDGE OF DRILLING METRICS AND DRILLING TECHNOLOGY FOR DIRECTIONAL DRILLING OPERATIONS, AND EVALUATE, AND RECOMMEND DRILLING PROGRAMS AND APPLY DAILY COSTS AND REPORTING.

**A Directional Drilling Specialist will be able to:**

1. Support project manager on technical aspects of directional drilling.
2. Provide training and consultations to other drilling personnel.
3. Evaluate, select and apply adaptations and modifications for drilling operations utilising knowledge of drilling metrics and drilling technology for directional drilling operations.
4. Evaluate and recommend drilling programs and apply daily costs and reporting.
5. Participate as an advisor on directional drilling operation on work site.
6. Conduct audits, assists in development of audit protocols, manuals, checklist.
7. Identify needed improvement in current practices and contributes to best practices of directional drilling.
8. Recommend equipments necessary for best directional drilling methods and operations.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **DRILLING FLUID PRINCIPAL**

A DRILLING FLUID PRINCIPAL FOR IS DESIGNATED TO DESIGN AND INTERPRETATION OF DRILLING FLUID LABORATORY TESTING, PROVIDE TECHNICAL SUPPORT FOR RELATED ACTIVITIES SUCH AS WELLBORE STABILITY, HOLE CLEANING/HYDRAULICS, STUCK PIPE, LOST CIRCULATION, FORMATION DAMAGE, AND SPACERS, AND DESIGN COST EFFECTIVE DRILLING AND COMPLETION FLUID PROGRAMS FOR OIL AND GAS WELL THROUGH LABORATORY TESTING.

**A Principal Specialist Drilling Fluid will be able to:**

1. Design and interpretation of drilling fluid laboratory testing.
2. Provide technical support for related activities such as wellbore stability, hole cleaning/hydraulics, stuck pipe, lost circulation, formation damage, spacers. etc.
3. Provide consultation on new technology development and deployment.
4. Design cost effective drilling and completion fluid programs for oil and gas well through laboratory testing.
5. Monitor the field applications and assist senior scientist in research and technology.
6. Work closely with proponents.
7. Communicate effectively with field personnel in multi-disciplines.
8. Lead incident investigation team as applicable.
9. Involve in quality assurance program for mud additives.
10. Provide consultation service on drilling fluid.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **DRILLING BIT PRINCIPAL**

A DRILLING BIT PRINCIPAL IS RESPONSIBLE TO MODEL AND TEST DRILL BIT USING RELATED COMPUTER SOFTWARE, PROVIDE TRAINING AND DESIGNING PROBLEMS OF DRILL BIT TO OTHER PERSONNEL, PROVIDE TECHNICAL GUIDANCE ON VARIOUS TYPES OF DRILL BIT TECHNOLOGY, AND COORDINATE AND IMPLEMENT BEST DRILL BITS AND ACTIONS TO ENHANCE THE PERFORMANCE.

**A Drilling Bit Principal must be able to:**

1. Model and test drill bit using related computer software.
2. Provide training and designing problems of drill bit to other personnel.
3. Provide technical guidance on various types of drill bit technology.
4. Support reliability analysis and promotes optimum use of development tools and standards during modelling process.
5. Focus on the aspect of design of drill bit with regards to drilling operations and solve design problems.
6. Coordinate and implement best drill bits and actions to enhance the performance.
7. Carry out drill bit recommendation for certain wells.
8. Review designs for various drilling projects.
9. Verify design is in accordance with design parameters and maintain all required records and documentation.
10. Provide consultation service on drill bit.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **DRILLING DESIGN PRINCIPAL**

A DRILLING DESIGN PRINCIPAL FOR BIT IS DESIGNATED TO DESIGN DRILLING ACTIVITIES USING COMPUTER SOFTWARE, PROVIDE TECHNICAL GUIDANCE ON DESIGNING OF DRILLING METHODS, FOCUS ON THE ASPECT OF DESIGN WITH REGARDS TO DRILLING OPERATIONS AND SOLVE DESIGN PROBLEMS, AND COORDINATE AND IMPLEMENT BEST PRACTICES AND ACTIONS TO ENHANCE THE PERFORMANCE.

**A Drilling Design Principal will be able to:**

1. Design drilling activities using computer software.
2. Provide training and designing problems to other personnel.
3. Provide technical guidance on designing of drilling methods.
4. Support reliability analysis and promote optimum use of development tools and standards during the design process.
5. Focus on the aspect of design with regards to drilling operations and solve design problems.
6. Coordinate and implement best practices and actions to enhance the performance.
7. Coordinate and manage drilling designers in operations.
8. Review designs for various drilling projects and provide recommendations.
9. Verify design is in accordance with design parameters and maintain all required records and documentation.
10. Provide consultation service on drilling design.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **DIRECTIONAL DRILLING PRINCIPAL**

A DIRECTIONAL DRILLING PRINCIPAL IS DESIGNATED TO DEVELOP AND MANAGE DIRECTIONAL DRILLING PROJECT BUDGETS, CONDUCT PERFORMANCE REVIEW AND TESTING OF EQUIPMENTS AND STAFF WORKERS, PROVIDE TECHNICAL GUIDANCE ON DIRECTIONAL DRILLING TECHNOLOGY, AND COORDINATE AND IMPLEMENT BEST DIRECTIONAL DRILLING PRACTICES AND ACTIONS TO ENHANCE THE PERFORMANCE.

**A Directional Drilling Principal will be able to:**

1. Develop and manage directional drilling project budgets.
2. Conduct performance review and testing of equipments and staff workers.
3. Provide technical guidance on directional drilling technology.
4. Support reliability analysis and promotes optimum use of development tools and standards during the design process.
5. Determine tactical direction with regard to policy or procedures, work force staffing, and budgeting.
6. Coordinate and implement best practices and actions to enhance the performance.
7. Coordinate and manage directional drilling operations and personnel.
8. Verify that all directional drilling activities are conducted safely.
9. Verify equipment is operated in accordance with design parameters and maintain all required records and documentation.
10. Provide consultation service on directional drilling.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **LOGGING AND WELL COMPLETION OPERATOR**

A LOGGING AND WELL COMPLETION OPERATOR IS DESIGNATED TO RIG UP AND RIG DOWN WIRELINE EQUIPMENT ON LOCATION WITH NO SUPERVISION, RUN HOIST OPERATIONS WITH NO SUPERVISION, ASSIST SUPERVISOR DURING WIRELINE OPERATIONS, WORK WITH OTHER FIELD OPERATORS FOR FAIR DISTRIBUTION OF DUTIES, SAFE OPERATIONS, AND SUPERIOR SERVICE PERFORMANCE ON FIELD JOBS, AND ASSIST IN CALL ROTATION AS REQUESTED BY SUPERVISOR.

**A Logging and Well Completion Operator must be able to:**

1. Rig up and rig down wireline equipment on location with no supervision.
2. Run hoist operations with no supervision
3. Assist supervisor during wireline operations.
4. Work with other field operators for fair distribution of duties, safe operations, and superior service performance on field jobs.
5. Complete all job related paperwork as required.
6. Assist in call rotation as requested by supervisor.
7. Maintain facilities and vehicles to ensure a safe and efficient work environment.
8. Work assignments carried out to the highest quality level.
9. Perform various other duties and activities as assigned by supervisor within the physical constraints of the job.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **WIRELINE SENIOR OPERATOR**

A WIRELINE SENIOR OPERATOR IS DESIGNATED TO RIG UP AND RIG DOWN WIRELINE EQUIPMENT ON LOCATION WITH NO SUPERVISION, RUN HOIST OPERATIONS WITH NO SUPERVISION, ASSIST SUPERVISOR DURING WIRELINE OPERATIONS, WORK WITH OTHER FIELD OPERATORS FOR FAIR DISTRIBUTION OF DUTIES, SAFE OPERATIONS, AND SUPERIOR SERVICE PERFORMANCE ON FIELD JOBS, AND ASSIST IN CALL ROTATION AS REQUESTED BY SUPERVISOR.

**A Wireline Senior Operator must be able to:**

1. Rig up and rig down wireline equipment on location with no supervision.
2. Run hoist operations with no supervision.
3. Assist supervisor during wireline operations.
4. Work with other field operators for fair distribution of duties, safe operations, and superior service performance on field jobs.
5. Complete all job related paperwork as required.
6. Assist in call rotation as requested by supervisor.
7. Maintain facilities and vehicles to ensure a safe and efficient work environment.
8. Work assignments carried out to the highest quality level.
9. Perform various other duties and activities as assigned by supervisor within the physical constraints of the job.
10. Monitor and guide entry level wireline operator to perform high skill task.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4 WIRELINE SUPERVISOR**

A WIRELINE SUPERVISOR IS DESIGNATED TO MAINTAIN RECORD AND COMMUNICATIONS AS REQUIRED BY DISTRICT MANAGER, RESPONSIBLE FOR PROPER JOB-RELATED PAPERWORK AND OTHER RECORDS FOR SELF AND ASSIGNED CREW, DRIVE COMPANY VEHICLES IN A SAFE MANNER, AND PROMOTE AND MAINTAIN GOOD CUSTOMER RELATION.

**A Wireline Supervisor must be able to:**

1. Maintain records and communications.
2. Perform a proper job-related paperwork and other records.
3. Verify the compliance of all Federal, Country, State, Local regulations.
4. Visit well site or other designated destination at scheduled time.
5. Participate actively in quality improvement efforts.
6. Promote and maintain good customer relations.
7. Perform other related duties as assigned by senior supervisor.
8. Perform supervisory function.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **WIRELINE SENIOR SUPERVISOR**

A WIRELINE SENIOR SUPERVISOR IS DESIGNATED TO SUPERVISE HEAVY DUTY WIRELINE CREW, PERFORM PRE-LOAD JOB WITH NO SUPERVISION, COMMUNICATE WITH COMPANY PERSONNEL, SUPERVISE WELL OPERATIONS, TRAIN PERSONNEL FOR HEAVY DUTY WIRELINE, CONDUCT PRE-JOB SAFETY MEETINGS, SUPERVISE THE RIG UP AND RIG DOWN OF WIRELINE EQUIPMENT, KEEP ALL WIRELINE EQUIPMENT CLEANED AND MAINTAINED, SUPERVISE THE REPAIR AND MAINTENANCE OF WIRELINE EQUIPMENT AND PROMOTE SALES OF HEAVY DUTY WIRELINE SERVICES.

**A Wireline Senior Supervisor must be able to:**

1. Maintain records and communications.
2. Perform a proper job-related paperwork and other records.
3. Verify the compliance of all Federal, Country, State, Local regulations.
4. Visit well site or other designated destination at scheduled time.
5. Participate actively in quality improvement efforts.
6. Promote and maintain good customer relations.
7. Perform other related duties as assigned by senior supervisor.
8. Monitor and guide entry-level wireline supervisor to perform assigned work.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **WIRELINE TECHNOLOGIST**

A WIRELINE TECHNOLOGIST IS DESIGNATED TO PLAN AND PREPARE FOR WELL SITE OPERATIONS, MONITOR JUNIOR FIELD ENGINEER AND OPERATOR CREWS IN THE PREPARATION OF THE UNIT AND CALIBRATION OF EQUIPMENT, ADHERENCE TO ALL SAFETY REGULATIONS, SUBMIT ALL REQUIRED REPORTS AND DATA, PREPARE DRAFTS AND COMPLETE ALL LOGS FOR PRINTING ON LOCATION.

**A Wireline Technologist must be able to:**

1. Plan and prepare for well site operations.
2. Monitor wireline supervisor and operator crews in the preparation of the unit and calibration of equipment.
3. Conduct wireline well site operations.
4. Assure all workers under supervision are adherence to all safety regulations.
5. Foster and maintain customer relations
6. Verify the confidentiality of all logging operations.
7. Inform customers of any unusual conditions noted at the well.
8. Interpret common services in the assigned service area for customers.
9. Submit all required reports and data.
10. Maintain assigned equipment and facilities.
11. Prepare, draft, and complete all logs.
12. Perform managerial function.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 WIRELINE SPECIALIST**

A WIRELINE SPECIALIST IS DESIGNATED TO ASSEMBLE AND PERFORM PERFORATING GUN SERVICE IN VARIOUS FIELD LOCATIONS, RUN LOGGING TOOLS OFFERED BY THE COMPANY, VERIFY THAT ALL SAFETY PRACTICES ARE IMPLEMENTED BEFORE, DURING AND AFTER THE WELL SERVICE OPERATION, PROVIDE TECHNICAL ASSISTANCE TO OTHER FIELD OPERATION AND PERSONNEL ON LOCATION.

**A Wireline Specialist must be able to:**

1. Assemble and perform perforating gun services in various field locations
2. Run logging tools offered by the company.
3. Verify the operation of perforating and setting services offered by the company is done safety, efficiently.
4. Verify that all safety practices are implemented before, during and after the well service operation.
5. Provide technical assistance to other field operation personnel on location.
6. Lead and manage wireline operation team.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **WIRELINE PRINCIPAL**

A WIRELINE PRINCIPAL IS DESIGNATED TO OPERATE THE PRINCIPLE SERVICE TOOLS IN AN ASSIGNED SERVICE AREA, CONDUCT THE OPERATION OF A SERVICE UNIT TO MAINTAIN A HIGH STANDARD OF EFFICIENCY AND QUALITY, SUPERVISE OPERATOR CREW IN THE PREPARATION OF THE UNIT AND CALIBRATION OF EQUIPMENT, ASSURE ADHERENCE TO ALL SAFETY REGULATIONS, SUBMIT ALL REQUIRED REPORTS AND DATA AND PERFORM OTHER ASSIGNMENTS AS REQUIRED.

**A Wireline Principal must be able to:**

1. Participate in state-of-the-art well logging research and development projects.
2. Identify potential logging problems and in proposing appropriate solutions.
3. Advise on well logging matters requiring solid technical expertise.
4. Undertake studies of specific problems and advise management.
5. Coordinate with E&P business line concerning newer and more sophisticated completion techniques and evaluate their application.
6. Present new research and problem solving strategy to engineering team.
7. Provide consultation service on well logging
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 3**

**WELL COMPLETION SENIOR OPERATOR**

A WELL COMPLETION SENIOR OPERATOR IS DESIGNATED TO OPERATE WELL COMPLETION EQUIPMENT ON LOCATION, ASSIST SUPERVISOR DURING WELL LOGGING OPERATIONS, WORK WITH OTHER FIELD OPERATORS FOR FAIR DISTRIBUTION OF DUTIES, SAFE OPERATIONS, AND SUPERIOR SERVICE PERFORMANCE ON FIELD JOBS.

**A Well Completion Senior Operator must be able to:**

1. Operate well completion equipment and tool.
2. Assist supervisor during well completion operations.
3. Work with other field operators for fair distribution of duties, safe operations, and superior service performance on field jobs.
4. Complete all job related paperwork as required.
5. Maintain facilities to ensure a safe and efficient work environment.
6. Perform various other duties and activities as assigned by supervisor within the physical constraints of the job.
7. Train and guide entry-level well completion operator
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **WELL COMPLETION SUPERVISOR**

A WELL COMPLETION SUPERVISOR IS DESIGNATED TO MONITOR AND SUPERVISE COMPLETION OPERATION FROM A DEEPWATER DRILL SHIP/SEMI-SUB RIG, IMPLEMENT THE COMPLETION RUNNING PROCEDURE FOR SUB-SEA WELLS AND PREPARE ON-SITE DRILLERS INSTRUCTIONS FROM THAT FOR EACH OPERATION, SUPERVISION OF ELECTRIC LINE AND SLICK-LINE DEPLOYMENT AND WELL BORE CLEANUP FLOW ACTIVITIES, AND PREPARATION OF RUNNING TALLY FOR EACH COMPLETION JOB.

**A Well Completion Supervisor must be able to:**

1. Monitor and supervise completion operation from the operation rig.
2. Supervise the installation of upper and lower completion.
3. Implement the completion running procedure for sub-sea wells and prepare on-site drillers instructions.
4. Supervise of various line deployments and well bore cleanup flow activities.
5. Prepare the running tally for each completion job.
6. Prepare daily completion progress report.
7. Coordinate short time planning on the rig.
8. Assist in preparation of end of completion and non-conformance reports.
9. Perform supervisory function.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **WELL COMPLETION SENIOR SUPERVISOR**

A WELL COMPLETION SENIOR SUPERVISOR IS DESIGNATED TO MONITOR AND SUPERVISE COMPLETION OPERATION FROM A DEEPWATER DRILL SHIP/SEMI-SUB RIG, IMPLEMENT THE COMPLETION RUNNING PROCEDURE FOR SUB-SEA WELLS AND PREPARE ON-SITE DRILLERS INSTRUCTIONS FROM THAT FOR EACH OPERATION, SUPERVISION OF ELECTRIC LINE AND SLICK-LINE DEPLOYMENT AND WELL BORE CLEANUP FLOW ACTIVITIES, AND PREPARATION OF RUNNING TALLY FOR EACH COMPLETION JOB, TRAIN AND GUIDE NEW WELL COMPLETION SUPERVISOR.

**A Well Completion Senior Supervisor must be able to:**

1. Monitor and supervise completion operation from the operation rig.
2. Supervise the installation of upper and lower completion.
3. Implement the completion running procedure for sub-sea wells and prepare on-site drillers instructions.
4. Supervise of various line deployments and well bore cleanup flow activities.
5. Prepare the running tally for each completion job.
6. Prepare daily completion progress report.
7. Coordinate short time planning on the rig.
8. Assist in preparation of end of completion and non-conformance reports.
9. Train and guide new-entry well logging supervisor.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **WELL COMPLETION TECHNOLOGIST**

A WELL COMPLETION TECHNOLOGIST IS DESIGNATED TO PLAN AND PREPARE FOR WELL SITE OPERATIONS, MONITOR JUNIOR FIELD ENGINEER AND OPERATOR CREWS IN THE PREPARATION OF THE UNIT AND CALIBRATION OF EQUIPMENT, ADHERENCE TO ALL SAFETY REGULATIONS, SUBMIT ALL REQUIRED REPORTS AND DATA AND PREPARE DRAFTS AND COMPLETE ALL LOGS FOR PRINTING ON LOCATION.

**A Well Completion Technologist must be able to:**

1. Plan and prepare for well site operations.
2. Monitor well logging supervisor and operator crews in the preparation of the unit and calibration of equipment.
3. Conduct well completion well site operations.
4. Assure all workers under supervision are adherence to all safety regulations.
5. Foster and maintain customer relations
6. Verify the confidentiality of all completion operations.
7. Inform customers of any unusual conditions noted at the well.
8. Interpret common services in the assigned service area for customers.
9. Submit all required reports and data.
10. Maintain assigned equipment and facilities.
11. Prepare, draft, and complete all well completion paperwork.
12. Perform managerial function.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **WELL COMPLETION SPECIALIST**

A WELL COMPLETION SPECIALIST IS DESIGNATED TO OVERSEE THE DESIGN AND EXECUTION OF COMPLETIONS AND WORKOVERS FOR DEEPWATER WELLS, IDENTIFY OPPORTUNITIES FOR COST REDUCTION VIA MORE EFFICIENT COMPLETION PRACTICES OR MODIFIED COMPLETION DESIGNS AND WORKING IN CONJUNCTION WITH FIELD OPERATIONS PERSONNEL TO OPTIMISE WELL SITE SAFETY PERFORMANCE.

**A Well Completion Specialist must be able to:**

1. Oversee the design and execution of completions and work overs for deepwater wells.
2. Identifying opportunities for cost reduction via more efficient completion practices or modified completion designs, focusing on value-add techniques.
3. Communicate with others to ensure the technology exchange required .
4. Work in conjunction with field operations personnel to optimise well-site safety performance.
5. Hold pre-completion meetings and desk-top execution meetings for critical operations.
6. Prepare cost analyses and estimation.
7. Lead and guide the well completion operation team.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **WELL COMPLETION PRINCIPAL**

A WELL COMPLETION PRINCIPAL IS DESIGNATED TO PARTICIPATE IN STATE-OF-THE-ART WELL COMPLETION RESEARCH AND DEVELOPMENT PROJECT, IDENTIFY POTENTIAL COMPLETION PROBLEMS, ADVISE ON WELL COMPLETION MATTERS, AND PROVIDE CONSULTATION SERVICE ON RELATED FIELD.

**A Well Completion Principal must be able to:**

1. Participate in state-of-the-art well completion research and development projects.
2. Identify potential completion problems and in proposing appropriate solutions.
3. Advise on well completion matters requiring solid technical expertise.
4. Undertake studies of specific problems and advise management.
5. Coordinate with E&P business line concerning newer and more sophisticated completion techniques and evaluate their application.
6. Present new research and problem solving strategy to engineering team.
7. Provide consultation service on well completion
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **RESERVOIR ENGINEERING TECHNOLOGIST**

A RESERVOIR ENGINEERING TECHNOLOGIST IS DESIGNATED TO PROVIDE RESERVOIR ENGINEERING SUPPORT TO A MULTI-DISCIPLINARY RESERVOIR DEVELOPMENT GROUP, GATHER ENGINEERING DATA FROM PUBLIC AND COMPANY SOURCES INCLUDING PRODUCTION, DRILLING INFORMATION COSTS AND OTHER, PERFORM PROJECT TRACKING INCLUDING INCREMENTAL PRODUCTION AND PROJECT PERFORMANCE, AND SET UP AND RUN DATABASES, GATHER, MAINTAIN, AND PLOT RESERVOIR DATA.

**A Reservoir Engineering Technologist must be able to:**

1. Provide reservoir engineering support to a multi-disciplinary reservoir
2. development group.
3. Gather engineering data from public and company sources including production, drilling information costs and other.
4. Perform project tracking including incremental production and project performance.
5. Set up and run databases, gather, maintain, and plot reservoir data.
6. Prepare presentation material and project tracking, retrieval and analysis of pressure data and tests, reservoir, PVT, well and production data, decline curves.
7. Assist in acquisition/divestiture projects.
8. Assist in developing project costs and economics for development prospect.
9. Provide technical support for engineers and geologists,
10. Assist in coordinating year end reserve evaluation, annual budgets, planning and project approval process.
11. Perform database manipulation of data from various sources.
12. Perform managerial function.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **RESERVOIR ENGINEERING SPECIALIST**

A RESERVOIR ENGINEERING SPECIALIST IS DESIGN TO EVALUATE OIL AND GAS RESERVOIR PERFORMANCE AND DEPLETION STRATEGIES, ANALYZE ACTUAL FIELD DATA AND RECOMMEND NEW PROJECTS FOR INCREASING RESERVES, PERFORM RESERVE EVALUATIONS ESTIMATING RESERVES AND RECOVERIES, DEVELOP ENGINEERING MODELS INTEGRATING WELL PERFORMANCE, CONDUCT RESERVOIR SIMULATIONS TO PREDICT RESERVOIR PERFORMANCE, PERFORM TECHNICAL AND ECONOMIC EVALUATIONS TO ADD RESERVE.

**A Reservoir Engineering Specialist must be able to:**

1. Evaluate oil and gas reservoir performance and depletion strategies.
2. Analyze actual field data and recommend new projects for increasing reserves.
3. Perform reserve evaluations estimating reserves and recoveries.
4. Develop engineering models integrating well performance.
5. Conduct reservoir simulations to predict reservoir performance.
6. Perform technical and economic evaluations to add reserves.
7. Carry out application for approvals of projects to regulatory agencies.
8. Carry out recommendations to increase asset value.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8 RESERVOIR PRINCIPAL**

A RESERVOIR PRINCIPAL IS DESIGNATED TO CALCULATE COMPANY RESERVES BY VOLUMETRIC, PERFORMANCE, AND MATERIAL BALANCE METHODS, MAINTAIN COMPANY'S RESERVE BOOKINGS FOR ASSIGNED FIELDS, INCLUDING BOOKING OF NEW RESERVES, FORECAST FUTURE PRODUCT SALES AND REVENUES, GENERATE AND MAINTAIN UPDATED PROJECT ECONOMICS, MONITOR ONGOING OPERATED AND NON-OPERATED PROJECTS.

**A Reservoir Principal must be able to:**

1. Recommend exploration and development opportunities through the evaluation of risk considerations and economic aspects of company and outside operated properties.
2. Calculate company reserves by volumetric, performance, and material balance methods.
3. Maintain company's reserve bookings for assigned fields, including booking of new reserves.
4. Forecast future product sales and revenues.
5. Generate and maintain updated project economics.
6. Monitor ongoing operated and non-operated projects.
7. Provide estimates of company reserves and schedules of future expenses for exploration and exploitation projects.
8. Conduct economic evaluations on both a risked and unrisked basis for prospects, acquisitions and dispositions.
9. Build and analyse reservoir simulation models to aid infield appraisal and development plans.
10. Maintain sales forecasts and books reserves for producing fields within business unit.
11. Provide consultation service on reservoir engineering.



12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2 PRODUCTION OPERATOR**

A PRODUCTION OPERATOR IS DESIGNATED TO OPERATE WELL PRODUCTION EQUIPMENT ON LOCATION, ASSIST SUPERVISOR DURING WELL PRODUCTION OPERATIONS, WORK WITH OTHER FIELD OPERATORS FOR FAIR DISTRIBUTION OF DUTIES, SAFE OPERATIONS, AND SUPERIOR SERVICE PERFORMANCE ON FIELD JOBS.

**A Production Operator must be able to:**

1. Operate production equipment and tool.
2. Assist supervisor during production operations.
3. Work with other field operators for fair distribution of duties, safe operations, and superior service performance on field jobs.
4. Complete all job related paperwork as required.
5. Maintain facilities to ensure a safe and efficient work environment.
6. Perform various other duties and activities as assigned by supervisor within the physical constraints of the job.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **PRODUCTION SENIOR OPERATOR**

A PRODUCTION SENIOR OPERATOR IS DESIGNATED TO OPERATE PRODUCTION EQUIPMENT ON LOCATION, ASSIST SUPERVISOR DURING PRODCUTION OPERATIONS, WORK WITH OTHER FIELD OPERATORS FOR FAIR DISTRIBUTION OF DUTIES, SAFE OPERATIONS, AND SUPERIOR SERVICE PERFORMANCE ON FIELD JOBS.

**A Production Senior Operator must be able to:**

1. Operate production equipment and tool.
2. Assist supervisor during production operations.
3. Work with other field operators for fair distribution of duties, safe operations, and superior service performance on field jobs.
4. Complete all job related paperwork as required.
5. Maintain facilities to ensure a safe and efficient work environment.
6. Perform various other duties and activities as assigned by supervisor within the physical constraints of the job.
7. Train and guide entry-level production operator
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PRODUCTION ENGINEERING TECHNICIAN**

A PRODUCTION ENGINEERING TECHNICIAN IS DESIGNATED TO OPERATE, SURVAILANCE AND TRUBLESBOOT OILFIELD SURFACE EQUIPMENT, VALIDATE AND GIVE INPUT PRODUCTION AND INJECTION DATA PERFORM PREVENTIVE MAINTENACE AND COORDINATE ABONDONMENT OF FACILITIES.

**A Production Engineering Technician must be able to:**

1. Operate, surveillance, and troubleshoot oilfield surface equipment.
2. Validate and give input production and injection data.
3. Perform preventative maintenance, minor maintenance, and minor repairs on equipment.
4. Report spills and leaks.
5. Initiate process for major equipment repairs.
6. Coordinate abandonment of facilities.
7. Perform supervisory function.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **PRODUCTION ENGINEERING SUPERVISOR**

A PRODUCTION ENGINEERING SUPERVISOR IS DESIGNATED TO ANALYSE WORK ORDERS TO ESTIMATE WORKER HOURS AND CREATE MACHINING SCHEDULES, COMPUTE AMOUNTS OF INVENTORY AND SUPPLIES REQUIRED FOR OPERATIONS, PLAN FLOW OF MATERIALS THROUGH DEPARTMENT AND DEVELOP PHYSICAL LAYOUT OF MACHINES ACCORDING TO WORK ORDERS.

**A Production Engineering Supervisor will be able to:**

1. Analyse work orders to estimate worker hours and create machining schedules.
2. Computes amounts of inventory and supplies required for operations.
3. Plans flow of materials through department.
4. Develops physical layout of machines according to work orders.
5. Inspect and measure parts and products to verify conformance to quality, safety and housekeeping specifications.
6. Directs workers in adjusting machines and equipment to repair products.
7. Establish or adjust work procedures to meet production schedules.
8. Develop, recommend, and implement measure.
9. Suggests changes in working conditions and use of equipment.
10. Analyse and resolve work problems, or assists workers in solving work problems.
11. Maintain time and production records.
12. Develop capital equipment justifications for machine tools and process technology.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 6**

**PRODUCTION TECHNOLOGIST**

A PRODUCTION TECHNOLOGIST IS DESIGNATED TO PROVIDE TECHNICAL LEADERSHIP ON SUBSEA PRODUCTION SYSTEMS, CREATE DRAWINGS AND CONFIGURE PRODUCT BILLS OF MATERIAL FOR NEW PRODUCTS AND CUSTOMER-SPECIFIC ORDERS, MODIFY DRAWINGS AND BILLS OF MATERIALS FROM DESIGN ENHANCEMENTS, ESTABLISH PART SPECIFICATIONS THROUGH CALCULATIONS AND DESIGN LAYOUTS, CONDUCT AND PARTICIPATE IN DESIGN REVIEWS AND CONSULT OTHER FUNCTIONS TO SOLVE PROBLEMS

**A Production Technologist will be able to:**

1. Provide technical leadership on subsea production systems create drawings.
2. Configure product bills of material for new products and customer-specific orders.
3. Modify drawings and bills of materials from design enhancements.
4. Establish part specifications through calculations and design layouts.
5. Conduct and participate in design reviews.
6. Consult other functions to solve problems, such as manufacturing, sourcing, field service and project management.
7. Generate production planning and scheduling for manufacturing of oil and gas equipments.
8. Handle day-to-day production issues.
9. Liaise closely with all departments on fulfilling delivery requirement.
10. Perform managerial function.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PRODUCTION SPECIALIST**

A PRODUCTION SPECIALIST IS DESIGNATED TO BE RESPONSIBLE IN ENCOMPASSING THE DESIGN, INSTALLATION, OPERATION, MAINTENANCE, MODIFICATION, CONSTRUCTION, MODERNISATION, AND PROTECTION OF PHYSICAL FACILITIES AND EQUIPMENT USED PRODUCE LIQUID AND GRANULAR CHEMICAL PRODUCTS TRAIN OPERATION OF CHEMICAL PRODUCTION CONTINUOUS UNITS ACT AS UNIT OPERATIONS INCLUDING FILTRATION, EVAPORATION, AND REACTORS,

**A Production Specialist will be able to:**

1. Encompass the design, installation, operation, maintenance, modification, construction, modernisation, and protection of physical facilities and equipment used.
2. Train operation of chemical production continuous units.
3. Communicate and interact with the operators.
4. Provide technical direction and process trouble shooting,
5. Assist in ensuring compliance with standard regulation.
6. Monitor and guide production technologist.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8 PRODUCTION PRINCIPAL**

A PRODUCTION PRINCIPAL IS DESIGNATED TO CREATE AND IMPLEMENT THE FIELD DEVELOPMENT PLAN, VERIFY THAT ALL RELEVANT OPERATIONAL PROCEDURES ARE IN PLACE WHEN PRODUCTION STARTS UP, PERFORM WELL DESIGN, MONITOR PRODUCTION RATES AND ADDRESS PRODUCTION ISSUES AS WELL AS GENERATE AND IMPLEMENT DEVELOPMENT PLANS FOR YOUR FIELDS TO MAXIMISE VALUE.

**A Production Principal for must be able to:**

1. Create and implement the Field Development Plan to maximise value.
2. Verify that all relevant operational procedures are in place when production starts up.
3. Perform well design, monitor production rates and address production issues.
4. Create additional value, cutting costs and planning and executing well interventions.
5. Develop annual production forecasts and Joint Venture budgets.
6. Recommend and prepare documentation and presentations for project approval.
7. Review the large onshore gas production well production.
8. Develop opportunities with multidisciplinary teams for production enhancement investments and project implementation.
9. Analyse process shutdown data.
10. Identify production process improvements.
11. Provide consultation service on production technology.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **PETROLEUM ECONOMICS**

A PETROLEUM ECONOMICS IS DESIGNATED TO SUPPORT THE DIVISION OF OIL AND GAS' COMMERCIAL SECTION IN ITS EFFORTS TO PROTECT AND ENHANCE THE OIL AND GAS ROYALTY INTERESTS, BUILD AND RUN ECONOMIC MODELS, ASSIST IN THE ANALYSIS OF VARIOUS ECONOMIC QUESTIONS, PREPARE MANAGEMENT REPORTS PERTAINING TO A WIDE ARRAY OF SUBJECTS, INCLUDING ROYALTY VALUE, NET PROFIT SHARES, LEASING, FACILITY ACCESS, UNITISATION, AND THE MARKETING OF ROYALTY OIL AND GAS.

**A Petroleum Economics will be able to:**

1. Support the Division of Oil and Gas' Commercial Section in its efforts to protect and enhance the oil and gas royalty interests.
2. Build and run economic models.
3. Create and maintain databases.
4. Assist in the analysis of various economic questions.
5. Perform independent economic research.
6. Perform Draft Preliminary and Final Best Interest Findings concerning royalty sales and royalty modification.
7. Assist or lead on modeling appropriate transportation charges, economic risk value of known or potential hydrocarbon resources, the effectiveness of various State incentives on hydrocarbon production.
8. Prepare management reports pertaining to a wide array of subjects, including royalty value, net profit shares, leasing, facility access, unitisation, and the marketing of royalty oil and gas.
9. Respond to information requests from lessees, licensees, industry, government agencies, and the public regarding all of these programs/functions.
10. Assist in developing presentation materials for Commercial Analysts.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PETROLEUM SPECIALIST**

A PETROLEUM SPECIALIST IS DESIGNATED TO ECONOMICALLY AND COMMERCIALY EVALUATE NEW BUSINESS OPPORTUNITIES CONDUCT ECONOMIC EVALUATIONS, ASSESSMENT AND FEASIBILITY STUDIES; FORMULATE ECONOMIC MODELS ANALYSE FISCAL TERMS AND PROVIDE ECONOMIC INTERPRETATION COORDINATE THE WORK OF GEOSCIENTISTS AND PETROLEUM ENGINEERS CONTRACTING NEGOTIATIONS, ASSESSING NEW BUSINESS VENTURES, IDENTIFYING NEW PROJECTS AND PROVIDE REGULAR OR ON REQUEST ECONOMIC ANALYSIS AND CASH FLOW FORECAST.

#### **A Petroleum Specialist will be able to:**

1. Evaluate economically and commercially on new business opportunities for greenfield and brownfield developments.
2. Conduct economic evaluations, assessment and feasibility studies in the upstream oil and gas industry.
3. Formulate economic models by using data.
4. Analyse fiscal terms and provide economic interpretation of Production Sharing Agreements and other legal tax documents.
5. Provide model of fiscal terms, and hence net present value and expected monetary values.
6. Coordinate the work of geoscientists and petroleum engineers in producing production and cost profiles.
7. Provide contract negotiations, assessing new business ventures, identifying new projects.
8. Provide regular or on request economic analysis and cash flow forecasts.
9. Prepare and research Key Economic Data Sets.
10. Continue developing on economic models and integrate with other corporate models.
11. Adhere to company standard operating procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 DRAUGHTSMAN**

A DRAUGHTSMAN MUST BE ABLE TO READ AND UNDERSTAND ARCHITECTURAL AND ENGINEERING DRAWINGS, TO BE ABLE TO READ AND GENERATE 2D/3D PIPING DESIGN DRAWINGS, SHOP DRAWINGS, SECTION DETAILS, AS-BUILT DRAWINGS, CO-ORDINATION DRAWINGS AND HANDLING OF DRAWINGS FOR ASSIGNED PROJECTS, TO EFFICIENTLY ASSIST IN TECHNICAL DRAWINGS PREPARATION INDEPENDENTLY WITH POSITIVE ATTITUDE, COMMITMENT TO COMPLETE ASSIGNMENT WITHIN DEADLINES.

#### **A Draughtsman must be able to:**

1. Read and understand architectural and engineering drawings.
2. Read 2D/3D piping design drawings, shop drawings, section details, as-built drawings, co-ordination drawings and handling of drawings for assigned projects.
3. Generate 2D/3D piping design drawings, shop drawings, section details, as-built drawings, co-ordination drawings and handling of drawings for assigned projects.
4. Efficiently assist in technical drawings preparation independently with positive attitude, commitment to complete assignment within deadlines
5. Assist in minor project coordination.
6. Perform any assignment as may be given from time to time by superior.
7. Adhere to company standard operating procedures.
8. Comply with safety and security procedure.
9. Determine quality, cost, strength and quantity of required materials and enter figures on materials list.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.

\*Draughtsman for Level 1 have a same Occupational Definition with another Draughtsman Level 1





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 PIPING FITTERS**

THE PIPING FITTERS IS DESIGNATED TO PERFORM PIPING FITTING DUTIES ASSIGNED BY THE PIPING FOREMAN, IN A SAFE AND EFFICIENT MANNER, PROVIDE PROGRESS FEEDBACK TO THE FOREMAN AND SUPERVISOR AND WORK WITHIN THE FRAMEWORK, PREPARE AND ASSEMBLE SCREWED AND WELDED PIPEWORK, AND PIPE SYSTEM.

#### **A Pipe Fitters must be able to:**

1. Assemble and tighten bolted flange connections.
2. Joint pipework using flanged joints.
3. Set and mark out pipework, and develop patterns for pipework.
4. Prepare pipe ends.
5. Prepare and assemble screwed pipework.
6. Prepare and assemble welded pipework.
7. Prepare and assemble non-metallic pipework.
8. Fabricate and install supports and fabricate branches and bends.
9. Install steam tracing and jacketed pipes.
10. Prepare and test pipework systems including pressure testing.
11. Perform all required discipline tasks, safely, consistently .
12. Read, understand and implement all applicable company, project policies, working practices and procedures.
13. Verify at all times that the plating and structural workscope is completed.
14. Complete all workscope in accordance with applicable workpack, jobcard instructions, associated procedures and drawings and sketches.
15. Support to other trades and disciplines where required.
16. Adhere to company standard operating procedure.
17. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **PIPING JUNIOR DRAFTER**

THE PIPING JUNIOR DRAFTER IS DESIGNATED TO PREPARE PIPING DRAWING PACKAGES, PROVIDE TECHNICAL DIRECTION TO TECHNICIANS, VERIFY THE PLANS MUST COMPLY WITH STANDARDS AND SAFETY CODES, DESIGN AND DRAFTING CAD PIPING DRAWING, PRACTICE FABRICATION DESIGN BEST PRACTICES, WELD SYMBOLS AND AUTOCAD PRACTICES.

#### **A Piping Junior Drafter must be able to:**

1. Involve with the development, design and drafting of CAD based mechanical/piping drawings for the projects.
2. Prepare of piping drawing packages.
3. Provide technical direction to technicians.
4. Verify the plans must comply with standards and safety codes as well as client specifications and budget.
5. Practice fabrication design best practices, weld symbols and AutoCAD contemporary practices.
6. Report status tasks assigned by the Project Engineer.
7. Estimate to complete for tasks assigned by the Project Engineer.
8. Allocate time to multiple ongoing projects.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2 PIPING SENIOR FITTER**

A PIPING SENIOR FITTER IS DESIGNATED TO VERIFY TYPE AND SIZE OF PIPE AND RELATED MATERIALS ACCORDING TO DRAWINGS AND JOB SPECIFICATIONS, INSPECT WORKSITES TO DETERMINE PRESENCE OF OBSTRUCTIONS PLANS SEQUENCE OF INSTALLATION TO AVOID OBSTRUCTIONS AND ACTIVITIES OF OTHER CRAFTS, CUT AND BEVEL PIPE USING CUTTING TORCHES, SAWS, THREADING MACHINES AND PIPE CUTTING MACHINE, ASSEMBLE AND INSTALLS A VARIETY OF VALVES AND FITTINGS, PREPARE AND FIT PIPE FOR WELDING BY A CERTIFIED PIPE WELDER OR JOIN PIPE AND FITTINGS BY MEANS OF THREADED, BRAZED OR SOLDERED JOINTS; FABRICATE, INSTALL, POSITION, OR CONNECT COMPONENTS, PARTS, FINISHED PRODUCTS, OR INSTRUMENTS FOR TESTING PURPOSES.

**A Piping Senior Fitter will be able to:**

1. Make sure type and size of pipe and related materials according to drawings and job specifications.
2. Inspect worksites to determine presence of obstructions plans sequence of installation to avoid obstructions and activities of other crafts.
3. Cut and bevel pipe using cutting torches, saws, threading machines and pipe cutting machine.
4. Assemble and installs a variety of valves and fittings.
5. Prepare and fit pipe for welding by a certified pipe welder or join pipe and fittings by means of threaded, brazed or soldered joints.
6. Secure pipe to structures with clamps, brackets or hangers.
7. Cut penetrations in walls, ceilings or floors.
8. Use, interpret and care for the tools and equipment commonly employed on an industrial project such.

9. Fabricate, install, position, or connect components, parts, finished products, or instruments for testing purposes.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 PIPING DRAFTER**

A PIPING DRAFTER IS DESIGNATED TO PREPARE PIPING DRAWING PACKAGES, PROVIDE TECHNICAL DIRECTION TO TECHNICIANS, VERIFY THE PLANS MUST COMPLY WITH STANDARDS AND SAFETY CODES, DESIGN AND DRAFT CAD PIPING DRAWING, PRACTICE FABRICATION DESIGN BEST PRACTICES, WELD SYMBOLS AND AUTOCAD PRACTICES AND MONITOR AND GUIDE JUNIOR DRAFTER.

**A Piping Drafter must be able to:**

1. Involve with the development, design and drafting of CAD based mechanical/piping drawings for the projects.
2. Prepare of piping drawing packages.
3. Provide technical direction to technicians.
4. Verify the plans must comply with standards and safety codes as well as client specifications and budget.
5. Practice fabrication design best practices, weld symbols and AutoCAD contemporary practices.
6. Report status tasks assigned by the Project Engineer.
7. Estimate to complete for tasks assigned by the Project Engineer.
8. Allocate time to multiple ongoing projects.
9. Monitor and guide junior piping drafter to accomplish work assigned.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 PIPING FABRICATOR**

A PIPING FABRICATOR IS DESIGNATED TO PERFORM ACTUAL MEASUREMENT OF ALL FABRICATED PIPING SPOOL, SPHERICAL TANKS AND CYLINDRICAL TANKS, INCLUDING ORIENTATION OF NOZZLES AND OPENINGS, RESPONSIBLE FOR DIMENSIONAL CHECK PRIOR TO WELDING AND TO CHECKING MATERIALS TO BE USED IN THE FABRICATION SHOP.

#### **A Piping Fabricator must be able to:**

1. Perform actual measurement of all fabricated piping spool, spherical tanks, and cylindrical tanks that includes orientation of nozzles and openings.
2. Perform dimensional check prior to welding.
3. Check materials to be used in the fabrication shop.
4. Check material traceability inspection by confirming heat numbers of each pieces and fittings.
5. Counter check drawing and designed plans before fabrication.
6. Coordinate sub-contractor piping engineer for all piping and equipment installation on site.
7. Review and confirm as-built drawings for all fabricated pipes and tanks.
8. Perform all piping installation as per equipment installation check lists.
9. Verify equipment foundation before and after grouting prior to client inspection for final acceptance.
10. Review all approved piping test packages being completed from hydro and pneumatic testing.
11. Complete all documentation for Piping and Mechanical required for mechanical completion.
12. Built piping drawing as per change design/revision line.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PIPING SENIOR DRAFTER**

A SENIOR PIPING DRAFTER IS DESIGNATED TO DESIGN AND DRAFT CAD BASED PIPING DRAWINGS FOR THE INDUSTRY PROJECTS, PREPARE PIPING AND DRAWING PACKAGES THAT REQUIRE HIGH DEGREE OF EXPERTISE AND JUDGMENT, PROVIDE TECHNICAL DIRECTION TO TECHNICIANS, TRAIN THE DRAFTING TEAM, WELD SYMBOLS AND AUTOCAD CONTEMPORARY PRACTICES, REPORT STATUS AND ESTIMATE TO COMPLETE TASKS ASSIGNED BY THE PROJECT ENGINEER.

**A Piping Senior Drafter must be able to:**

1. Participate with the development, design and drafting of CAD based mechanical/piping drawings for the industry projects.
2. Prepare piping and other mechanical drawing packages that require high degree of expertise and judgment.
3. Provide technical direction to technicians.
4. Train the drafting team.
5. Verify that the plans must comply with government standards and safety codes as well as client specifications and budget.
6. Practice fabrication design best practices, weld symbols and AutoCAD contemporary practices.
7. Report status and estimate to complete for tasks assigned by the Project Engineer.
8. Allocate time to multiple ongoing projects.
9. Train and monitor the drafting team.
10. Perform supervisory function.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PIPING FABRICATION SUPERVISOR**

THE PIPING FABRICATION SUPERVISOR IS DESIGNATED TO CHECK AND SUPERVISES THE CONSTRUCTION OF THE STEEL STRUCTURE; ENSURE THE FABRICATION ARE CARRIED OUT EFFICIENTLY AND IN ACCORDANCE WITH CONTRACT DOCUMENTS AND SITE INSTRUCTIONS; ENSURE THAT THE SUPPLIER IS USING THE LATEST REVISION OF APPROVED SHOP DRAWINGS.

**A Piping Fabrication Supervisor must be able to:**

1. Check and supervise the construction of the steel structures to ensure the fabrications are carried out efficiently.
2. Verify that the supplier is using the latest revision of approved shop drawings.
3. Assist the contractor's fabrication manager or his representatives with any shop floor issues relevant to the fabrication.
4. Compile and keep daily fabrication reports of the activities for the works conducted by the supplier.
5. Identify faulty materials and bad workmanship.
6. Notify faulty materials and bad workmanship to contractor and provide written report.
7. Check that the supplier follows the approved fabrication procedures and schedule.
8. Report to the contractor's fabrication manager on site difficulties, day-to-day progress of work, quality of workmanship, adequacy of the supplier's plant and labour force.
9. Verify all the supplier's site staffs observe safety precaution for works.
10. Monitor record and verify the supplier's works.
11. Update progress in the contractor's required format and maintain records in the office.
12. Co-ordinate with supplier's representatives for providing supervision of works.
13. Perform supervisory function
14. Adhere to company standard operating procedure.
15. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 PIPING DESIGNER**

A PIPING DESIGNER IS DESIGNATED TO PREPARE THE ISOMETRIC PIPING AS PER EQUIPMENT LAYOUT AND DIAGRAMS WHICH IN 3D MODELLING OF PIPING AND EQUIPMENT, PREPARE PIPING ISOMETRIC DRAWINGS. THEY ALSO WILL IN CHARGE FOR DESIGNING WORK IN PDMS MODULE FOR PIPING, EQUIPMENT, PUMP AND MUCH MORE.

#### **A Piping Designer must be able to:**

1. Prepare the isometric piping as per equipment layout, piping diagram and owner project requirements and standard.
2. Built 3D modelling of piping and equipment.
3. Prepare piping isometric drawings.
4. Participate in design coordination and interfaces with other engineering discipline.
5. Perform for designing work for piping, equipment, pump, piping and tray supports, nozzle orientation and clash checking.
6. Give technical direction and control of the piping engineering team on a project
7. Prepare discipline project estimates and planning input.
8. Verify that all staff are aware of their obligations under statutory Instruments, regulations and guidelines.
9. Verify that all staff are working to the company procedures, specifications, standards and any project specific agenda.
10. Review and assist in the updating of procedures, specifications and standards.
11. Assist and mentor for graduates and technical trainees.
12. Recommend improvements to company procedures.
13. Transfer technology and experience gained to others.
14. Prepare man-hour estimates, cost estimates, manpower histograms and planning schedules for area of project responsibility.
15. Undertake technical and safety audits

16. Adhere to company standard operating procedure.
17. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **PIPING FABRICATION SUPERINTENDENT**

A PIPING FABRICATION SUPERINTENDENT IS DESIGNATED TO SUPERVISE THE FABRICATION, INSTALLATION, PUNCH LISTING, PRE-COMMISSIONING, COMMISSIONING AND HYDRO-TESTING OF PIPING SYSTEMS, COORDINATE ANY NECESSARY REVISIONS TO DRAWINGS.

**A Piping Fabrication Superintendent must be able to:**

1. Supervise the fabrication, installation, punch listing, pre-commissioning, commissioning and hydro-testing of piping systems.
2. Co-ordinate, supervise and inspect related multi-discipline activities.
3. Prepare construction methods, schedules, manning levels and material requirements.
4. Co-ordinate any necessary revisions to drawings.
5. Manage, monitor and report on progress to ensure completion dates and budgets are met
6. Train workforce within a piping discipline.
7. Verify that drawings, tools, equipment and materials are available and correct.
8. Implement and enforce procedures and safety standards.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 PIPING TECHNOLOGIST**

A PIPING TECHNOLOGIST IS DESIGNATED TO PREPARE BID, CONSTRUCTION AND AS-BUILT CIVIL, MECHANICAL, AUTOCAD SOFTWARE AND PREPARATION OF PLANT LAYOUT, PIPING PLANS, PIPING ISOMETRICS, STEEL STRUCTURE AND LATOUTS EQUIPMENT LAYOUTS.

**A Piping Technologist must be able to:**

1. Prepare bid, construction and as-built piping drawing on AutoCAD software.
2. Prepare plant layout, piping plans, piping isometrics, steel structure and layouts, equipment layouts.
3. Perform site visit when required information for development, as-built and dimension verification of drawings.
4. Keep and maintain properly record of all drawings hard copies and soft copies with electronic drawing list and schedule.
5. Take back up data time to time as per scheduled and place at designated location.
6. Perform managerial duties.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PIPING DESIGN SPECIALIST**

A PIPING DESIGN SPECIALIST IS DESIGNATED TO PROVIDE TECHNICAL GUIDANCE TO OTHER LEVELS OF DRAFTING STAFF AND SQUAD LEADER, PREPARE ESTIMATION, CHANGE REQUESTS AND PROPOSAL WRITE UPS. ASSISTANCE IN CONTROLLING AND COORDINATING INFORMATION AS IT APPLIES TO THE PIPING TASK FORCE A PROJECT.

**A Piping Design Specialist must be able to:**

1. Perform conceptual design layout and studies.
2. Assist in the development and preparation of piping specifications, valve specification and P&IDs.
3. Provide technical guidance to other levels of drafting staff and squad leaders.
4. Perform duties of a Senior Designer/Checker as assigned by the Squad Leader.
5. Assist in the preparation of estimates, change requests and proposal write-ups.
6. Provide assistance in controlling and coordinating.
7. Assist in the development and preparation of piping specifications, valve specification and P&IDs.
8. Verify work in his/her area of responsibility follows the department design guides and work instructions.
9. Coordinate information and common activities for assigned areas.
10. Build 3D CADD modeling and model reviews.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PIPING MATERIAL SPECIALIST**

A PIPING MATERIAL SPECIALIST IS DESIGNATED TO ESTABLISH PROPER SOURCING PROCESSES AND IDENTIFY RESOURCES AND ACTIVITIES TO ACHIEVE OPTIMAL COST AND MEET REQUIREMENTS RELATING TO DEADLINES AND QUALITY PLUS REVIEWED THE REQUESTS; COORDINATE WITH SUPPLIERS AND COMPANY PROCUMENT ENGINEERS BY EXAMINING PRICES AND SUITABILITY.

**A Piping Material Specialist must be able to:**

1. Provide proper sourcing processes and identify all procurement resources and activities
2. Review the requests, coordinated with suppliers and company procurement engineers, compare specifications, negotiate terms and review alternatives
3. Supervise and lead Materials Management, Inventory Control, Procurement, Logistics, Warehousing and Distribution.
4. Create and monitor purchase orders and established a just-in-time delivery of goods.
5. Verify safe-keeping of materials work in lay down yard is done.
6. Provide all spare parts coordination and support operations for following projects.
7. Coordinate all expediting of all materials using email and telephone.
8. Monitor status of material deliverables.
9. Examine estimates of material, equipment service, performance requirements and delivery schedules.
10. Review offer for piping items, prepare technical bid analysis and purchase specification.
11. Prepare Piping Material Specifications, Vendor discussion, Material Requisition for purchase for all piping items.
12. Review and check general piping specification for project and enquiry specification for all piping items.
13. Verify the delivery of quality materials, supplies and documents.

14. Provide leadership, guidance and direction to operation.
15. Perform purchase requests, material receiving, storing and issues according to the sites requirements.
16. Verify the delivery of quality materials, supplies and documents to all on-going projects.
17. Adhere to company standard operating procedure.
18. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PIPING STRESS SPECIALIST**

A PIPING STRESS SPECIALIST IS DESIGNATED TO ANALYSE THE PIPEWORK CONNECTED TO PUMP, AIR FIN HEAT EXCHANGERS AND VESSELS PLUS DESIGN VESSEL DESIGN AND RETIREMENT ASSESSMENTS.

**A Piping Stress Specialist must be able to:**

1. Analyse the pipework connected to pumps, air fin heat exchangers, exchangers and vessels etc.
2. Build vessel design and retirement assessments.
3. Provide local flexibility/stress assessment.
4. Provide flange leakage assessment.
5. Support design and specification.
6. Re-rate the existing pipework and process equipment.
7. Review and approve piping isometric and vessel.
8. Review and approve pipe stress calculations and vessel design calculations.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **PIPING CUSTODIAN/PRINCIPAL**

A PIPING CUSTODIAN/PRINCIPAL IS DESIGNATED TO VERIFY QUALITY AND PERFORMANCE OF THE STRESS ENGINEERING ACTIVITIES ON ALL PROJECTS; MONITOR THE PIPING STRESS ENGINEERING, INCLUDING CHECKING AND APPROVAL OF THEIR WORK.

**A Piping Custodian/Principal must be able to:**

1. Verify the quality and performance of the stress engineering activities on all projects.
2. Execute the piping stress engineering activities on the projects assigned.
3. Monitor stress engineers, including checking and approval of their work.
4. Assist the departmental administration work including preparation of corporate procedures, standards and specifications.
5. Provide consultation services on piping technology.
6. Advice and guide piping specialist.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 PIPELINE FITTER**

A PIPELINE FITTER IS DESIGNATED TO CUT, THREAD, AND HAMMER PIPE TO SPECIFICATION, ASSEMBLE AND SECURE PIPES, TUBES, FITTINGS AND RELATED EQUIPMENT, INSPECT, EXAMINE AND TEST INSTALLED SYSTEM AND PIPE LINES, MEASURE AND MARK PIPES FOR CUTTING AND THREADING, LAYOUT FULL SCALE DRAWINGS, SELECT PIPE SIZES AND TYPES AND RELATED MATERIAL AND INSPECT WORK SITES FOR OBSTRUCTIONS.

**A Pipeline Fitter must be able to:**

1. Cut, thread, and hammer pipe to specifications, using tools.
2. Assemble and secure pipes, tubes, fittings, and related equipment.
3. Inspect, examine, and test installed systems and pipe lines, using pressure gauge, hydrostatic testing, observation, or other methods
4. Measure and mark pipes for cutting and threading.
5. Generate full scale drawings of pipe systems, supports, and related equipment, following blueprints.
6. Select pipe sizes and types and related materials, such as supports, hangers, and hydraulic cylinders, according to specifications.
7. Cut and bore holes in structures, such as bulkheads, decks, walls, and mains, prior to pipe installation, using hand and power tools.
8. Modify, clean, and maintain pipe systems, units, fittings, and related machines and equipment, following specifications and using hand and power tools.
9. Inspect work sites for obstructions and to ensure that holes will not cause structural weakness.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **PIPELINE JUNIOR DRAFTER**

A PIPELINE JUNIOR DRAFTER IS DESIGNATED TO INVOLVE WITH THE DEVELOPMENT, DESIGN AND DRAFT CAD BASED MECHANICAL/PIPING DRAWINGS FOR THE INDUSTRY PROJECTS, PROVIDE TECHNICAL DIRECTION FOR TECHNICIANS, MAKE SURE THAT THE PLANS MUST COMPLY WITH GOVERNMENT STANDARDS AND SAFETY CODES AS WELL AS CLIENT SPECIFICATIONS AND BUDGET, PRACTICE FABRICATION DESIGN BEST PRACTICES, WELD SYMBOLS AND AUTOCAD CONTEMPORARY PRACTICES.

**A Pipeline Junior Drafter must be able to:**

1. Involve with the development, design and drafting of CAD based mechanical/piping drawings for the industry projects.
2. Prepare piping and other mechanical drawing packages.
3. Provide technical direction to technicians.
4. Verify that the plans must comply with government standards and safety codes as well as client specifications and budget.
5. Practice fabrication design best practices, weld symbols and AutoCAD contemporary practices.
6. Report status and estimate to complete for tasks assigned.
7. Allocate time to multiple ongoing projects.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **PIPELINE SENIOR FITTER**

A PIPELINE SENIOR FITTER IS DESIGNATED TO CUT, THREAD, AND HAMMER PIPE TO SPECIFICATION, ASSEMBLE AND SECURE PIPES, TUBES, FITTINGS AND RELATED EQUIPMENT, INSPECT, EXAMINE AND TEST INSTALLED SYSTEM AND PIPE LINES; MEASURE AND MARK PIPES FOR CUTTING AND THREADING, LAYOUT FULL AND SCALE DRAWINGS, SELECT PIPE SIZES AND TYPES AND RELATED MATERIAL, INSPECT WORK SITES FOR OBSTRUCTIONS.

**A Pipeline Senior Fitter must be able to:**

1. Cut, thread, and hammer pipe to specifications, using tools.
2. Assemble and secure pipes, tubes, fittings, and related equipment, according to specifications, by welding, brazing, cementing, soldering, and threading joints.
3. Attach pipes to walls, structures and fixtures, such as radiators or tanks, using brackets, clamps, tools or welding equipment.
4. Inspect, examine, and test installed systems and pipe lines, using pressure gauge, hydrostatic testing, observation, or other methods.
5. Measure and mark pipes for cutting and threading.
6. Generate full scale drawings of pipe systems, supports, and related equipment, following blueprints.
7. Plan pipe system layout, installation, or repair according to specifications.
8. Select pipe sizes, types and related materials.
9. Cut and bore holes in structures, such as bulkheads, decks, walls, and mains.
10. Modify, clean, and maintain pipe systems, units, fittings, and related machines and equipment.
11. Install automatic controls used to regulate pipe systems.
12. Turn valves to shut off steam, water, or other gases or liquids from pipe sections.
13. Remove and replace worn components.
14. Prepare cost estimates for clients.

15. Inspect work sites for obstructions and to ensure that holes will not cause structural weakness.
16. Operate motorised pumps to remove water from flooded manholes, basements, or facility floors.
17. Adhere to company standard operating procedure.
18. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 PIPELINE DRAFTER**

A SENIOR PIPELINE DRAFTER IS DESIGNATED TO PREPARE AND REVISE DRAWINGS RELATED TO THE GAS TRANSPORTATION INDUSTRY, WORK CLOSELY WITH THE SENIOR PIPELINE DRAFTER, PERFORM DRAFTING TASK RELATING TO MULTIPLE PROJECTS, OCCASION VISITS TO PROJECT SITES AND PROVIDE STATUS REPORT AS NEEDED.

**A Pipeline Drafter must be able to:**

1. Prepare and revise drawings related to the gas transportation industry.
2. Work closely with the senior pipeline drafter.
3. Read, process, and interpret field data.
4. Perform drafting task relating to multiple projects at various stages.
5. Perform technical and analytical support functions for drafting projects.
6. Occasion visits to project sites to define scope of work and/or to collect data.
7. Provide status reports as needed.
8. Provide input in discussions concerning day-to-day operations of projects.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **PIPELINE CONSTRUCTOR**

A PIPELINE CONSTRUCTOR IS DESIGNATED TO ACT AS THE FOCAL POINT BETWEEN THE PROJECT MANAGER, CONTRACTOR'S TEAM OF ENGINEERS AND FIELD SUPERVISORS/INSPECTORS, MANAGE THE CONSTRUCTION TEAM, PROMOTING PROFESSIONAL PERFORMANCE AND TEAM SPIRIT, MANAGE THE CONSTRUCTION ACTIVITIES FOR THE PROJECT, MANAGE HSE TO MEET OR EXCEED THE HSE TARGET AND TAKE A LEADING ROLE IN SAFETY MANAGEMENT.

**A Pipeline Constructor will be able to:**

1. Act as the focal point between the Project Manager, Contractor's team of engineers and field supervisors/inspectors.
2. Manage the construction team, promoting professional performance and team spirit.
3. Responsibilities of the team members include detailed engineering reviews, field engineering, supervision, inspection, witnessing, verification and audit.
4. Enable, monitor, audit, guide and control the Construction and Commissioning Contractor in the execution of his responsibilities under the Construction and Commissioning Contract to achieve a safe, healthy, environmentally friendly, within the schedule and budget realisation of the project.
5. Manage the construction activities for the project ensuring that construction is performed in accordance with execution plans, specifications, approved variations and will meet project contractual, statutory and regulatory requirements.
6. Manage HSE to meet or exceed the HSE target and take a leading role in safety management, promoting a true HSE culture for the project. Lead by example, by actively participating in HSE walks. Promote that HSE is a line responsibility.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PIPELINE SENIOR DRAFTER**

A PIPELINE SENIOR DRAFTER IS DESIGNATED TO PREPARE AND REVISE DRAWINGS RELATED TO THE GAS TRANSPORTATION INDUSTRY, WORK CLOSELY WITH THE DRAFTING MANAGER, TRAIN THE DRAFTING TEAM, PERFORM DRAFTING TASK RELATING TO MULTIPLE PROJECTS, OCCASION VISITS TO PROJECT SITES, PROVIDE STATUS REPORT AS NEEDED, MAINTAIN CUSTOMER RELATIONSHIP, AND PARTICIPATE IN INDUSTRY EVENTS.

**A Pipeline Senior Drafter must be able to:**

1. Prepare and revise drawings related to the gas transportation industry.
2. Work closely with the senior pipeline drafter.
3. Read, process, and interpret field data.
4. Perform drafting task relating to multiple projects at various stages.
5. Perform technical and analytical support functions for drafting projects.
6. Occasion visits to project sites to define scope of work and/or to collect data.
7. Provide status reports as needed.
8. Provide input in discussions concerning day-to-day operations of projects.
9. Maintain customer relationships to ensure that their expectations are met.
10. Perform supervisory function.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PIPELINE CONSTRUCTION SUPERVISOR**

A PIPELINE CONSTRUCTION SUPERVISOR IS DESIGNATED TO MONITOR CONSTRUCTION CONTRACTOR ACTIVITIES, ENSURE THAT CONTRACTOR'S WELDING AND NDT MEETS RELEVANT STANDARDS, SUPPORT THE PROJECTS HSEQ PLAN AND PROCEDURES, VERIFY THAT THE WORK ARE CARRIED OUT AS PER RELEVANT PROJECT DRAWINGS AND SPECIFICATIONS, ENSURE THAT THE CONSTRUCTION CONTRACTOR COMPLIES WITH ALL QA/QC PROCEDURES, PROVIDE PROGRESS AND OTHER REPORT AND ENSURE PROVISION OF ALL REQUIRED PROJECT DOCUMENTATION AND CERTIFICATION.

**A Pipeline Construction Supervisor must be able to:**

1. Monitor Construction Contractor Welding and Non Destructive Testing (NDT), Piping.
2. Ensure that Contractor's Welding and NDT meets relevant standards.
3. Support the Projects HSEQ Plan and Procedures.
4. Ensure that the works are carried out as per relevant Project Drawings and Specifications, and to the Relevant Engineering Codes and Standards.
5. Ensure that the Construction Contractor complies with all QA/QC Procedures.
6. Provides progress and related reports.
7. Verify provision of all required project documentation and certification.
8. Perform supervisory function.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 PIPELINE DESIGNER**

A PIPELINE DESIGNER IS DESIGNATED TO PRODUCE DRAWING INCLUDE CONSISTENCY CHECK; AWARE AND CHECK THE INTERFACE WITH OTHER DISCIPLINE; ENSURE ALL TEAM MEMBERS ADHERE TO CLIENT'S REGULATION; INVOLVE IN THE DESIGN CALCULATION AND CHECKING; INVOLVE IN THE PROJECT DELIVERY.

#### **A Pipeline Designer must be able to:**

1. Produce presentable and accurate drawings, including a consistency check
2. Check the interface between his own discipline and other disciplines at all stages of the design
3. Ensure all team members adhere strictly to client's safety regulations and standards
4. Involve in the design calculations and design checking for both installation and construction
5. Involve in the project delivery ensuring designs are met with vendor's requirement.
6. Perform work assigned by pipeline technologist.
7. Adhere to company standard operating procedure
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **PIPELINE CONSTRUCTION SUPERINTENDENT**

A PIPELINE CONSTRUCTION SUPERINTENDENT IS DESIGNATED TO MANAGE ALL WORKS RELATED TO CONSTRUCTION OF PIPELINE, LEAD A TEAM OF PROJECT ENGINEER, COORDINATE WITH MULTI DISCIPLINE DEPARTMENT, ENSURE ALL REQUIRED TOOLS ARE IN PLACE FOR USE AND COORDINATE MATTERS REGARDING CLIENT.

**A Pipeline Construction Superintendent must be able to:**

1. Manage all works related to construction of pipeline, including resource planning, client co-ordination, interface co-ordination, construction equipment resourcing, etc.
2. Lead a team of project engineers, site engineers and site supervisors.
3. Co-ordinate with Engineering, Procurement, QC, plant and HSE departments.
4. Manage, coordinate and administrate the project planning, engineering, procurement, construction, start-up, performance testing, commissioning, and contract close-out.
5. Verify all required tools, such as specs, guidelines and procedures are in place for project team use.
6. Provides input for spec revisions, lessons learned, contract exhibits, forms, guidelines and procedure revisions.
7. Lead communications and presentations to client.
8. Resolve problems and coordinate the final turnover of the project to the client.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **PIPELINE TECHNOLOGIST**

A PIPELINE TECHNOLOGIST IS DESIGNATED TO SUPPORT DESIGN OFFICE PERSONNEL WITH SPECIALIST ENGINEERING INPUT, LEAD THE FACILITIES DEVELOPMENT PROCESS, PREPARE THE DETAILED PRELIMINARY PROJECT SCOPES, SCHEDULE AND COST ESTIMATES, ENSURE DESIGN ARE IN LINE WITH INTERNATIONAL/CLIENT STANDARDS AND THE REQUIRED SAFETY STANDARD, AND INTERACT AND MANAGE WITH MULTIDISCIPLINARY TEAM.

**A Pipeline Technologist must be able to:**

1. Support design and drawing office personnel with specialist engineering input.
2. Lead the facilities development process.
3. Monitor construction, testing and commissioning work.
4. Prepare and develop the detailed preliminary project scopes, schedule and cost estimates including bids.
5. Verify designs are executed in line with client specifications.
6. Interact with multidisciplinary team and manage all interfaces for the related discipline with other discipline.
7. Verify design packages meet the required safety, environmental and ergonomic standards.
8. Perform managerial duties.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROLEUM**

### **LEVEL 7**

#### **PIPELINE SPECIALIST**

A PIPELINE SPECIALIST IS DESIGNATED TO PROVIDE TECHNICAL SUPPORT AND RECOMMENDATIONS TO DISCIPLINE HEAD, MONITOR JUNIOR TECHNICAL PERSONNEL, SUPPORT DESIGN/DRAWING OFFICE PERSONNEL, VERIFY THAT WORK MEET THE REQUIREMENT BY HSEQ MANAGEMENT SYSTEM, MONITOR THE EQUIPMENT PROVIDE BY VENDOR, PREPARE THE TECHNICAL EVALUATION OF SUBSEQUENT BIDS FOR DISCIPLINE MATERIAL AND EQUIPMENT PURCHASES.

**A Pipeline Specialist must be able to:**

1. Provide technical support and recommendations to discipline head in carrying out pipeline engineering design work.
2. Supervise junior technical personnel within a project team.
3. Support design/drawing office personnel with Specialist Engineering input.
4. Ensure that work carried out meets the requirements of project plans and procedures.
5. Verify that equipment vendors provide timely and high quality product to front-end and detailed design packages.
6. Prepare the requisitions and technical evaluation of subsequent bids for discipline material and equipment purchases.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **PIPELINE PRINCIPAL/CUSTODIAN**

A PIPELINE PRINCIPAL/CUSTODIAN IS DESIGNATED TO PRODUCE ROUTE SELECTION, SURVEY AND INPUT OF PIPELINE DRAWING, MONITOR AND GUIDE THE PIPELINE ENGINEERS, REVIEW SUPPLIED DESIGN DOCUMENTS, SPECIFICATIONS AND CONSTRUCTION PROCEDURES, PREPARE THE TECHNICAL REQUISITIONS, TECHNICAL BID EVALUATIONS, DATA REVIEW AND CO-ORDINATION WITH VENDORS, REVIEW MULTIDISCIPLINE DOCUMENTS, AND GIVE INPUT TO COST ESTIMATES AND SCHEDULE UPDATE.

**A Pipeline Principal/Custodian must be able to:**

1. Route selection, survey and input/checking of pipeline drawings.
2. Supervise and guide the Pipeline Engineers as required.
3. Review of company supplied design documents, specifications and construction procedures
4. Review and monitor pipeline pre-commissioning and commissioning.
5. Review and develop construction specifications.
6. Review and develop pipeline equipment and pipeline fittings specifications, data sheets.
7. Prepare the technical requisitions, technical bid evaluations, data review and co-ordination with vendors
8. Interface with other Discipline Groups
9. Perform site visits for reconnaissance, routing, interface meetings,
10. Review of multi-discipline documents relevant to offshore pipelines and their associated onshore sections and above ground installations/tie-ins.
11. Provide input to cost estimates and schedule updates.
12. Provide consultation services on pipeline technology.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 MECHANICAL FITTER**

A MECHANICAL FITTER IS DESIGNATED TO ASSEMBLE COMPONENTS PER BILL OF MATERIAL REQUIREMENTS, LOCATE AND MARK REFERENCE POINTS AND HOLES FOR INSTALLATION OF COMPONENT, INSPECT AND TEST INSTALLED EQUIPMENT, CRATE AND GET PALLET/SKIDS READY FOR SHIPMENT, AND COMPLY WITH ALL SAFETY RULES AND COMPANY POLICIES.

**A Mechanical Fitter must be able to:**

1. Assemble components per bill of material requirements.
2. Adhere quality policy and comply with all requirements of the quality manual, operating, technical procedures and workplace instructions.
3. Locate and mark reference points and holes for installation of parts and components.
4. Inspect and test installed units, parts, and equipment for fit, performance.
5. Cut, trim, and file parts, and verify fitting tolerances to prepare for installation.
6. Use hand tools, power tools, and measuring devices to assemble and test product.
7. Install units, parts, equipment, and components in structural assembly.
8. Crate and get pallet/skids ready for shipment.
9. Perform various other duties and activities as assigned by supervisor.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **MECHANICAL SENIOR FITTER**

A MECHANICAL SENIOR FITTER IS DESIGNATED TO ASSEMBLE STANDARD EQUIPMENT AND PRODUCTS, REWORK AND REPAIR ASSEMBLED EQUIPMENT AND PRODUCTS, PERFORM QUALITY WORK CHECK, CONFER WITH SUPERVISOR REGARDING QUALITY OR PROCEDURE PROBLEMS, IDENTIFY PRODUCT DEFECTS AND INSPECT ALL PRODUCTS FOR QUALITY ASSURANCE.

**A Mechanical Senior Fitter must be able to:**

1. Perform standard assembly procedures, rework, and repair on manufactured equipment and products.
2. Assemble standard equipment and products under general supervision.
3. Read, interpret and follow blueprints, diagrams, engineering drawings, specifications, bill of materials, and other written instructions or procedures.
4. Perform quality work checks to ensure the product meets quality standards.
5. Confer with supervisor regarding quality or procedure problems.
6. Identify product defects and complete appropriate documentation when defects are identified.
7. Rework and repair assembled equipment and products.
8. Perform all work in accordance with quality standards and established safety procedures.
9. Provide assistance to more senior level Assembly Mechanics on larger jobs.
10. Participate in training new hires on set-up's and reading blue prints.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 MECHANICAL DRAFTER**

A MECHANICAL DRAFTER OPERATOR IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR MECHANICAL EQUIPMENT, MODIFY AND REVISE DESIGNS, CHECK DIMENSIONS OF MATERIALS, CONFER WITH CUSTOMER REPRESENTATIVES, COORDINATE WITH AND CONSULT OTHER WORKERS, GENERATE LAY OUT, DRAW, AND REPRODUCE ILLUSTRATIONS.

**A Mechanical Drafter must be able to:**

1. Develop detailed design drawings and specifications for mechanical equipment, dies, tools, and controls.
2. Coordinate with and consult other workers to design, lay out, or detail components and systems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery.
5. Modify and revise designs to correct operating deficiencies and to reduce production problems.
6. Design scale or full-size blueprints of specialty items.
7. Check dimensions of materials to be used and assign numbers to the materials.
8. Generate lay out and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.
9. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.
10. Draw freehand sketches of designs, trace finished drawings onto designated paper.
11. Generate lay out, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of mechanical systems.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **MECHANICAL SENIOR DRAFTER**

A MECHANICAL SENIOR DRAFTER IS DESIGNATED TO PERFORM A VARIETY OF DRAFTING DUTIES, PERFORM NON-ROUTINE TO COMPLEX TASKS HAVING DISTINCTIVE DESIGN, PREPARE BASIC LEVEL CAD DETAIL AND ASSEMBLY DRAWINGS, CREATE PRELIMINARY DRAWINGS, SUPERVISE AND TRAIN OTHER DRAFTERS, TECHNOLOGISTS, AND TECHNICIANS AND LAYOUTS, DRAW, AND REPRODUCE ILLUSTRATIONS FOR REFERENCE MANUALS.

**A Mechanical Senior Drafter must be able to:**

1. Perform a variety of drafting duties in preparation of and revisions to drawings.
2. Perform non-routine to complex tasks having distinctive design features that can differ significantly from established drafting precedents.
3. Prepare basic level CAD detail and assembly drawings from sketches, mark-up prints and other reference, materials.
4. Monitor and train other drafters, technologists, and technicians.
5. Create preliminary drawings with complete dimensional data for engineering or manufacturing purposes.
6. Review for drawing accuracy, completeness, and conformance to drafting, applicable design, component weights and system standards.
7. Prepare and process basic level sales or sequence drawings as directed.
8. Perform administrative and related responsibilities as assigned.
9. Generate layouts, draw, and reproduce illustrations for reference manuals and technical publications.
10. Perform supervisory function.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 MECHANICAL DESIGNER**

A MECHANICAL DESIGNER IS DESIGNATED TO PREPARE ENGINEERING DRAWINGS OF EQUIPMENT, CREATE BILLS OF MATERIAL AND SPECIFICATIONS, PERFORM QUANTITATIVE DESIGN CALCULATIONS, PERFORM THOROUGH CHECKING OF DRAWINGS AND DESIGN DOCUMENTS, RECOMMEND SOLUTIONS REGARDING COST SAVING DESIGN PRACTICES; MODIFY DRAWINGS AND MODEL AS REQUIRED AND CONFER WITH ENGINEERS TO RESOLVE ISSUES AND OFFER ALTERNATE SOLUTIONS.

#### **A Mechanical Designer must be able to:**

1. Prepare engineering drawings of equipment.
2. Prepare drawings using design concepts created by the designer or other individual or from information specified in an engineering sales request.
3. Create bills of material and specifications.
4. Assemble and test procedures and other product documentation.
5. Perform quantitative design calculations, executes change orders.
6. Maintain engineering database information associated with drawings and their bills of material.
7. Perform thorough checking of drawings and design documents.
8. Verify adherence to quality and cost parameters of the project.
9. Depict relationships of components and parts.
10. Identify dimensions, angles, curvatures, tolerances and materials.
11. Make various calculations and frequently uses charts and tables.
12. Modify drawings and model as required, confer with engineers to resolve issues and offer alternate solutions.
13. Modify drawings and model as required.
14. Adhere to company standard operating procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **MECHANICAL TECHNOLOGIST**

A MECHANICAL TECHNOLOGIST IS DESIGNATED TO REVIEW AND APPROVE THE SPECIFICATION AND DESIGN OF MOORING AND RISER SYSTEMS, RESPONSIBLE TO OVERALL TECHNICAL INTEGRITY OF MOORING AND RISER SYSTEM, DEFINE MOORING AND RISER SYSTEM LAYOUT, PERFORM MATERIAL SELECTION AND SPECIFICATION, AND RESPONSIBLE FOR CONSULTANCY PROJECTS IN MOORING AND RISER FROM PROPOSAL STAGE TO FINAL REPORT.

**A Mechanical Technologist must be able to:**

1. Review and approve the specification and design of mooring and riser systems.
2. Verify that specification and design meets project objectives, industry standards and best practices for safety, reliability and cost.
3. Integrate overall technicality of mooring and riser system design premises, design, structural and flow assurance behavior.
4. Approve mooring and riser system.
5. Define design premises of mooring and riser system.
6. Define mooring and riser system layout.
7. Perform material selection and specification.
8. Plan, review and follow-up systems purchasing, construction and commissioning.
9. Consult projects in mooring and riser from proposal stage to final report.
10. Estimate mooring and riser system cost and schedule.
11. Perform managerial duties.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 MOORING SPECIALIST**

A MOORING SPECIALIST IS DESIGNATED TO PERFORM PRELIMINARY AND DETAILED ENGINEERING OF MOORING SYSTEMS, DESIGN, DEVELOP, IMPLEMENT AND ANALYSE TECHNICAL MOORING SYSTEMS, PERFORM STRUCTURAL AND MECHANICAL DESIGN USING INDUSTRY RECOGNISED SOFTWARE, APPROVE DISCIPLINE CONCEPT DRAWINGS AND DISCIPLINE CONSTRUCTION DRAWINGS, PERFORM ANALYTICAL ASSESSMENT OF CRITICAL MECHANICAL COMPONENTS, ASSIST IN THE TECHNICAL PART FOR THE PREPARATION OF PROPOSALS, AND PROVIDE TECHNICAL SUPPORT FOR PROJECT AND PRODUCT DEVELOPMENTS.

#### **A Mooring Specialist must be able to:**

1. Perform preliminary and detailed engineering of mooring systems.
2. Design, develop, implement and analyse technical mooring systems.
3. Perform structural and mechanical design using industry recognised software.
4. Develop discipline design basis for project.
5. Approve discipline concept drawings and discipline construction drawings.
6. Perform analytical assessment of critical mechanical components.
7. Perform motion calculations of the overall structure, strength, fatigue, and buckle check of components.
8. Assist in the technical part for the preparation of proposals.
9. Develop engineering deliverables, interface with project team members.
10. Provide technical support for project and product development.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **MOORING CUSTODIAN/PRINCIPAL**

A MOORING CUSTODIAN/PRINCIPAL IS DESIGNATED TO PERFORM DESIGN AND ANALYSIS OF MOORING SYSTEMS, PERFORM PRELIMINARY AND DETAILED ENGINEERING OF MOORING SYSTEMS, UNDERTAKE PACKAGE ENGINEER TASKS FOR MOORING AND TENDON COMPONENTS, DEVELOP SPECIFICATIONS FOR MOORING AND TENDON EQUIPMENTS, AND PERFORM ANALYTICAL ASSESSMENT OF CRITICAL MECHANICAL COMPONENTS.

**A Mooring Custodian/Principal must be able to:**

1. Perform design and analysis of mooring systems.
2. Develop design and analysis reports.
3. Perform preliminary and detailed engineering of mooring systems.
4. Develop functional specifications and other conceptual documents
5. Undertake package engineer tasks for mooring and tendon components.
6. Develop specifications for mooring and tendon equipments.
7. Perform analytical assessment of critical mechanical components.
8. Develop engineering deliverables, interface with vendors, clients, and project team.
9. Provide technical support for project and product developments.
10. Provide consultation services on mooring technology
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 RISER SPECIALIST**

A RISER SPECIALIST IS DESIGNATED TO DESIGN, DEVELOP, IMPLEMENT AND ANALYST TECHNICAL PRODUCTS AND RISER SYSTEMS, PERFORM STRUCTURAL AND MECHANICAL DESIGN, PERFORM ENGINEERING DESIGN CHECKING AND METHODOLOGY EVALUATIONS; APPROVE DISCIPLINE CONCEPT DRAWINGS AND DISCIPLINE CONSTRUCTION DRAWINGS, PERFORM MOTION CALCULATIONS OF THE OVERALL STRUCTURE, STRENGTH, FATIGUE, AND BUCKLE CHECK OF COMPONENTS; INSTALL SUBSEA EQUIPMENT AND OFFSHORE STRUCTURES FOR DEEPWATER APPLICATIONS, AND PROVIDE TECHNICAL CONSULTING AND TECHNOLOGY DEVELOPMENT.

**A Riser Specialist must be able to:**

1. Design, develop, implement and analyst technical products and riser systems.
2. Perform structural and mechanical design using industry recognised software.
3. Perform engineering design checking and methodology evaluations.
4. Develop discipline design basis for project.
5. Approve discipline concept drawings and discipline construction drawings.
6. Document design and analysis work in project calculation books.
7. Perform motion calculations of the overall structure, strength, fatigue, and buckle check of components.
8. Assist in the technical part for the preparation of proposals.
9. Provide technical consulting and technology development in the field of deepwater riser engineering with emphasis on design.
10. Verify work is executed in accordance with department procedures, project schedules and project budgets.
11. Write technical reports or prepare input
12. Approve technical reports.
13. Install subsea equipment and offshore structures for deepwater applications.

14. Prepare engineering input to the discipline design drawings.
15. Coordinate the drawings with the drafting department.
16. Adhere to company standard operating procedure.
17. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **RISER CUSTODIAN/PRINCIPAL**

A RISER CUSTODIAN/PRINCIPAL IS DESIGNATED TO PREPARE, ESTIMATE AND PROPOSAL FOR RISER STUDIES, COMPILE SYSTEM REQUIREMENTS AND PREPARE DESIGN BASIS DOCUMENTATION, LEAD AND PERFORM RISER DESIGN, PERFORM PRELIMINARY AND DETAILED ENGINEERING OF RISER SYSTEMS AND DESIGN OF KEY RISER COMPONENTS, DEVELOP ENGINEERING DELIVERABLES, INTERFACE WITH PROJECT TEAM MEMBERS, AND PROVIDE TECHNICAL SUPPORT FOR PROJECT AND PRODUCT DEVELOPMENTS.

**A Riser Custodian/Principal must be able to:**

1. Prepare estimates and proposals for riser studies.
2. Compile system requirements and prepare design basis documentation.
3. Develops functional specifications and other conceptual documents.
4. Develop computer models for simulation and study case matrix.
5. Lead and perform riser design in accordance with standard industry and client specifications.
6. Verify that riser within subsea systems meet specified design requirements.
7. Interface with pipeline, process, construction and installation disciplines as necessary in the interpretation of client and interdisciplinary requirements.
8. Perform preliminary and detailed engineering of riser systems and design of key riser components.
9. Develop engineering deliverables, interface with project team members.
10. Provide technical support for project and product developments.
11. Provide consultation services on mooring technology
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **FIRE FIGHTING JUNIOR DRAFTER**

A JUNIOR FIRE FIGHTING DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR FIRE FIGHTING EQUIPMENT, MODIFY AND REVISE DESIGNS, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN FIRE FIGHTING EQUIPMENT, CONFER WITH CUSTOMER REPRESENTATIVES, COORDINATE WITH AND CONSULT OTHER WORKERS, AND LAY OUT, DRAW, AND REPRODUCE ILLUSTRATIONS.

##### **A Fire Fighting Junior Drafter will be able to:**

1. Develop detailed design drawings and specifications for fire fighting equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, lay out, or detail fire fighting components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for fire fighting components or machinery, using computer-assisted equipment.
5. Modify and revise designs to correct operating deficiencies or to reduce production problems.
6. Design scale or full-size blueprints of specialty items, such as components, and machines.
7. Check dimensions of materials to be used and assign numbers to the materials.
8. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.
9. Confer with customer representatives to review schematics and answer questions pertaining to installation of fire fighting systems.
10. Adhere to company standard operating procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 FIRE FIGHTING DRAFTER**

A FIRE FIGHTING DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR FIRE FIGHTING EQUIPMENT, MODIFY AND REVISE DESIGNS, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN FIRE FIGHTING EQUIPMENT, CONFER WITH CUSTOMER REPRESENTATIVES, COORDINATE WITH AND CONSULT OTHER WORKERS, AND LAY OUT, DRAW, AND REPRODUCE ILLUSTRATIONS;

#### **A Fire Fighting Drafter will be able to:**

1. Develop detailed design drawings and specifications for fire fighting equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, lay out, or detail fire fighting components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for fire fighting components or machinery, using computer-assisted equipment.
5. Modify and revise designs to correct operating deficiencies or to
6. reduce production problems.
7. Design scale or full-size blueprints of specialty items, such as components,
8. and machines.
9. Perform engineering calculation for mechanical designs.
10. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.
11. Confer with customer representatives to review schematics and answer questions pertaining to installation of fire fighting systems.



12. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines.
13. Layouts, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of fire fighting systems.
14. Supervise and train junior fire fighting drafters.
15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **FIRE FIGHTING SENIOR DRAFTER**

A FIRE FIGHTING SENIOR DRAFTER IS DESIGNATED TO PERFORM A VARIETY OF DRAFTING DUTIES, PERFORM NON-ROUTINE TO COMPLEX TASKS HAVING DISTINCTIVE DESIGN, PREPARE BASIC LEVEL CAD DETAIL AND ASSEMBLY DRAWINGS, CREATE PRELIMINARY DRAWINGS, SUPERVISE AND TRAIN OTHER DRAFTERS, TECHNOLOGISTS, AND TECHNICIANS AND LAYOUTS, DRAW, AND REPRODUCE ILLUSTRATIONS FOR REFERENCE MANUALS;

#### **A Fire Fighting Senior Drafter will be able to:**

1. Perform a variety of drafting duties in preparation of and/or revisions to drawings.
2. Perform non-routine to complex tasks having distinctive design features that can differ significantly from established drafting precedents.
3. Prepare basic level CAD detail and assembly drawings from sketches, mark-up prints and other reference, materials under the direction of senior level Drafters, Designers, Technologist, Sales Personnel or Supervisor.
4. Supervise and train other drafters, technologists, and technicians.
5. Create preliminary drawings with complete dimensional data for engineering or manufacturing purposes and reviews for accuracy, completeness, and conformance to drafting, applicable design, component weights and system standards.
6. Create final drawings.
7. Prepare and process basic level sales or sequence drawings as directed.
8. Perform administrative and related responsibilities as assigned.
9. Layouts, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of fire fighting systems.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **FIRE FIGHTING DESIGNER**

A FIRE FIGHTING DESIGNER IS DESIGNATED TO PREPARE ENGINEERING DRAWINGS OF FIRE FIGHTING EQUIPMENT, CREATE COMPLETE FIRE ALARM AND SECURITY SYSTEMS DESIGN LAYOUTS, DRAFT AND DESIGN FIRE ALARM AND FIRE FIGHTING SYSTEM, PERFORM QUANTITATIVE DESIGN CALCULATIONS, RECOMMEND SOLUTIONS REGARDING COST SAVING DESIGN PRACTICES AND PROCEDURES AS RELATED TO THE PROJECT, AND VERIFY THE DESIGN AND IMPLEMENTATION OF THE COMPLETE FIRE FIGHTING SYSTEM.

**A Fire Fighting Designer will be able to:**

1. Prepare engineering drawings of fire fighting equipment including machine details, assemblies, manufacturing instructions, graphs and layouts.
2. Create complete fire alarm and security systems design layouts, working detail drawings, sub assemblies and final assemblies including various views, sections and details.
3. Draft and design Fire Alarm and Fire Fighting System.
4. Perform quantitative design calculations, executes change orders, take direction from a lead technologist or supervisor.
5. Modify drawings and model as required, confers with technologist to resolve issues and offers alternate solutions.
6. Design and drafting of pump room layout, equipment foundation layout, cable tray layout, electrical wiring, and Electrical Panel.
7. Draft building system's riser and schematic diagram of Fire Alarm System, CCTV and Telephone system.
8. Design and draft fire fighting, sprinklers, foam, extinguisher, hose reel and kitchen hood protection system.
9. Recommend solutions regarding cost saving design practices and procedures as related to the project.

10. Conduct site visitation for actual survey, free hand sketches and for as built plan drawing.
11. Create bills of material and specifications, assembly and test procedures and other product documentation.
12. Verify the design and implementation of the complete fire fighting system and make sure that it is within the norms and regulations.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **FIRE FIGHTING FITTER**

A FIRE FIGHTING FITTER IS DESIGNATED TO ASSEMBLE COMPONENTS PER BILL OF MATERIAL REQUIREMENTS, LOCATE AND MARK REFERENCE POINTS AND HOLES FOR INSTALLATION OF COMPONENTS, INSPECT AND TEST INSTALLED EQUIPMENT, CRATE, AND GET PALLET/SKIDS READY FOR SHIPMENT, AND UNDERSTAND AND COMPLY WITH ALL SAFETY RULES AND COMPANY POLICIES.

**A Fire Fighting Fitter will be able to:**

1. Assemble fire fighting components per bill of material requirements.
2. Know and understand quality policy and comply with all requirements of the quality manual, operating and technical procedures plus workplace instructions.
3. Locate and mark reference points and holes for installation of parts and components, using jigs, templates, and measuring instruments.
4. Inspect and test installed units, parts, and equipment for fit, performance, and compliance with standards, using measuring instruments and test equipment.
5. Cut, trim, and file parts, and verify fitting tolerances to prepare for installation.
6. Use hand tools, power tools, and measuring devices such as tapes, gauges, pressure equipment, callipers and rules to assemble and test product.
7. Install units, parts, equipment, and components in structural assembly, according to blueprints and specifications, using hand tools and power tools.
8. Crate, and get pallet/skids ready for shipment.
9. Understand and comply with all safety rules and company policies.
10. Perform various other duties and activities as assigned by supervisor within the physical constraints of the job.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **FIRE FIGHTING SENIOR FITTER**

A FIRE FIGHTING SENIOR FITTER IS DESIGNATED TO ASSEMBLE STANDARD FIRE FIGHTING EQUIPMENT AND PRODUCTS, REWORK AND/OR REPAIR ASSEMBLED EQUIPMENT AND PRODUCTS, PERFORM QUALITY WORK CHECKS, CONFER WITH SUPERVISOR REGARDING QUALITY OR PROCEDURE PROBLEMS, IDENTIFY PRODUCT DEFECTS AND INSPECT ALL PRODUCTS FOR QUALITY ASSURANCE.

**A Fire Fighting Senior Fitter will be able to:**

1. Perform standard assembly procedures, reworks, and repairs on fire fighting equipment and products.
2. Assemble standard fire fighting equipment and products under general supervision and in accordance with standard operating procedures.
3. Read, interpret and follow blueprints, diagrams, engineering drawings, specifications, bill of materials, and other written instructions or procedures to accurately assemble equipment and products.
4. Perform quality work checks to insure the product meets quality standards.
5. Confer with supervisor regarding quality or procedure problems.
6. Identify product defects and complete appropriate documentation when defects are identified.
7. Rework and/or repair assembled equipment and products according to engineering specification changes.
8. Perform all work in accordance with quality standards and established safety procedures.
9. Provide assistance to more senior level Assembly Mechanics on larger jobs.
10. Help in training new hires on set-up's and reading blue prints.
11. Inspect all products for quality assurance.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **FIRE FIGHTING CONSTRUCTOR**

A FIRE FIGHTING CONSTRUCTOR IS DESIGNATED TO FABRICATE AND ASSEMBLE FIRE FIGHTING EQUIPMENT AND SYSTEMS, MAKE SHOP DRAWING, BUILT DRAWING AND COMPOSITE DRAWING; READ, INTERPRET AND FOLLOW BLUEPRINTS, DIAGRAMS, ENGINEERING DRAWINGS, INSTALL PARTS, PIECES AND ELEMENTS OF THE DESIGNATED PROJECT, TREATMENT AND REPAIR OF METAL SURFACES, MAINTAIN THE SHOP AND EQUIPMENT USED IN THE ASSEMBLY PROCESS, AND INTERFACE WITH SUPERVISOR ON PROJECT AND FACILITY OBJECTIVES.

#### **A Fire Fighting Constructor will be able to:**

1. Assist technologist in fabrication and assembly of prototype units, construct and assemble fire fighting equipment and systems.
2. Prepare drawings/modifications and has to maintain/control/documentation of drawings.
3. Make shop drawing, built drawing and composite drawing.
4. Read, interpret and follow blueprints, diagrams, engineering drawings, specifications, bill of materials, and other written instructions or procedures to accurately assemble fire fighting equipment and systems.
5. Install parts, pieces and elements of the designated project, treatment and repair of metal surfaces to ensure safe usage and welding to secure fastening for pieces including in the final product.
6. Maintain the shop and equipment used in the assembly process.
7. Maintain and repair, set up and operate fabricating machines such as plasma table, shears, brakes, forming rolls, etc., to cut bend, block weld, and form or straighten materials.
8. Shape and form fire fighting equipment and systems, using power and hand tools.
9. Operate computer aided drafting (CAD) equipment to develop scale drawings of fire fighting equipment and systems.

10. Interface with supervisor on project and facility objectives.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **FIRE FIGHTING CONSTRUCTION SUPERVISOR**

A FIRE FIGHTING CONSTRUCTION SUPERVISOR IS DESIGNATED TO PLAN, DIRECT AND COORDINATE CONSTRUCTION ACTIVITIES FOR FIRE FIGHTING SYSTEMS, SCHEDULE THE PROJECT IN LOGICAL STEPS AND BUDGET TIME, DETERMINE LABOR REQUIREMENTS AND DISPATCH WORKERS TO CONSTRUCTION SITES, STUDY JOB SPECIFICATIONS TO DETERMINE APPROPRIATE CONSTRUCTION METHODS, AND DIRECT AND SUPERVISE SKILLED AND UNSKILLED WORKERS AT CONSTRUCTION SITES.

#### **A Fire Fighting Construction Supervisor will be able to:**

1. Plan, direct and coordinate construction activities for fire fighting systems requiring a thorough knowledge of techniques, regarding productions processes, procedures, for major fitting, welding, assembly, grinding, rigging, and heat treatment, machining, and tool cribs.
2. Schedule the project in logical steps and budget time required to meet deadlines.
3. Determine labour requirements and dispatch workers to construction sites.
4. Inspect and review projects to monitor compliance with building and safety codes, and other regulations.
5. Interpret and explain plans and contract terms to administrative staff, workers, and clients, representing the owner or developer.
6. Prepare contracts and negotiate revisions, changes and additions to contractual agreements with architects, consultants, clients, suppliers and subcontractors.
7. Study job specifications to determine appropriate construction methods.
8. Select, contract, and oversee workers who complete specific pieces of the project, such as painting or plumbing.
9. Perform requisition on supplies and materials to complete construction projects.
10. Prepare and submit budget estimates and progress and cost tracking reports.
11. Develop and implement quality control programs.

12. Take actions to deal with the results of delays, bad weather, or emergencies at construction site.
13. Direct and supervise skilled and unskilled workers at construction sites.
14. Confer with supervisory personnel, owners, contractors, and design professionals to discuss and resolve matters such as work procedures, complaints, and construction problems.
15. Plan, organise, and direct activities concerned with the construction and maintenance of structures, facilities, and systems.
16. Investigate damage, accidents, or delays at construction sites, to ensure that proper procedures are being carried out.
17. Evaluate construction methods and determine cost-effectiveness of plans, using computers.
18. Adhere to company standard operating procedure.
19. Comply with safety and security procedure
20. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **FIRE FIGHTING CONSTRUCTION SUPERINTENDENT**

A FIRE FIGHTING CONSTRUCTION SUPERINTENDENT IS DESIGNATED TO PLAN CONSTRUCTION PROCEDURES, SPECIFICATIONS, WORK SCHEDULES, AND MATERIAL NEEDS FOR FIRE FIGHTING SYSTEMS, MANAGE AND SUPERINTEND SITE ACTIVITIES, INSPECT WORK IN PROGRESS TO ENSURE THAT WORK CONFORMS TO SPECIFICATIONS AND ADHERENCE TO WORK SCHEDULES, CHECK CONSTRUCTION PROGRESS ON A WEEKLY BASIS, SCHEDULE THE PROJECT IN LOGICAL STEPS AND BUDGET TIME REQUIRED TO MEET DEADLINES, STUDY JOB SPECIFICATIONS TO DETERMINE APPROPRIATE CONSTRUCTION METHODS, AND PREPARE AND SUBMIT BUDGET ESTIMATES AND PROGRESS AND COST TRACKING REPORTS.

#### **A Fire Fighting Construction Superintendent will be able to:**

1. Plan construction procedures, specifications, work schedules, and material needs for fire fighting systems.
2. Manage and superintend site activities regarding construction, pre-commissioning start up and handling over of the fire fighting systems to the client.
3. Inspect work in progress to ensure that work conforms to specifications and adherence to work schedules.
4. Check construction progress on a weekly basis, identifying any problem areas and requesting the contractor involved to take action, where required.
5. Ensure that the works are carried out as per relevant Project Drawings and Specifications, and to the Relevant Engineering Codes and Standards.
6. Schedule the project in logical steps and budget time required to meet deadlines.
7. Determine labour requirements and dispatch workers to construction sites.
8. Inspect and review projects to monitor compliance with building and safety codes, and other regulations.
9. Prepare contracts and negotiate revisions, changes and additions to contractual agreements with architects, consultants, clients, suppliers and subcontractors.

10. Study job specifications to determine appropriate construction methods.
11. Perform requisition on supplies and materials to complete construction projects.
12. Prepare and submit budget estimates and progress and cost tracking reports.
13. Develop and implement quality control programs.
14. Plan, organise, and direct activities concerned with the construction and maintenance of structures, facilities, and systems.
15. Investigate damage, accidents, or delays at construction sites, to ensure that proper procedures are being carried out.
16. Evaluate construction methods and determine cost-effectiveness of plans, using computers.
17. Adhere to company standard operating procedure
18. Comply with safety and security procedure





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **FIRE FIGHTING TECHNOLOGIST**

A FIRE FIGHTING TECHNOLOGIST IS DESIGNATED FOLLOW-UP TECHNOLOGIST ACTIVITIES RELATED TO ROTATING MACHINERY, MANAGE TECHNICAL EVALUATION OF THE BIDS AND PREPARE TECHNICAL RECOMMENDATION, ANTICIPATE PROBLEMS, OFFER SOLUTIONS AND INFORM HEAD OF TECHNOLOGIST, LIAISE WITH OTHER DISCIPLINES.

**A Fire Fighting Technologist will be able to:**

1. Design clean and dry agent fire protection systems and knowledge of fire alarm system and emergency light system.
2. Perform inspection and testing of active and passive fire protection systems.
3. Review designs and shop drawings as per life safety and fire protection codes.
4. Develop training materials, and conduct training sessions on fire protection.
5. Evaluate fire department performance and the laws and regulations affecting fire prevention or fire safety.
6. Prepare and write reports detailing specific fire prevention and protection issues such as work performed and proposed review schedules.
7. Advise architects, builders, and other construction personnel on fire prevention equipment and techniques, and on fire code and standard interpretation and compliance.
8. Conduct research on fire retardants and the fire safety of materials and devices.
9. Consult with authorities to discuss safety regulations and to recommend changes as necessary.
10. Design fire detection equipment, alarm systems, and fire extinguishing devices and systems.
11. Determine causes of fires, and ways in which they could have been prevented.
12. Direct the purchase, modification, installation, maintenance, and operation of fire protection systems.

13. Inspect buildings or building designs to determine fire protection system requirements and potential problems in areas such as water supplies, exit locations, and construction materials.
14. Study the relationships between ignition sources and materials to determine how fires start.
15. Attend workshops, seminars, or conferences to present or obtain information regarding fire prevention and protection.
16. Develop plans for the prevention of destruction by fire, wind, and water.
17. Adhere to company standard operating procedure.
18. Comply with safety and security procedure
19. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **FIRE FIGHTING SPECIALIST**

A FIRE FIGHTING SPECIALIST IS DESIGNATED TO DESIGN AND SUPERVISE PROJECT DRAWINGS AND SPECIFICATIONS FOR FIRE FIGHTING PROTECTION DESIGN, DEVELOP CONCEPT STUDIES OF ACTIVE FIRE PROTECTION SYSTEMS APPLICATION, PERFORM STRUCTURAL AND MECHANICAL DESIGN USING INDUSTRY RECOGNISED SOFTWARE, PREPARE AND CHECK MATERIAL DATA SHEETS AND MATERIAL TAKE OFF REPORTS, AND LEAD AND MANAGE A TEAM OF PROFESSIONAL DESIGN TECHNOLOGIST;

**A Fire Fighting Specialist will be able to:**

1. Design and supervise project drawings and specifications for fire fighting protection design.
2. Develop concept studies of active fire protection systems application, engineering design, flow calculation and installation monitoring in adherence to specifications.
3. Verify the completion of projects per schedule within budget, in accordance with quality standards.
4. Review material acquisitions, submittals, and ensure contract performance measures are met per the position discipline.
5. Perform structural and mechanical design using industry recognised software.
6. Plan, review and coordinate design and construction operations to ensure compliance with design drawings and specifications.
7. Lead and manage a team of professional Design Technologist.
8. Develop designs from project specifications.
9. Allocate, prioritise and check work of a team of Design Technologist.
10. Check and evaluate design and material specifications for tender.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedures
13. Prepare and check material data sheets and material take off reports.

14. Document, record and report on meetings, progress of jobs and construction completions from design and validation reports from Project Technologist.
15. Incorporate feedback from projects and customers for design clarification and modifications during the development and construction project phases.



## **OIL, GAS AND PETROLEUM**

### **LEVEL 8**

#### **FIRE FIGHTING CUSTODIAN/PRINCIPAL**

A FIRE FIGHTING CUSTODIAN/PRINCIPAL IS DESIGNATED TO PREPARE TECHNICAL SPECIFICATION FIRE FIGHTING SYSTEM/SAFETY SYSTEM, PREPARE DESIGN BASIS ON FIRE FIGHTING SYSTEM, DIRECT AND MONITOR ALL PERSONNEL ACTIVITIES WITHIN ENGINEERING AREA, PREPARE BUDGET REQUESTS AND ADMINISTER ADOPTED BUDGET, AND DETERMINE METHODS AND SOLUTIONS FOR COMPLEX ENGINEERING PROBLEMS;

#### **A Fire Fighting Custodian/Principal will be able to:**

1. Prepare technical specification/tender documents, basic layout of fire fighting system/safety system.
2. Prepare design basis on fire fighting system.
3. Review, approve and implement all engineering standards, policies and procedures.
4. Direct and monitor all personnel activities within engineering area including manpower forecasting, staff assignments and performance reviews.
5. Oversee the coordination and development of engineering plans and specification between other design teams.
6. Supervise development of fire fighting engineering staff, manage the resources in accordance with the schedules and quality control of the fire fighting designs.
7. Implement policies, established procedures and expedite workflow.
8. Manage design teams, programs or functions, develop goals and objectives and ensure that staff has an appropriate project understanding.
9. Prepare budget requests and administer adopted budget in assigned areas of responsibility.
10. Determine methods and solutions for complex engineering problems.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedures



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 HVAC FITTER**

A HVAC FITTER IS DESIGNATED TO ASSEMBLE PRODUCTS OR SUB-ASSEMBLIE ACCORDING TO VERBAL OR WRITTEN INSTRUCTIONS READ AND INTERPRET BLUEPRINTS, SKETCHES AND PRODUCT SPECIFICATIONS, KNOW AND UNDERSTAND QUALITY POLICY, INSPECT AND TEST INSTALLED UNITS, PARTS, AND EQUIPMENT, AND INSTALL UNITS, PARTS, EQUIPMENT, PRODUCTION EQUIPMENT AND COMPONENTS IN STRUCTURAL ASSEMBLY.

**A HVAC Fitter must be able to:**

1. Accomplish various production assembly functions that complicated in nature.
2. Assemble products or sub-assemblies according to verbal or written instructions, or by following drawings or diagrams.
3. Read and interpret blueprints, sketches and product specifications to determine sequence and methods of fabricating and/or welding metal parts.
4. Know and understand quality policy and comply with all requirements of the quality manual, operating and technical procedures plus workplace instructions.
5. Locate and mark reference points and holes for installation of parts and components, using jigs, templates, and measuring instruments.
6. Inspect and test installed units, parts, and equipment for fit, performance, and compliance with standards, using measuring instruments and test equipment.
7. Cut, trim, and file parts, and verify fitting tolerances to prepare for installation.
8. Use hand tools, power tools, and measuring devices such as tapes, gauges, pressure equipment, callipers and rules to assemble and test product.
9. Install units, parts, equipment, production equipment and components in structural assembly, according to blueprints and specifications, using hand tools and power tools.
10. Crate, and get pallet/skids ready for shipment.
11. Understand and comply with all safety rules and company policies.



12. Maintain a safe, clean and orderly work area.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **HVAC JUNIOR DRAFTER**

A HVAC JUNIOR DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR HVAC EQUIPMENT COORDINATE WITH AND CONSULT OTHER WORKERS TO DESIGN AND TO RESOLVE DESIGN, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN DETAILED SPECIFICATIONS FOR COMPONENTS OR MACHINERY, DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS AND MODIFY AND REVISE DESIGNS TO CORRECT OPERATING DEFICIENCIES OR TO REDUCE PRODUCTION PROBLEMS.

**A HVAC Junior Drafter must be able to:**

1. Develop detailed design drawings and specifications for HVAC equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, lay out, or detail components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.
5. Position instructions and comments onto drawings.
6. Modify and revise designs to correct operating deficiencies or to reduce production problems.
7. Design scale or full-size blueprints of specialty items, such as furniture and automobile body or chassis components.
8. Check dimensions of materials to be used and assign numbers to the materials.

9. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.
10. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.
11. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines.
12. Supervise and train draftsman.
13. Layout, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of HVAC systems.
14. Shade or colour drawings to clarify and emphasise details and dimensions and eliminate background, using ink, crayon, airbrush, and overlays.
15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **HVAC SENIOR FITTER**

A HVAC SENIOR FITTER IS DESIGNATED TO ASSEMBLE STANDARD EQUIPMENT AND PRODUCTS, ACCOMPLISH VARIOUS PRODUCTION ASSEMBLY FUNCTIONS, READ, INTERPRET AND FOLLOW BLUEPRINTS, DIAGRAMS, ENGINEERING DRAWINGS, PERFORM QUALITY WORK CHECKS, CONFER WITH SUPERVISOR REGARDING QUALITY OR PROCEDURE PROBLEMS AND IDENTIFY PRODUCT DEFECTS AND INSPECT ALL PRODUCTS FOR QUALITY ASSURANCE.

**A HVAC Senior Fitter must be able to:**

1. Perform standard assembly procedures, reworks, and repairs on manufactured equipment and products.
2. Accomplish various production assembly functions that complicated in nature.
3. Assemble products or sub-assemblies according to verbal or written instructions, or by following drawings or diagrams.
4. Operate hand tools, power tools, or production equipment.
5. Read, interpret and follow blueprints, diagrams, engineering drawings, specifications, bill of materials, and other written instructions or procedures to accurately assemble equipment and products.
6. Perform quality work checks to insure the product meets quality standards.
7. Confer with supervisor regarding quality or procedure problems.
8. Identify product defects and complete appropriate documentation when defects are identified.
9. Rework and/or repair assembled equipment and products according to engineering specification changes.
10. Perform all work in accordance with quality standards and established safety procedures.
11. Provide assistance to more senior level Assembly Mechanics on larger jobs.
12. Help in training new hires on set-up's and reading blue prints.
13. Adhere to company standard operating procedure.

14. Comply with safety and security procedure.
15. Inspect all products for quality assurance.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **HVAC DRAFTER**

A HVAC DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR HVAC EQUIPMENT COORDINATE WITH AND CONSULT OTHER WORKERS TO DESIGN AND TO RESOLVE DESIGN, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN DETAILED SPECIFICATIONS FOR COMPONENTS OR MACHINERY, DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS AND CHECK DIMENSIONS OF MATERIALS TO BE USED, AND ASSIGN NUMBERS TO THE MATERIALS.

**A HVAC Drafter must be able to:**

1. Develop detailed design drawings and specifications for static equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, lay out, or detail components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.
5. Position instructions and comments onto drawings.
6. Modify and revise designs to correct operating deficiencies or to reduce production problems.
7. Design scale or full-size blueprints of specialty items, such as furniture and automobile body or chassis components.
8. Check dimensions of materials to be used and assign numbers to the materials.
9. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.



10. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.
11. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines;
12. Supervise and train junior static designer.
13. Layout, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of static systems.
14. Adhere to company standard operating procedure.
15. Comply with safety and security procedure.
16. Shade or colour drawings to clarify and emphasise details and dimensions and eliminate background, using ink, crayon, airbrush, and overlay.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 HVAC FABRICATOR**

A HVAC FABRICATOR IS DESIGNATED TO FABRICATE AND ASSEMBLE STRUCTURAL METAL PRODUCTS, MAKING SHOP DRAWING, BUILT DRAWING AND COMPOSITE DRAWING, READ, INTERPRET AND FOLLOW BLUEPRINTS, DIAGRAMS, ENGINEERING DRAWINGS, INSTALL PARTS, PIECES AND ELEMENTS OF THE DESIGNATED PROJECT, TREATMENT AND REPAIR OF METAL SURFACES; MAINTAIN THE SHOP AND EQUIPMENT USED IN THE ASSEMBLY PROCESS, AND INTERFACE WITH SUPERVISOR ON PROJECT AND FACILITY OBJECTIVES.

#### **A HVAC Fabricator must be able to:**

1. Assist Engineer in fabrication and assembly of prototype units, fabricate and assemble structural metal products.
  2. Prepare drawings/modifications and has to maintain, control, documentation of drawings.
  3. Design and select duct routing layout, piping layout for chillers, cooling towers and pumps with sections.
  4. Make shop drawing, built drawing and composite drawing.
  5. Read, interpret and follow blueprints, diagrams, engineering drawings, specifications, bill of materials, and other written instructions or procedures to accurately assemble equipment and products,
  6. Install parts, pieces and elements of the designated project, treatment and repair of metal surfaces to ensure safe usage and welding to secure fastening for pieces including in the final product.
  7. Maintain the shop and equipment used in the assembly process.
  8. Maintain and repair, set up and operate fabricating machines such as plasma table,
  9. Shears, brakes, forming rolls, to cut bend, block weld, and form or straighten materials.
- Shape and form HVAC ductwork and related products, using power and hand tools.

10. Operate computer aided drafting (CAD) equipment to develop scale drawings of products or systems.
11. Interface with supervisor on project and facility objectives.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4 HVAC SENIOR DRAFTER**

A HVAC SENIOR DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR HVAC EQUIPMENT, COORDINATE WITH AND CONSULT OTHER WORKERS TO DESIGN AND TO RESOLVE DESIGN, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN DETAILED SPECIFICATIONS FOR COMPONENTS OR MACHINERY, AND DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS.

**A HVAC Senior Drafter must be able to:**

1. Develop detailed design drawings and specifications for HVAC equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, lay out, or detail components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.
5. Position instructions and comments onto drawings.
6. Modify and revise designs to correct operating deficiencies or to reduce production problems.
7. Design scale or full-size blueprints of specialty items, such as furniture and automobile body or chassis components.
8. Check dimensions of materials to be used and assign numbers to the materials.
9. Lay out and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.

10. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.
11. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines.
12. Supervise and train HVAC drafter.
13. Layout, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of HVAC systems.
14. Shade or colour drawings to clarify and emphasise details and dimensions and eliminate background, using ink, crayon, airbrush, and overlays.
15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure.
17. Perform supervisory function.



## **OIL, GAS AND ENGINEERING**

### **LEVEL 4**

#### **HVAC FABRICATION SUPERVISOR**

A HVAC FABRICATION SUPERVISOR IS DESIGNATED TO PLAN, DIRECT AND COORDINATE FABRICATION ACTIVITIES, RECOMMEND IMPROVEMENTS IN SHOP, RECOMMEND IMPROVEMENTS IN SHOP OPERATING PROCEDURES, RECOMMEND THE ACQUISITION OF ADDITIONAL OR NEW EQUIPMENT AND MACHINERY, STOP ANY MANUFACTURING OPERATION IN THE AREA WHICH WILL PRODUCE PARTS OF QUESTIONABLE QUALITY, AND MANAGES ASSIGNED CREW TO ATTAIN QUALITY, SCHEDULE AND COST OBJECTIVES.

#### **A HVAC Fabrication Supervisor must be able to:**

1. Plan, direct and coordinate fabrication activities for HVAC systems requiring a thorough knowledge of techniques, regarding productions processes, procedures, for major fitting, welding, assembly, grinding, rigging, and heat treatment, machining, and tool cribs.
2. Recommend improvements in shop operating procedures, policies, and processes.
3. Recommend the acquisition of additional or new equipment and machinery when costs and production problems dictate to control and/or reduce production costs.
4. Requisition of materials and supplies within normal budget category, provide justification when required.
5. Stop any manufacturing operation in the area which will produce parts of questionable quality or could create a safety risk to the employee.
6. Facilitate communication between the production employees and other departments.
7. Lead a crew of skilled trade personnel in an area of the manufacturing organisation with responsibility for fabrication and/or assembly of product for the construction of HVAC systems for the delivery to commercial customers.
8. Manage assigned crew to attain quality, schedule and cost objectives.
9. Review and understand department, organisation, and company goals and objectives and support execution plans that ensure positive predictable results.



10. Measure performance to budget and support superintendent in budget analysis.
11. Plan overtime and schedules resources as required to meet program schedules.
12. Ensure manufacturing trade areas of responsibility are supporting all programs.
13. Educate subordinate supervisors on contractual and procedural manners.
14. Interface with superintendent on project and facility objectives.
15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure.
17. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 HVAC DESIGNER**

A HVAC DESIGNER IS DESIGNATED TO DRAFT DRAWINGS ACCORDING TO ENGINEERING SPECIFICATIONS, DESIGN HVAC MECHANISMS AND COMPONENTS, PERFORM ENGINEERING CALCULATION FOR HVAC DESIGNS, DESIGN MANUFACTURING AND INSTALLATION DRAFT EXECUTION DRAWINGS, RESEARCHES, MAINTAIN CORRESPONDENCE WITH VENDORS OF TECHNICAL EQUIPMENT, AND PREPARE WORKS ORDERS.

#### **A HVAC Designer must be able to:**

1. Draft drawings according to engineering specifications.
2. Assist in the design and modification of existing products or equipment.
3. Design HVAC mechanisms and components.
4. Perform engineering calculation for HVAC designs.
5. Design manufacturing and installation draft execution drawings.
6. Prepare works orders.
7. Visit manufacturing facility to ensure compliance of manufactured HVAC components.
8. Suggest improvement to processes and designs to increase effectiveness of performance and manufacturing.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.
11. Research and maintain correspondence with vendors of technical equipment.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **HVAC FABRICATION SUPERINTENDENT**

A HVAC FABRICATION SUPERINTENDENT IS DESIGNATED TO OVERSEE PRE-FABRICATION, FABRICATION, WELDING, PAINTING AND ERECTION ACTIVITIES, REVIEW SHOP DRAWINGS RELATED TO HIS DISCIPLINE AND ENSURE ITS COMPLIANCE WITH DESIGN REQUIREMENTS, REGULAR VISITS TO PROJECT SITE, SUPERINTEND FABSHOP PERSONNEL, SUBCONTRACTORS, ACTIVITIES AND ASSIGNED CREW, MEASURE PERFORMANCE TO BUDGET, AND BUDGET ANALYSIS; AND MAINTAIN GOOD HOUSE KEEPING WITHIN SHOP, ASSOCIATED LAYDOWN AND STORAGE AREAS

**A HVAC Fabrication Superintendent must be able to:**

1. Oversee pre-fabrication, fabrication, welding, painting and erection activities, QA/QC Inspection skills which include witness testing, administrative skills including report writing and accustomed to preparing Quality Procedures inline with the required Standards and Specifications.
2. Assist and manage the compiling of documentation for reports and final submissions, recording full Documentation Control.
3. Assist the sub contractor whenever required to maintain the programme ensuring that the work was carried out safely and to the necessary quality requirements.
4. Work closely and assist the sub contractor in regards to shop floor production and fabrication techniques, utilising the workforce as required.
5. Review shop drawings related to his discipline and ensure its compliance with design requirements and contract requirements and that it is properly coordinated with other disciplines and submitted as per the approved schedules.
6. Superintend fabshop personnel, subcontractors, activities and assigned crew to attain quality, schedule and cost objectives.
7. Review and understand department, organisation, and company goals and objectives and support execution plans that ensure positive predictable results.

8. Measure performance to budget and budget analysis.
9. Plan overtime and schedules resources as required to meet program schedules.
10. Ensure manufacturing trade areas of responsibility are supporting all programs.
11. Educate subordinate supervisors on contractual and procedural manners.
12. Maintain good housekeeping within shop, associated laydown and storage areas.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL AND GAS ENGINEERING**

### **LEVEL 6 HVAC TECHNOLOGIST**

A HVAC TECHNOLOGIST IS DESIGNATED TO FOLLOW-UP TECHNOLOGIST ACTIVITIES RELATED TO HVAC, MANAGE TECHNICAL EVALUATION OF THE BIDS AND PREPARE TECHNICAL RECOMMENDATION, ANTICIPATE PROBLEMS, OFFER SOLUTIONS AND INFORM HEAD OF ENGINEERING, LIAISE WITH OTHER DISCIPLINES, LIAISE WITH OTHER DISCIPLINES IN ORDER TO ENSURE CONSISTENCY OF THE WORK, AND ENSURE ENGINEERING CONTRACTOR PROVIDES PROPER REPORTING OF THE PROGRESS OF HIS ACTIVITIES.

#### **A HVAC Technologist must be able to:**

1. Supervise the execution of the engineering, fabrication, erection and commissioning for what concerns static machinery.
2. Follow-up technologist activities related to HVAC Machinery.
3. Manage technical evaluation of the bids and prepare technical recommendation with Head of Engineering.
4. Follow-up procurement, construction, expediting, FAT for his discipline.
5. Anticipate problems, offer solutions and inform Head of Engineering.
6. Keep HVAC Machinery Group Leader informed of main decision and orientation.
7. Comment on Technologist documents and coordinate other Company specialists comments.
8. Liaise with other disciplines in order to ensure consistency of the work.
9. Comment on contractor documents.
10. Review proposed deviations and give recommendation for project management approval.
11. Organise weekly and/or monthly co-ordination meetings with Engineering Contractor.
12. Ensure Engineering Contractor provides proper reporting of the progress of his activities.
13. Adhere to company standard operating procedure.

14. Comply with safety and security procedure.
15. Perform managerial duties.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 HVAC SPECIALIST**

A HVAC SPECIALIST IS DESIGNATED TO PREPARE AND MONITOR PREVENTIVE MAINTENANCE/CONDITION MONITORING TASK, PROPOSE AND IMPLEMENT CORRECTIVE MAINTENANCE ON ANY HVAC EQUIPMENT FAILURE, PROPOSE AND MAINTAIN SPARE PARTS OF CRITICAL SPARES, MANAGE CONTRACTORS AND REPORT BREAKDOWN.

**A HVAC Specialist must be able to:**

1. Prepare and monitor Preventive Maintenance/Condition Monitoring Task on all HVAC Equipment.
2. Propose and implement corrective maintenance on any HVAC equipment failure or abnormal condition.
3. Propose and maintain spare parts of critical spares for the HVAC equipment.
4. Manage contractors working on HVAC equipment.
5. Report breakdown frequencies on HVAC equipment.
6. Report to HVAC custodian.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **HVAC CUSTODIAN/PRINCIPAL**

A HVAC CUSTODIAN/PRINCIPAL IS DESIGNATED TO SUPERVISE AND LEAD A TEAM OF TECHNOLOGIST AND DESIGNERS, PROVIDE NECESSARY TECHNICAL INFORMATION AND SUPPORT FOR PROCUREMENT, ADHERE TO COST/ BUDGETED MAN-HOUR AND PROJECT SCHEDULES, DETERMINE METHODS AND SOLUTIONS FOR COMPLEX ENGINEERING PROBLEMS.

**A HVAC Custodian/Principal must be able to:**

1. Supervise and lead a team of technologist and designers in carrying out detailed engineering work for large sized projects or proposals assuming entire responsibility for the detailed design.
2. Shall provide necessary technical information and support for procurement of all HVAC Equipment and related packages in compliance with tender specifications and data sheets.
3. Shall adhere to cost/ budgeted man-hour and project schedules.
4. Determine methods and solutions for complex engineering problems and select the most efficient and economical manner in meeting the objectives.
5. Apply advanced engineering techniques and analyses within the discipline to serve as a technical specialist when required.
6. Adhere to company standard operating procedure.
7. Comply with safety and security procedure.
8. Supervise HVAC specialist.
9. Provide consultation service on HVAC.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 ROTATING FITTER**

A ROTATING FITTER IS DESIGNATED TO ASSEMBLE PRODUCTS OR SUB-ASSEMBLIES ACCORDING TO VERBAL OR WRITTEN INSTRUCTIONS, READ AND INTERPRET BLUEPRINTS, SKETCHES AND PRODUCT SPECIFICATIONS, KNOW AND UNDERSTAND QUALITY POLICY, INSPECT AND TESTS ROTATING INSTALLED UNITS, PARTS, AND EQUIPMENT, AND INSTALL UNITS, PARTS, EQUIPMENT, PRODUCTION EQUIPMENT AND COMPONENTS IN STRUCTURAL ASSEMBLY.

#### **A Rotating Fitter must be able to:**

1. Accomplish various production assembly functions that complicated in nature.
2. Assemble products or sub-assemblies according to verbal or written instructions or by following drawings or diagrams.
3. Read and interpret blueprints, sketches and product specifications to determine sequence and methods of fabricating and/or welding metal parts.
4. Know and understand quality policy and comply with all requirements of the quality manual, operating and technical procedures plus workplace instructions.
5. Locate and mark reference points and holes for installation of parts and components, using jigs, templates, and measuring instruments.
6. Inspect and test installed rotating units, parts, and equipment for fit, performance, and compliance with standards, using measuring instruments and test equipment.
7. Cut, trim, and files part, and verify fitting tolerances to prepare for installation.
8. Use hand tools, power tools, and measure devices such as tapes, gauges, pressure equipment, callipers and rules to assemble and test product.
9. Install units, parts, equipment, production equipment and components in structural assembly, according to blueprints and specifications, using hand tools and power tools.
10. Crate and get pallet/skids ready for shipment.
11. Understand and comply with all safety rules and company policies.

12. Maintain a safe, clean and orderly work area.
13. Adhere to company standard operating procedures.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **ROTATING JUNIOR DRAFTER**

A ROTATING JUNIOR DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR MECHANICAL EQUIPMENT, COORDINATE WITH AND CONSULT OTHER WORKERS TO DESIGN AND TO RESOLVE DESIGN, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN DETAILED SPECIFICATIONS FOR COMPONENTS OR MACHINERY, DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS.

**A Rotating Junior Drafter must be able to:**

1. Develop detailed design drawings and specifications for mechanical equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, lay out, or detail components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.
5. Position instructions and comments onto drawings.
6. Modify and revise designs to correct operating deficiencies or to reduce production problems.
7. Design scale or full-size blueprints of specialty items, such as furniture and automobile body or chassis components.
8. Check dimensions of materials to be used and assign numbers to the materials
9. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.
10. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.

11. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines.
12. Supervise and train draftsman.
13. Layout, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of mechanical systems.
14. Shade or colour drawings to clarify and emphasise details and dimensions and eliminate background, using ink, crayon, airbrush, and overlays.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **ROTATING SENIOR FITTER**

A ROTATING SENIOR FITTER IS DESIGNATED TO ASSEMBLE STANDARD ROTATING EQUIPMENT AND PRODUCTS, ACCOMPLISH VARIOUS PRODUCTION ASSEMBLY FUNCTIONS, READ, INTERPRET AND FOLLOW BLUEPRINTS, DIAGRAMS, ENGINEERING DRAWINGS, PERFORM QUALITY WORK CHECKS, CONFER WITH SUPERVISOR REGARDING QUALITY OR PROCEDURE PROBLEMS, AND IDENTIFY PRODUCT DEFECTS AND INSPECT ALL PRODUCTS FOR QUALITY ASSURANCE;

**A Rotating Senior Fitter must be able to:**

1. Perform standard assembly procedures, reworks, and repairs on rotating equipment and products.
2. Accomplish various production assembly functions that complicated in nature.
3. Assemble products or sub-assemblies according to verbal or written instructions, or by following drawings or diagrams.
4. Operate hand tools, power tools, or production equipment.
5. Read, interpret and follow blueprints, diagrams, engineering drawings, specifications, bill of materials, and other written instructions or procedures to accurately assemble rotating equipment and products.
6. Perform quality work checks to insure the product meets quality standards.
7. Confer with supervisor regarding quality or procedure problems.
8. Identify product defects and complete appropriate documentation when defects are identified.
9. Rework and/or repair assembled rotating equipment and products according to engineering specification changes.
10. Perform all work in accordance with quality standards and established safety procedures.
11. Provide assistance to more senior level Assembly Mechanics on larger jobs.
12. Inspect all products for quality assurance.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 ROTATING DRAFTER**

A ROTATING DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR MECHANICAL EQUIPMENT COORDINATE WITH AND CONSULT OTHER WORKERS TO DESIGN AND TO RESOLVE DESIGN, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN DETAILED SPECIFICATIONS FOR COMPONENTS OR MACHINERY, DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS AND CHECK DIMENSIONS OF MATERIALS TO BE USED AND ASSIGN NUMBERS TO THE MATERIALS.

#### **A Rotating Drafter must be able to:**

1. Develop detailed design drawings and specifications for mechanical equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, layout, or detail components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.
5. Position instructions and comments onto drawings.
6. Modify and revise designs to correct operating deficiencies or to reduce production problems.
7. Design scale or full-size blueprints of specialty items, such as furniture and automobile body or chassis components.
8. Check dimensions of materials to be used and assign numbers to the materials.
9. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.

10. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.
11. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines.
12. Supervise and train draftsman.
13. Layout, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of mechanical systems.
14. Shade or colour drawings to clarify and emphasise details and dimensions and eliminate background, using ink, crayon, airbrush, and overlays.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **ROTATING FABRICATOR**

A ROTATING FABRICATOR IS DESIGNATED TO FABRICATE AND ASSEMBLE ROTATING EQUIPMENT AND PRODUCTS, MAKE SHOP DRAWING, BUILT DRAWING AND COMPOSITE DRAWING, READ, INTERPRET AND FOLLOW BLUEPRINTS, DIAGRAMS, ENGINEERING DRAWINGS, INSTALL PARTS, PIECES AND ELEMENTS OF THE DESIGNATED PROJECT, TREATMENT AND REPAIR OF METAL SURFACES, MAINTAIN THE SHOP AND EQUIPMENT USED IN THE ASSEMBLY PROCESS, AND INTERFACE WITH SUPERVISOR ON PROJECT AND FACILITY OBJECTIVES.

#### **A Rotating Fabricator must be able to:**

1. Assist Technologist in fabrication and assembly of prototype units, fabricate and assemble rotating equipment and products.
2. Prepare drawings/modifications and has to maintain/control/documentation of drawings.
3. Make shop drawing, built drawing and composite drawing.
4. Read, interpret and follow blueprints, diagrams, engineering drawings, specifications, bill of materials, and other written instructions or procedures to accurately assemble rotating equipment and products.
5. Install parts, pieces and elements of the designated project, treatment and repair of metal surfaces to ensure safe usage and welding to secure fastening for pieces including in the final product.
6. Maintain the shop and equipment used in the assembly process.
7. Maintain and repair, set up and operate fabricating machines such as plasma table, shears, brakes, forming rolls, etc., to cut bend, block weld, and form or straighten materials.
8. Shape and form rotating equipment and related products, using power and hand tools.

9. Operate computer aided drafting (CAD) equipment to develop scale drawings of rotating equipment or systems.
10. Interface with supervisor on project and facility objectives.
11. Adhere to company standard operating procedures.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **ROTATING SENIOR DRAFTER**

A ROTATING SENIOR DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR MECHANICAL EQUIPMENT COORDINATE WITH AND CONSULT OTHER WORKERS TO DESIGN AND TO RESOLVE DESIGN, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN DETAILED SPECIFICATIONS FOR COMPONENTS OR MACHINERY, DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS, AND CHECK DIMENSIONS OF MATERIALS TO BE USED AND ASSIGN NUMBERS TO THE MATERIALS.

**A Rotating Senior Drafter must be able to:**

1. Develop detailed design drawings and specifications for mechanical equipment, dies or tools, and controls, using computer-assisted drafting (CAD) equipment;
2. Coordinate with and consult other workers to design, layout, or detail components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment;
5. Position instructions and comments onto drawings.
6. Modify and revise designs to correct operating deficiencies or to reduce production problems;
7. Design scale or full-size blueprints of specialty items, such as furniture and automobile body or chassis components
8. Check dimensions of materials to be used and assign numbers to the materials.
9. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines;



10. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.
11. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines;
12. Supervise and train draftsman.
13. Layout, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of mechanical systems.
14. Shade or colour drawings to clarify and emphasise details and dimensions and eliminate background, using ink, crayon, airbrush, and overlays.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedure.
17. Perform supervising function.



## **OIL, GAS AND PROCESSING**

### **LEVEL 4**

#### **ROTATING FABRICATION SUPERVISOR**

A ROTATING FABRICATION SUPERVISOR IS DESIGNATED TO PLAN, DIRECT AND COORDINATE FABRICATION ACTIVITIES; RECOMMEND IMPROVEMENTS IN SHOP, RECOMMEND IMPROVEMENTS IN SHOP OPERATING PROCEDURES, RECOMMENDS THE ACQUISITION OF ADDITIONAL OR NEW EQUIPMENT AND MACHINERY, STOP ANY MANUFACTURING OPERATION IN THE AREA WHICH WILL PRODUCE PARTS OF QUESTIONABLE QUALITY, AND MANAGE ASSIGNED CREW TO ATTAIN QUALITY, SCHEDULE AND COST OBJECTIVES.

#### **A Rotating Fabrication Supervisor must be able to:**

1. Supervise the entire equipment during the construction, pre-commissioning and support operation during commissioning and there after maintain.
2. Plan, direct and coordinate fabrication activities for rotating equipment requiring a thorough knowledge of techniques, regarding productions processes, procedures, for major fitting, welding, assembly, grinding, rigging, and heat treatment, machining, and tool cribs.
3. Recommend improvements in shop operating procedures, policies, and processes.
4. Recommend the acquisition of additional or new equipment and machinery when costs and production problems dictate to control and/or reduce production costs.
5. Requisition materials and supplies within normal budget category, providing justification when required.
6. Stop any manufacturing operation in the area which will produce parts of questionable quality or could create a safety risk to the employee.
7. Facilitate communication between the production employees and other departments.
8. Lead a crew of skilled trade personnel in an area of the manufacturing organisation with responsibility for fabrication and/or assembly of product for the construction of rotating equipment for the delivery to commercial customers.
9. Manage assigned crew to attain quality, schedule and cost objectives.

10. Review and understand department, organisation, and company goals and objectives and support execution plans that ensure positive predictable results.
11. Measure performance to budget and support superintendent in budget analysis.
12. Plan overtime and schedules resources as required to meet program schedules.
13. Ensure manufacturing trade areas of responsibility are supporting all programs.
14. Interface with superintendent on project and facility objectives
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedure.
17. Perform supervising function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 ROTATING DESIGNER**

A ROTATING DESIGNER IS DESIGNATED TO DRAFT DRAWINGS ACCORDING TO ENGINEERING SPECIFICATIONS, DESIGN MECHANICAL MECHANISMS AND COMPONENTS, PERFORM ENGINEERING CALCULATION FOR MECHANICAL DESIGNS, DESIGN MANUFACTURING AND INSTALLATION DRAFT EXECUTION DRAWINGS, RESEARCH AND MAINTAIN CORRESPONDENCE WITH VENDORS OF TECHNICAL EQUIPMENT, AND PREPARE WORKS ORDERS.

#### **A Rotating Designer must be able to:**

1. Draft drawings according to engineering specifications.
2. Assist in the design and modification of existing products or equipment.
3. Design mechanical mechanisms and components.
4. Perform engineering calculation for mechanical designs.
5. Design manufacturing and installation draft execution drawings.
6. Prepare works orders.
7. Visit manufacturing facility to ensure compliance of manufactured mechanical components.
8. Suggest improvement to process and design to increase effectiveness of performance and manufacturing.
9. Research and maintain correspondence with vendors of technical equipment.
10. Adhere to company standard operating procedures.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **ROTATING FABRICATION SUPERINTENDENT**

A ROTATING FABRICATION SUPERINTENDENT IS DESIGNATED TO OVERSEE PRE-FABRICATION, FABRICATION, WELDING, PAINTING AND ERECTION ACTIVITIES; REVIEW SHOP DRAWINGS RELATED TO MECHANICAL ROTATING DISCIPLINE AND ENSURE ITS COMPLIANCE WITH DESIGN REQUIREMENTS, REGULAR VISITS TO PROJECT SITE, SUPERINTEND FABSHOP PERSONNEL, SUBCONTRACTORS, ACTIVITIES AND ASSIGNED CREW, MEASURE PERFORMANCE TO BUDGET, AND BUDGET ANALYSIS, AND MAINTAIN GOOD HOUSE KEEPING WITHIN SHOP, ASSOCIATED LAYDOWN AND STORAGE AREAS

#### **A Rotating Fabrication Superintendent must be able to:**

1. Oversee pre-fabrication, fabrication, welding, painting and erection activities, QA/QC inspection skills which include witness testing, administrative skills including report writing and accustomed to preparing Quality Procedures inline with the required Standards and Specifications.
2. Assist and manage the compiling of documentation for reports and final submissions, recording full Documentation Control.
3. Assist the sub contractor whenever required to maintain the programme ensuring that the work was carried out safely and to the necessary quality requirements.
4. Work closely and assist the sub contractor in regards to shop floor production and fabrication techniques, utilising the workforce as required.
5. Review shop drawings related to mechanical rotating discipline and ensure its compliance with design requirements and contract requirements and that it is properly coordinated with other disciplines and submitted as per the approved schedules.
6. Regular visits to project site to ensure quality of work is in compliance with contract requirements, good construction practice is in effect, only approved materials are used and compliance with shop drawings.
7. Raised Technical Query to client engineering.

8. Superintend fabshop personnel, subcontractors, activities and assigned crew to attain quality, schedule and cost objectives.
9. Reviews and understands department, organisation, and company goals and objectives and supports execution plans that ensure positive predictable results.
10. Measure performance to budget, and budget analysis.
11. Plan overtime and schedules resources as required to meet program schedules.
12. Ensure manufacturing trade areas of responsibility are supporting all programs.
13. Educate subordinate supervisors on contractual and procedural manners.
14. Maintain good housekeeping within shop, associated laydown and storage areas.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 ROTATING TECHNOLOGIST**

A ROTATING TECHNOLOGIST DESIGNATED TO FOLLOW-UP ENGINEER'S ACTIVITIES RELATED TO ROTATING MACHINERY, MANAGE TECHNICAL EVALUATION OF THE BIDS AND PREPARE TECHNICAL RECOMMENDATION, ANTICIPATE PROBLEMS, OFFER SOLUTIONS AND INFORM HEAD OF ENGINEERING, LIAISE WITH OTHER DISCIPLINES AND KEEP ROTATING MACHINERY GROUP LEADER INFORMED OF MAIN DECISION AND/OR ORIENTATION.

**A Rotating Technologist must be able to:**

1. Supervise the execution of the Engineering, Fabrication, Erection and Commissioning for what concerns rotating machinery for all the PSF packages Duties.
2. Follow-up Technologist activities related to Rotating Machinery.
3. Manage technical evaluation of the bids and prepare technical recommendation with Head of Engineering.
4. Follow-up procurement, construction, expediting and FAT for his discipline
5. Anticipate problems, offer solutions and inform Head of Engineering.
6. Keep Rotating Machinery Group Leader informed of main decision and/or orientation.
7. Comment on Technologist documents and coordinate other Company specialists comments.
8. Liaise with other disciplines in order to ensure consistency of the work.
9. Comment on contract or documents.
10. Review proposed deviations & give recommendation for project management approval
11. Organize weekly and monthly co-ordination meetings with Engineering Contractor
12. Ensure Engineering Contractor provides proper reporting of the progress of his activities
13. Adhere to company standard operating procedures.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 ROTATING SPECIALIST**

A ROTATING SPECIALIST IS DESIGNATED TO PREPARE AND MONITOR PREVENTIVE MAINTENANCE/CONDITION MONITORING TASK, PROPOSE AND IMPLEMENT CORRECTIVE MAINTENANCE ON ANY ROTATING EQUIPMENT FAILURE, PROPOSE AND MAINTAIN SPARE PARTS OF CRITICAL SPARES, MANAGE CONTRACTORS AND REPORT BREAKDOWN.

#### **A Rotating Specialist must be able to:**

1. Prepare and monitor preventive maintenance and condition monitoring task on all rotating equipment.
2. Propose corrective maintenance on any rotating equipment failure or abnormal condition.
3. Implement corrective maintenance on any rotating equipment failure or abnormal condition.
4. Propose and maintain spare parts of critical spares for the rotating equipment.
5. Manage contractors working on rotating equipment.
6. Report breakdown frequencies on rotating equipment.
7. Perform any assignment as may be given from time to time by superior.
8. Adhere to company standard operating procedures.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **ROTATING CUSTODIAN/PRINCIPAL**

A ROTATING CUSTODIAN/PRINCIPAL IS DESIGNATED TO SUPERVISE AND LEAD A TEAM OF TECHNOLOGIST AND DESIGNERS, PROVIDE NECESSARY TECHNICAL INFORMATION AND SUPPORT FOR PROCUREMENT, ADHERE TO COST/BUDGETED MAN-HOUR AND PROJECT SCHEDULES, DETERMINE METHODS AND SOLUTIONS FOR COMPLEX ENGINEERING PROBLEMS, AND APPLY ADVANCED ENGINEERING TECHNIQUES AND ANALYSES WITHIN THE DISCIPLINE.

**A Rotating Custodian/Principal must be able to:**

1. Supervise and Lead a team of technologist and designers in carrying out detailed engineering work for large sized projects or proposals assuming entire responsibility for the detailed design.
2. Provide necessary technical information and support for procurement of all Rotating Equipment and related packages in compliance with tender specifications/data sheets.
3. Adhere to cost/ budgeted man-hour and project schedules.
4. Determine methods and solutions for complex engineering problems and select the most efficient and economical manner in meeting the objectives.
5. Apply advanced engineering techniques and analyses within the discipline to serve as a technical specialist when required.
6. Adhere to company standard operating procedures.
7. Comply with safety and security procedure.
8. Provide consultancy on rotating engineering.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 STATIC FITTER**

A STATIC FITTER IS DESIGNATED TO ASSEMBLE PRODUCTS OR SUB-ASSEMBLIES ACCORDING TO VERBAL OR WRITTEN INSTRUCTIONS, READ AND INTERPRET BLUEPRINTS, SKETCHES AND PRODUCT SPECIFICATIONS, KNOW AND UNDERSTAND QUALITY POLICY, INSPECT AND TEST INSTALLED STATIC UNITS, PARTS, AND EQUIPMENT, AND INSTALL UNITS, PARTS, EQUIPMENT, PRODUCTION EQUIPMENT AND COMPONENTS IN STRUCTURAL ASSEMBLY.

#### **A Static Fitter must be able to:**

1. Accomplish various production assembly functions that complicated in nature.
2. Assemble products or sub-assemblies according to verbal or written instructions, or by following drawings or diagrams.
3. Read and interpret blueprints, sketches and product specifications to determine sequence and methods of fabricating and/or welding metal parts.
4. Know and understand quality policy and comply with all requirements of the quality manual, operating and technical procedures plus workplace instructions.
5. Locate and mark reference points and holes for installation of parts and components, using jigs, templates, and measuring instruments.
6. Inspect and test installed static units, parts, and equipment for fit, performance, and compliance with standards, using measuring instruments and test equipment.
7. Cut, trim, and file parts, and verify fitting tolerances to prepare for installation.
8. Use hand tools, power tools, and measuring devices such as tapes, gauges, pressure equipment, callipers and rules to assemble and test product.
9. Install units, parts, equipment, production equipment and components in structural assembly, according to blueprints and specifications, using hand tools and power tools.
10. Crate and get pallet/skids ready for shipment.
11. Understand and comply with all safety rules and company policies.

12. Maintain a safe, clean and orderly work area.
13. Adhere to company standard operating procedures.
14. Comply with safety and security procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **STATIC JUNIOR DRAFTER**

A STATIC JUNIOR DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR STATIC EQUIPMENT COORDINATE WITH AND CONSULT OTHER WORKERS TO DESIGN AND TO RESOLVE DESIGN, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN DETAILED SPECIFICATIONS FOR COMPONENTS OR MACHINERY, DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS.

**A Static Junior Drafter must be able to:**

1. Develop detailed design drawings and specifications for static equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, layout, or detail components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.
5. Position instructions and comments onto drawings.
6. Modify and revise designs to correct operating deficiencies or to reduce production problems.
7. Design scale or full-size blueprints of specialty items, such as furniture and automobile body or chassis components.
8. Check dimensions of materials to be used and assign numbers to the materials.
9. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.
10. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.



11. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines;
12. Supervise and train draftsman.
13. Layout, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of static systems.
14. Shade or colour drawings to clarify and emphasise details and dimensions and eliminate background, using ink, crayon, airbrush, and overlays.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **STATIC SENIOR FITTER**

A STATIC SENIOR FITTER IS DESIGNATED TO ASSEMBLE STANDARD STATIC EQUIPMENT AND PRODUCTS, ACCOMPLISH VARIOUS PRODUCTION ASSEMBLY FUNCTIONS, READ, INTERPRET AND FOLLOW BLUEPRINTS, DIAGRAMS, ENGINEERING DRAWINGS, PERFORM QUALITY WORK CHECKS, CONFER WITH SUPERVISOR REGARDING QUALITY OR PROCEDURE PROBLEMS, IDENTIFY PRODUCT DEFECTS AND INSPECT ALL PRODUCTS FOR QUALITY ASSURANCE;

**A Static Senior Fitter must be able to:**

1. Perform standard assembly procedures, reworks, and repairs on static equipment and products.
2. Accomplish various production assembly functions that complicated in nature.
3. Assemble products or sub-assemblies according to verbal or written instructions or by following drawings or diagrams.
4. Operates hand tools, power tools, or production equipment.
5. Read, interpret and follow blueprints, diagrams, engineering drawings, specifications, bill of materials, and other written instructions or procedures to accurately assemble static equipment and products.
6. Perform quality work checks to insure the product meets quality standards.
7. Confer with supervisor regarding quality or procedure problems.
8. Identify product defects and complete appropriate documentation when defects are identified.
9. Rework and/or repair assembled static equipment and products according to engineering specification changes.
10. Perform all work in accordance with quality standards and established safety procedures.
11. Provide assistance to more senior level Assembly Mechanics on larger jobs.

12. Help in training new hires on set-up's and reading blue prints.
13. Inspect all products for quality assurance.
14. Adhere to company standard operating procedures.
15. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 STATIC DRAFTER**

A STATIC DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR STATIC EQUIPMENT COORDINATE WITH AND CONSULT OTHER WORKERS TO DESIGN AND TO RESOLVE DESIGN, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN DETAILED SPECIFICATIONS FOR COMPONENTS OR MACHINERY AND DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS.

#### **A Static Drafter must be able to:**

1. Develop detailed design drawings and specifications for static equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, layout, or detail components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.
5. Position instructions and comments onto drawings.
6. Modify and revise designs to correct operating deficiencies or to reduce production problems.
7. Design scale or full-size blueprints of specialty items, such as furniture and automobile body or chassis components.
8. Check dimensions of materials to be used and assign numbers to the materials.
9. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.
10. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.

11. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines.
12. Supervise and train junior static designer.
13. Layout, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of static systems.
14. Shade or colour drawings to clarify and emphasise details and dimensions and eliminate background, using ink, crayon, airbrush, and overlays.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 STATIC FABRICATOR**

A STATIC FABRICATOR IS DESIGNATED TO FABRICATES AND ASSEMBLES STATIC EQUIPMENT AND PRODUCTS; MAKING SHOP DRAWING, BUILT DRAWING AND COMPOSITE DRAWING; READ, INTERPRET AND FOLLOW BLUEPRINTS, DIAGRAMS, ENGINEERING DRAWINGS; INSTALL PARTS, PIECES AND ELEMENTS OF THE DESIGNATED PROJECT, TREATMENT AND REPAIR OF METAL SURFACES; MAINTAIN THE SHOP AND EQUIPMENT USED IN THE ASSEMBLY PROCESS; AND INTERFACE WITH SUPERVISOR ON PROJECT AND FACILITY OBJECTIVES.

#### **A Static Fabricator must be able to:**

1. Assist Technologist in fabrication and assembly of prototype units, fabricates and assembles static equipment and products.
2. Prepare drawings/modifications and has to maintain/control/documentation of drawings.
3. Making shop drawing, built drawing and composite drawing.
4. Read, interpret and follow blueprints, diagrams, engineering drawings, specifications, bill of materials, and other written instructions or procedures to accurately assemble static equipment and products.
5. Install parts, pieces and elements of the designated project, treatment and repair of metal surfaces to ensure safe usage and welding to secure fastening for pieces including in the final product.
6. Maintain the shop and equipment used in the assembly process.
7. Maintain and repair, set up and operate fabricating machines such as plasma table, shears, brakes, forming rolls, etc., to cut bend, block weld, and form or straighten materials.
8. Shape and form static equipment and related products, using power and hand tools.



9. Operate computer aided drafting (CAD) equipment to develop scale drawings of static equipment or systems.
10. Interface with supervisor on project and facility objectives.
11. Adhere to company standard operating procedures.
12. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **STATIC SENIOR DRAFTER**

A STATIC SENIOR DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR STATIC EQUIPMENT COORDINATE WITH AND CONSULT OTHER WORKERS TO DESIGN AND TO RESOLVE DESIGN, COMPUTE MATHEMATICAL FORMULAS TO DEVELOP AND DESIGN DETAILED SPECIFICATIONS FOR COMPONENTS OR MACHINERY AND DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS.

**A Static Senior Drafter must be able to:**

1. Develop detailed design drawings and specifications for static equipment, dies/tools, and controls, using computer-assisted drafting (CAD) equipment.
2. Coordinate with and consult other workers to design, layout, or detail components and systems and to resolve design or other problems.
3. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
4. Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.
5. Position instructions and comments onto drawings.
6. Modify and revise designs to correct operating deficiencies or to reduce production problems.
7. Design scale or full-size blueprints of specialty items, such as furniture and automobile body or chassis components.
8. Check dimensions of materials to be used and assign numbers to the materials.
9. Layout and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.
10. Confer with customer representatives to review schematics and answer questions pertaining to installation of systems.

11. Draw freehand sketches of designs, trace finished drawings onto designated paper for the reproduction of blueprints, and reproduce working drawings on copy machines.
12. Supervise and train static drafter.
13. Layout, draw, and reproduce illustrations for reference manuals and technical publications to describe operation and maintenance of static systems.
14. Shade or colour drawings to clarify and emphasise details and dimensions and eliminate background, using ink, crayon, airbrush, and overlays.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedures.
17. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **STATIC FABRICATION SUPERVISOR**

A STATIC FABRICATION SUPERVISOR IS DESIGNATED TO PLAN, DIRECT AND COORDINATE FABRICATION ACTIVITIES, RECOMMEND IMPROVEMENTS IN SHOP, RECOMMEND IMPROVEMENTS IN SHOP OPERATING PROCEDURES, RECOMMEND THE ACQUISITION OF ADDITIONAL OR NEW EQUIPMENT AND MACHINERY, STOP ANY MANUFACTURING OPERATION IN THE AREA WHICH WILL PRODUCE PARTS OF QUESTIONABLE QUALITY, AND MANAGE ASSIGNED CREW TO ATTAIN QUALITY, SCHEDULE AND COST OBJECTIVES.

**A Static Fabrication Supervisor must be able to:**

1. Supervise the entire equipment during the construction, pre-commissioning and support operation during commissioning and there after maintain.
2. Plan, direct and coordinate fabrication activities for static equipment requiring a thorough knowledge of techniques, regarding productions processes, procedures, for major fitting, welding, assembly, grinding, rigging, and heat treatment, machining, and tool cribs.
3. Recommend improvements in shop operating procedures, policies, and processes.
4. Recommend the acquisition of additional or new equipment and machinery when costs and production problems dictate to control and/or reduce production costs.
5. Requisition materials and supplies within normal budget category, providing justification when required.
6. Stop any manufacturing operation in the area which will produce parts of questionable quality or could create a safety risk to the employee.
7. Facilitate communication between the production employees and other departments

8. Lead a crew of skilled trade personnel in an area of the manufacturing organisation with responsibility for fabrication and/or assembly of product for the construction of static equipment for the delivery to commercial customers.
9. Manage assigned crew to attain quality, schedule and cost objectives.
10. Review and understand department, organisation, and company goals and objectives and support execution plans that ensure positive predictable results.
11. Measure performance to budget and support superintendent in budget analysis.
12. Plan overtime and schedules resources as required to meet program schedules.
13. Verify manufacturing trade areas of responsibility are supporting all programs.
14. Adhere to company standard operating procedures.
15. Comply with safety and security procedures.
16. Perform supervisory function
17. Interface with superintendent on project and facility objectives.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 STATIC DESIGNER**

A STATIC DESIGNER IS DESIGNATED TO DRAFT DRAWINGS ACCORDING TO ENGINEERING SPECIFICATIONS, DESIGN STATIC MECHANISMS AND COMPONENTS, PERFORM ENGINEERING CALCULATION FOR STATIC DESIGNS, DESIGN MANUFACTURING AND INSTALLATION DRAFT EXECUTION DRAWINGS, AND RESEARCH AND MAINTAIN CORRESPONDENCE WITH VENDORS OF TECHNICAL EQUIPMENT.

#### **A Static Designer must be able to:**

1. Draft drawings according to engineering specifications.
2. Assist in the design and modification of existing products or equipment.
3. Design static mechanisms and components.
4. Perform engineering calculation for static designs.
5. Design manufacturing and installation draft execution drawings.
6. Prepare Works Orders.
7. Visit manufacturing facility to ensure compliance of manufactured static components.
8. Suggest improvement to process and design to increase effectiveness of performance and manufacturing.
9. Adhere to company standard operating procedures.
10. Comply with safety and security procedures.
11. Research and maintain correspondence with vendors of technical equipment.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **STATIC FABRICATION SUPERINTENDENT**

A STATIC FABRICATION SUPERINTENDENT IS DESIGNATED TO OVERSEE PRE-FABRICATION, FABRICATION, WELDING, PAINTING AND ERECTION ACTIVITIES, REVIEW SHOP DRAWINGS RELATED TO MECHANICAL STATIC DISCIPLINE AND ENSURE ITS COMPLIANCE WITH DESIGN REQUIREMENTS, REGULAR VISITS TO PROJECT SITE, SUPERINTEND FABSHOP PERSONNEL, SUBCONTRACTORS, ACTIVITIES AND ASSIGNED CREW, MEASURE PERFORMANCE TO BUDGET, AND BUDGET ANALYSIS, AND MAINTAIN GOOD HOUSE KEEPING WITHIN SHOP, ASSOCIATED LAYDOWN, AND STORAGE AREAS.

#### **A Static Fabrication Superintendent must be able to:**

1. Oversee pre-fabrication, fabrication, welding, painting and erection activities, QA/QC inspection skills which include witness testing, administrative skills including report writing and accustomed to preparing Quality Procedures inline with the required Standards and Specifications.
2. Assist and manage the compiling of documentation for reports and final submissions, recording full Documentation Control.
3. Assist the sub contractor whenever required to maintain the programme ensuring that the work was carried out safely and to the necessary quality requirements.
4. Work closely and assist the sub contractor in regards to shop floor production and fabrication techniques, utilising the workforce as required.
5. Review shop drawings related to mechanical static discipline and ensure its compliance with design requirements and contract requirements and that it is properly coordinated with other disciplines and submitted as per the approved schedules.
6. Regular visits to project site to ensure quality of work is in compliance with contract requirements, good construction practice is in effect, only approved materials are used and compliance with shop drawings.

7. Raised Technical Query to client engineering.
8. Superintend fabshop personnel, subcontractors, activities and assigned crew to attain quality, schedule and cost objectives.
9. Review and understand department, organisation, and company goals and objectives and supports execution plans that verify positive predictable results.
10. Measure performance to budget, and budget analysis.
11. Plan overtime and schedules resources as required to meet program schedules.
12. Verify manufacturing trade areas of responsibility are supporting all programs.
13. Educate subordinate supervisors on contractual and procedural manners.
14. Adhere to company standard operating procedures.
15. Comply with safety and security procedures.
16. Maintain good housekeeping within shop, associated lay down and storage areas.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **STATIC TECHNOLOGIST**

A STATIC TECHNOLOGIST IS DESIGNATED TO FOLLOW-UP TECHNOLOGIST ACTIVITIES RELATED TO STATIC MACHINERY, MANAGE TECHNICAL EVALUATION OF THE BIDS AND PREPARE TECHNICAL RECOMMENDATION, ANTICIPATE PROBLEMS, OFFER SOLUTIONS, INFORM HEAD OF ENGINEERING AND LIAISE WITH OTHER DISCIPLINES.

**A Static Technologist must be able to:**

1. Supervise the execution of the Engineering, Fabrication, Erection and Commissioning for what concerns static machinery.
2. Follow-up Technologist activities related to Static Machinery.
3. Manage technical evaluation of the bids and prepare technical recommendation with Head of Engineering;
4. Follow-up procurement, construction, expediting and FAT for his discipline.
5. Anticipate problems, offer solutions and inform Head of Engineering.
6. Keep Static Machinery Group Leader informed of main decision and/or orientation.
7. Comment on Technologist documents and coordinate other Company specialists comments.
8. Liaise with other disciplines in order to ensure consistency of the work.
9. Comment on contractor documents.
10. Review proposed deviations and give recommendation for project management approval.
11. Organise weekly and/or monthly co-ordination meetings with Engineering Contractor.
12. Ensure Engineering Contractor provides proper reporting of the progress of his activities.
13. Adhere to company standard operating procedures.
14. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 STATIC SPECIALIST**

A STATIC SPECIALIST IS DESIGNATED TO PREPARE AND MONITOR PREVENTIVE MAINTENANCE/CONDITION MONITORING TASK, PROPOSE AND IMPLEMENT CORRECTIVE MAINTENANCE ON ANY STATIC EQUIPMENT FAILURE, PROPOSE AND MAINTAIN SPARE PARTS OF CRITICAL SPARES, AND MANAGE CONTRACTORS AND REPORT BREAKDOWN.

**A Static Specialist must be able to:**

1. Prepare and monitor Preventive Maintenance/Condition Monitoring Task on all Static equipment.
2. Propose and implement corrective maintenance on any static equipment failure or abnormal condition.
3. Implement corrective maintenance on any static equipment failure or abnormal condition.
4. Propose and maintain spare parts of critical spares for the static equipment.
5. Manage contractors working on static equipment.
6. Report breakdown frequencies on static equipment.
7. Perform any assignment as may be given from time to time by superior.
8. Adhere to company standard operating procedures.
9. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **STATIC CUSTODIAN/PRINCIPAL**

A STATIC CUSTODIAN/PRINCIPAL TECHNOLOGIST IS DESIGNATED TO SUPERVISE AND LEAD A TEAM OF TECHNOLOGIST AND DESIGNERS, PROVIDE NECESSARY TECHNICAL INFORMATION AND SUPPORT FOR PROCUREMENT; ADHERE TO COST/BUDGETED MAN-HOUR AND PROJECT SCHEDULES, AND DETERMINE METHODS AND SOLUTIONS FOR COMPLEX ENGINEERING PROBLEMS.

**A Static Custodian/Principal must be able to:**

1. Supervise and Lead a team of technologist and designers in carrying out detailed engineering work for large sized projects or proposals assuming entire responsibility for the detailed design
2. Provide necessary technical information and support for procurement of all Static Equipment and related packages in compliance with tender specifications/data sheets.
3. Adhere to cost/budgeted man-hour and project schedules.
4. Determine methods and solutions for complex engineering problems and select the most efficient and economical manner in meeting the objectives.
5. Supervise static specialist.
6. Adhere to company standard operating procedures.
7. Comply with safety and security procedures.
8. Provide consultation service on static engineering
9. Apply advanced engineering techniques and analyse within the discipline to serve as a technical specialist when require.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 CIVIL FITTER**

A CIVIL FITTER IS DESIGNATED TO FIT AND ASSEMBLE STRUCTURAL FRAMEWORKS FROM MATERIAL, FOLLOWING BLUEPRINT SPECIFICATIONS. THEY ALSO EXAMINE BLUEPRINTS AND MATERIAL LIST TO OBTAIN PARTS SPECIFICATIONS.

**A Civil Fitter must be able to:**

1. Layout parts dimensions on worktable, using square, chalk line, and soapstone.
2. Tack-welds scrap metal to outline to provide jig for assembly.
3. Position parts in jig and files, chisels, and grinds parts, as indicated, to fit them together.
4. Heat parts with acetylene torch and bend them, on anvil, or around stakes mounted in table.
5. Heat parts with acetylene torch and dip parts in cyanide bath to harden.
6. Periodically compares dimensions of assembly to blueprint specifications, using square, rule, and callipers.
7. Anneal parts with acetylene torch to remove stresses of welding.
8. Fasten parts together with acetylene torch and brazing rod.
9. Adhere to company standard operating procedures.
10. Comply with safety and security procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **CIVIL JUNIOR DRAFTER**

A CIVIL JUNIOR DRAFTER IS DESIGNATED TO PREPARE TECHNICAL DRAWINGS AND PLANS TO BUILD STRUCTURES, INSTALLATIONS AND CONSTRUCTION RELATED TO THE OIL AND GAS INDUSTRY. A JUNIOR CIVIL DRAFTER WILL WORK UNDER CLOSE SUPERVISION FROM THE SENIOR AND CIVIL DRAFTERS TO CONDUCT FIELD SURVEYS AND INSPECTIONS TO REVISE CONSTRUCTION DRAWINGS. THEY WILL ALSO REVIEW ON COST AND QUALITY OF MATERIALS WITH THE SENIOR AND CIVIL DRAFTERS.

#### **A Civil Junior Drafter must be able to:**

1. Produce drawings using computer assisted drafting systems (CAD) or drafting machines or by hand using compasses, dividers, protractors, triangles and other drafting devices.
2. Draft plans and detailed drawings for structures, installations, and construction projects, working from sketches or notes.
3. Correlate, interpret, and modify data obtained from topographical surveys, well logs, and geophysical prospecting reports.
4. Finish and duplicate drawings and documentation packages, according to required mediums and specifications for reproduction, using blueprinting, photography, or other duplicating methods.
5. Review rough sketches, drawings, specifications, and other engineering data received from civil engineers to verify that they conform to design concepts.
6. Supervise and conduct field surveys, inspections or technical investigations to obtain data required to revise construction drawings.
7. Determine the order of work and method of presentation, such as orthographic or isometric drawing.
8. Calculate excavation tonnage and prepare graphs and fill-hauling diagram for use in earth-moving operations.

9. Explain drawings to production or construction teams and provide adjustments as necessary.
10. Locate and identify symbols located on topographical surveys to denote geological and geophysical formations or oil field installations.
11. Calculate weights, volumes, and stress factors, and their implications for technical aspects of designs.
12. Determine quality, cost, strength and quantity of required materials, and enter figures on material lists.
13. Plot characteristic of boreholes for oil and gas wells from photographic subsurface survey recordings and other data, representing depth, degree and direction of inclination.
14. Adhere to company standard operating procedures.
15. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2 CIVIL SENIOR FITTER**

A CIVIL SENIOR FITTER IS DESIGNATED TO FIT AND ASSEMBLES STRUCTURAL FRAMEWORKS FROM MATERIAL, FOLLOWING BLUEPRINT SPECIFICATIONS. THEY ALSO EXAMINE BLUEPRINTS AND MATERIAL LIST TO OBTAIN PARTS SPECIFICATIONS. THEY WILL ALSO SUPERVISE JUNIOR CIVIL FITTER.

**A Civil Senior Fitter must be able to:**

1. Layout parts dimensions on worktable, using square, chalk line, and soapstone.
2. Tack-welds scrap metal to outline to provide jig for assembly.
3. Positions parts in jig and files, chisels, and grinds parts, as indicated, to fit them together.
4. Heat parts with acetylene torch and bend them, on anvil, or around stakes mounted in table.
5. Heat parts with acetylene torch and dip parts in cyanide bath to harden.
6. Periodically compares dimensions of assembly to blueprint specifications, using square, rule, and callipers.
7. Anneal parts with acetylene torch to remove stresses of welding.
8. Fasten parts together with acetylene torch and brazing rod.
9. Adhere to company standard operating procedures.
10. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 CIVIL DRAFTER**

A CIVIL DRAFTER IS DESIGNATED TO PREPARE TECHNICAL DRAWINGS AND PLANS TO BUILD STRUCTURES, INSTALLATIONS AND CONSTRUCTION RELATED TO THE OIL AND GAS INDUSTRY. A CIVIL DRAFTER WILL ALSO SUPERVISE AND TRAIN OTHER TECHNOLOGISTS AND JUNIOR DRAFTERS AND CONDUCT FIELD SURVEYS AND INSPECTIONS TO REVISE CONSTRUCTION DRAWINGS. THEY MUST ALSO REVIEW ON COST AND QUALITY OF MATERIALS.

#### **A Civil Drafter must be able to:**

1. Produce drawings using computer assisted drafting systems (CAD) or drafting machines or by hand using compasses, dividers, protractors, triangles and other drafting devices.
2. Draft plans and detailed drawings for structures, installations, and construction projects, working from sketches or notes.
3. Correlate, interpret, and modify data obtained from topographical surveys, well logs, and geophysical prospecting reports.
4. Finish and duplicate drawings and documentation packages, according to required mediums and specifications for reproduction, using blueprinting, photography, or other duplicating methods.
5. Review rough sketches, drawings, specifications, and other engineering data received from civil engineers to verify that they conform to design concepts.
6. Supervise and train other technologists, technicians and drafters.
7. Supervise and conduct field surveys, inspections or technical investigations to obtain data required to revise construction drawings.
8. Determine the order of work and method of presentation, such as orthographic or isometric drawing.
9. Calculate excavation tonnage and prepare graphs and fill-hauling diagram for use in earth-moving operations.

10. Explain drawings to production or construction teams and provide adjustments as necessary.
11. Locate and identify symbols located on topographical surveys to denote geological and geophysical formations or oil field installations.
12. Calculate weights, volumes, and stress factors, and their implications for technical aspects of designs.
13. Determine quality, cost, strength and quantity of required materials, and enter figures on material lists.
14. Plot characteristic of boreholes for oil and gas wells from photographic subsurface survey recordings and other data, representing depth, degree and direction of inclination.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 CIVIL CONSTRUCTOR**

A CIVIL CONSTRUCTOR IS DESIGNATED TO PERFORM TASK IN HEAVY CONSTRUCTION WORKS. THEY MAY OPERATE HAND AND POWER TOOLS OF ALL TYPES SUCH AS AIR HAMMERS, EARTH TAMPERS, CEMENT MIXERS, SMALL MECHANICAL HOISTS, SURVEYING AND MEASURING EQUIPMENT, AND A VARIETY OF OTHER EQUIPMENT AND INSTRUMENTS.

**A Civil Constructor must be able to:**

1. Place, consolidate, and protect cast-in-place concrete or masonry structures.
2. Position, join, align, and seal structural components, such as concrete wall sections and pipes.
3. Signal equipment operators to facilitate alignment, movement, and adjustment of machinery, equipment, and materials.
4. Spray materials such as water, sand, steam, vinyl, paint, or stucco through hoses to clean, coat, or seal surfaces.
5. Tend machines that pump concrete, grout, cement, sand, plaster or stucco through spray-guns for application to ceilings and walls.
6. Tend pumps, compressors, and generators to provide power for tools, machinery, and equipment, or to heat and move materials such as asphalt.
7. Lubricate, clean, and repair machinery, equipment, and tools.
8. Operate, read, and maintain air monitoring and other sampling devices in confined and/or hazardous environments.
9. Clean and prepare construction sites to eliminate possible hazards.
10. Erect and disassemble scaffolding, shoring, braces, traffic barricades, ramps, and other temporary structures.
11. Load, unload, and identify building materials, machinery, and tools, and distribute them to the appropriate locations, according to project plans and specifications.



12. Measure, mark, and record openings and distances to layout areas where construction work must be performed.
13. Read and interpret plans, instructions, and specifications to determine work activities.
14. Use computers and other input devices to control robotic pipe cutters and cleaners.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **CIVIL SENIOR DRAFTER**

A CIVIL SENIOR DRAFTER IS DESIGNATED TO PREPARE TECHNICAL DRAWINGS AND PLANS TO BUILD STRUCTURES, INSTALLATIONS AND CONSTRUCTION RELATED TO THE OIL AND GAS INDUSTRY. A SENIOR CIVIL DRAFTER WILL ALSO SUPERVISE AND TRAIN OTHER TECHNOLOGISTS AND JUNIOR DRAFTERS AND CONDUCT FIELD SURVEYS AND INSPECTIONS TO REVISE CONSTRUCTION DRAWINGS. THEY WILL ALSO REVIEW ON COST AND QUALITY OF MATERIALS.

#### **A Civil Senior Drafter must be able to:**

1. Produce drawings using computer assisted drafting systems (CAD) or drafting machines or by hand using compasses, dividers, protractors, triangles and other drafting devices.
2. Draft plans and detailed drawings for structures, installations, and construction projects, working from sketches or notes.
3. Correlate, interpret, and modify data obtained from topographical surveys, well logs, and geophysical prospecting reports.
4. Finish and duplicate drawings and documentation packages, according to required mediums and specifications for reproduction, using blueprinting, photography, or other duplicating methods.
5. Review rough sketches, drawings, specifications, and other engineering data received from civil technologist to verify that they conform to design concepts.
6. Supervise and train other technologists, technicians and drafters.
7. Supervise and conduct field surveys, inspections or technical investigations to obtain data required to revise construction drawings.
8. Determine the order of work and method of presentation, such as orthographic or isometric drawing.
9. Calculate excavation tonnage and prepare graphs and fill-hauling diagram for use in earth-moving operations.

10. Explain drawings to production or construction teams and provide adjustments as necessary.
11. Locate and identify symbols located on topographical surveys to denote geological and geophysical formations or oil field installations.
12. Calculate weights, volumes, and stress factors, and their implications for technical aspects of designs.
13. Determine quality, cost, strength and quantity of required materials, and enter figures on material lists.
14. Plot characteristic of boreholes for oil and gas wells from photographic subsurface survey recordings and other data, representing depth, degree and direction of inclination.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedures.
17. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **CIVIL CONSTRUCTION SUPERVISOR**

A CIVIL CONSTRUCTION SUPERVISOR IS DESIGNATED TO COMPLETE CONSTRUCTION PROJECTS BY PLANNING, ORGANISING, AND CONTROLLING PROJECTS, COMPLETING QUALITY INSPECTIONS, AND SUPERVISING CONSTRUCTION WORKERS IN TERMS OF SAFETY AND QUALITY OF WORK.

**A Civil Construction Supervisor must be able to:**

1. Manage sub-contractors by locating, evaluating, and monitoring and controlling performance.
2. Meet operational standards by contributing construction information to strategic plans and reviews, implement production, productivity, quality and customer service standards and resolve problems.
3. Identify construction management system improvements.
4. Meets construction budget by monitoring project expenditures, identify variances, and implement corrective actions.
5. Accomplish construction project results by defining project purpose and scope, calculate resources required, establish standards and protocols, allocate resources and resolve design problems.
6. Evaluate and implement change orders.
7. Approve construction projects by conducting inspections at critical phases.
8. Ensure compliance with codes and standards.
9. Maintain safe and secure work environment by complying with legal regulations.
10. Adhere to company standard operating procedures.
11. Comply with safety and security procedures.
12. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 CIVIL DESIGNER**

A CIVIL DESIGNER IS DESIGNATED TO DRAFT DRAWINGS ACCORDING TO ENGINEERING SPECIFICATIONS, PREPARE CONCEPTUAL DESIGNS USING 2D AND 3D SOFTWARES, DESIGN MANUFACTURING AND INSTALLATION DRAFT EXECUTION DRAWINGS, RESEARCH, MAINTAIN CORRESPONDENCE WITH VENDORS OF TECHNICAL EQUIPMENT, AND PREPARE WORKS ORDERS.

#### **A Civil Designer must be able to:**

1. Prepare layouts and conceptual designs for moderately complex problems.
2. Prepare moderately complex design drawings.
3. Interface with other design disciplines.
4. Proficient in 2D and 3D CAD capabilities.
5. Check moderately complex concrete and steel design drawings.
6. Perform squad check of vendor.
7. Draft drawings using designing software.
8. Prepare drawings according to engineering specifications.
9. Design manufacturing and installation draft execution drawings.
10. Adhere to company standard operating procedures.
11. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **CIVIL CONSTRUCTION SUPERINTENDANT**

A CONSTRUCTION SUPERINTENDANT IS DESIGNATED TO PLAN, DIRECT, COORDINATE, AND BUDGET CONSTRUCTION PROJECTS. THEY MAY SUPERVISE AN ENTIRE PROJECT OR JUST PART OF ONE. THEY SCHEDULE AND COORDINATE ALL DESIGN AND CONSTRUCTION PROCESSES, INCLUDING THE SELECTION, HIRING, AND OVERSIGHT OF SPECIALTY TRADE CONTRACTORS BUT THEY USUALLY DO NOT DO ANY ACTUAL CONSTRUCTION OF THE STRUCTURE.

**A Construction Superintendent must be able to:**

1. Coordinate and supervise construction process from the conceptual development stage through final construction, making sure the project gets completed on time and within budget.
2. Work with technologist, architect and others who are involved in the process.
3. Given the designs, they supervise the planning, scheduling, and implementation of those designs.
4. Determine the best way to get materials to the building site and the most cost effective plan and schedule for completing the project.
5. Determine the labour requirements of the project and, in some cases, supervise or monitor the hiring and dismissal of workers.
6. Direct and monitor the progress of construction activities.
7. Responsible for obtaining all necessary permits and licenses.
8. Oversee the delivery and use of materials, tools, and equipment, worker safety and productivity, and the quality of the construction.
9. Researches and maintains correspondence with vendors of technical equipment.
10. Adhere to company standard operating procedures.
11. Comply with safety and security procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 CIVIL TECHNOLOGIST**

A CIVIL TECHNOLOGIST PERFORMS ENGINEERING DUTIES IN PLANNING, DESIGNING, AND OVERSEEING CONSTRUCTION AND MAINTAINANCE OF BUILDING STRUCTURES AND FACILITIES SUCH AS PIPELINES, POWER PLANTS, AND PLATFORMS.

**A Civil Technologist must be able to:**

1. Analyse survey reports, maps, drawings, blueprints, aerial photography, and other topographical or geological data to plan projects.
2. Plan and design transportation or hydraulic systems and structures, following construction and government standards, using design software and drawing tools.
3. Compute load and grade requirements, water flow rates, and material stress factors to determine design specifications.
4. Inspect project sites to monitor progress and ensure conformance to design specifications and safety or sanitation standards.
5. Direct construction, operations, and maintenance activities at project site.
6. Direct or participate in surveying to layout installations and establish reference points, grades and elevations to guide construction.
7. Estimate quantities and cost of material, equipments, or labour to determine project feasibility.
8. Prepare or present public reports, such as bid proposals, deeds, environmental impact statements, and property and right –of-way descriptions.
9. Test soils and materials to determine the adequacy and strength of foundations, concrete, asphalt, or steel.
10. Provide technical advice regarding design, construction, or program modifications and structural repairs to industrial and managerial personnel.

11. Conduct studies of traffic patterns or environmental conditions to identify engineering problems and assess the potential impact of projects.
12. Adhere to company standard operating procedures.
13. Comply with safety and security procedures.
14. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 CIVIL SPECIALIST**

A CIVIL SPECIALIST IS RESPONSIBLE FOR DESIGN, DEVELOPMENT, IMPLEMENTATION AND ANALYSIS OF TECHNICAL PRODUCTS AND SYSTEMS FOR THE OIL AND GAS INDUSTRY.

**A Civil Specialist must be able to:**

1. Perform structural and mechanical design using industry recognised software.
2. Perform engineering design checking and methodology evaluations.
3. Develop discipline design basis for project.
4. Document design works in project calculation books.
5. Approve discipline concept drawings and discipline construction drawings.
6. Perform motion calculation of the overall structure, strength, fatigue of components.
7. Check discipline calculations performed by others.
8. Assist in the technical part for the preparation of proposals.
9. Provide technical consulting and technology development.
10. Ensure work is executed in accordance with department procedures, project schedules and project budgets.
11. Write technical reports or prepare input for them.
12. Approve technical reports.
13. Prepare engineering input to the discipline design drawings and coordinate the drawings with the drafting department in the generation of them.
14. Adhere to company standard operating procedures.
15. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **CIVIL CUSTODIAN/PRINCIPAL**

A CIVIL CUSTODIAN/PRINCIPAL IS DESIGNATED TO SUPERVISE AND LEAD A TEAM OF TECHNOLOGIST TO THE OIL AND GAS PRODUCTION AND PROCESSING INDUSTRY, PROVIDE NECESSARY TECHNICAL INFORMATION FOR PROCUREMENT AND BUDGET MAN-HOUR AND PROJECT SCHEDULES. HE/SHE SHALL ALSO BE RESPONSIBLE FOR COMPLETION OF PROJECT WITHIN BUDGETED TIME AND COST.

**A Civil Custodian/Principal must be able to:**

1. Supervise and lead team of technologist and designers in carrying out detailed engineering work.
2. Assuming responsibility for conceptual and detailed design.
3. Determine methods and solution for complex engineering problems in tandem with the technical specialist and select the most efficient and economical manner in meeting the objectives.
4. Responsible in getting the project to complete within time frame and cost.
5. Review contract requirements for project execution.
6. Coordinate with planning on time schedules.
7. Supervise and provide guidance in the development of plot plans, engineering drawings and technical documents.
8. Adhere to company standard operating procedures.
9. Comply with safety and security procedures.
10. Provide consultancy service on civil engineering.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 STRUCTURE FITTER**

A STRUCTURE FITTER IS DESIGNATED TO FIT AND ASSEMBLE STRUCTURAL FRAMEWORKS FROM MATERIAL, FOLLOWING BLUEPRINT SPECIFICATIONS. THEY ALSO EXAMINE BLUEPRINTS AND MATERIAL LIST TO OBTAIN PARTS SPECIFICATIONS.

**A Structure Fitter should be able to:**

1. Layout parts dimensions on worktable, using square, chalk line, and soapstone.
2. Tack-welds scrap metal to outline to provide jig for assembly.
3. Position parts in jig and files, chisels, and grinds parts, as indicated, to fit them together.
4. May heat parts with acetylene torch and bend them, on anvil, or around stakes mounted in table.
5. May heat parts with acetylene torch and dip parts in cyanide bath to harden.
6. Periodically compares dimensions of assembly to blueprint specifications, using square, rule, and callipers.
7. May anneal parts with acetylene torch to remove stresses of welding.
8. May fasten parts together with acetylene torch and brazing rod.
9. Adhere to company standard operating procedures
10. Comply with safety and security procedures.



**OIL, GAS AND PETROCHEMICAL**

## **LEVEL 2**

### **STRUCTURE JUNIOR DRAFTER**

A STRUCTURE JUNIOR DRAFTER IS DESIGNATED TO DEVELOP SPECIFICATIONS FOR EQUIPMENT AND PREPARE TECHNICAL DRAWINGS AND PLANS, WHICH ARE USED BY PRODUCTION AND CONSTRUCTION WORKERS TO BUILD STRUCTURES.

#### **A Structure Junior Drafter will be able to:**

1. Provide drawings to give visual guidelines and show how to construct a structure.
2. Drawing includes technical details and specifies dimensions, materials, and procedures.
3. Drafters fill in technical details using drawings, rough sketches, specifications and calculations made by engineers.
4. Use CAD systems to prepare drawings.
5. Produce drawings using computer assisted drafting systems (CAD) or drafting machines or by hand using compasses, dividers, protractors, triangles and other drafting devices.
6. Review rough sketches, drawings, specifications, and other engineering data received from civil engineers to ensure that they conform to design concepts.
7. Determine quality, cost, strength and quantity of required materials, and enter figures on material lists.
8. Explain drawings to production or construction teams and provide adjustments as necessary.
9. Determine the order of work and method of presentation, such as orthographic or isometric drawing.
10. Comply with safety and security procedures.





OIL, GAS AND PETROCHEMICAL

## LEVEL 2

### STRUCTURE SENIOR FITTER

A STRUCTURE SENIOR FITTER IS DESIGNATED TO FIT AND ASSEMBLE STRUCTURAL FRAMEWORKS FROM MATERIAL, FOLLOWING BLUEPRINT SPECIFICATIONS. THEY ALSO EXAMINE BLUEPRINTS AND MATERIAL LIST TO OBTAIN PARTS SPECIFICATIONS. THEY WILL ALSO SUPERVISE THE WORK OF STRUCTURE FITTER.

#### **A Structure Senior Fitter will be able to:**

1. Layout parts dimensions on worktable, using square, chalk line, and soapstone.
2. Tack-welds scrap metal to outline to provide jig for assembly.
3. Position parts in jig and files, chisels, and grinds parts, as indicated, to fit them together.
4. May heat parts with acetylene torch and bend them, on anvil, or around stakes mounted in table.
5. May heat parts with acetylene torch and dip parts in cyanide bath to harden.
6. Periodically compares dimensions of assembly to blueprint specifications, using square, rule, and callipers.
7. May anneal parts with acetylene torch to remove stresses of welding.
8. May fasten parts together with acetylene torch and brazing rod.
9. Adhere to company standard operating procedures
10. Comply with safety and security procedures.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 3  
STRUCTURE DRAFTER**

A STRUCTURE DRAFTER IS DESIGNATED TO DEVELOP SPECIFICATIONS FOR EQUIPMENT AND PREPARE TECHNICAL DRAWINGS AND PLANS, WHICH ARE USED BY PRODUCTION AND CONSTRUCTION WORKERS TO BUILD STRUCTURES.

**A Structure Drafter will be able to:**

1. Provide drawings to give visual guidelines and show how to construct a structure.
2. Drawing includes technical details and specifies dimensions, materials, and procedures.
3. Drafters fill in technical details using drawings, rough sketches, specifications and calculations made by engineers.
4. Use CAD systems to prepare drawings.
5. Supervise other junior structure drafters.
6. Produce drawings using computer assisted drafting systems (CAD) or drafting machines or by hand using compasses, dividers, protractors, triangles and other drafting devices.
7. Review rough sketches, drawings, specifications, and other engineering data received from civil engineers to ensure that they conform to design concepts.
8. Determine quality, cost, strength and quantity of required materials, and enter figures on material lists.
9. Explain drawings to production or construction teams and provide adjustments as necessary.
10. Determine the order of work and method of presentation, such as orthographic or isometric drawing.
11. Adhere to company standard operating procedures
12. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 STRUCTURE FABRICATOR**

A STRUCTURE FABRICATOR IS DESIGNATED TO BE RESPONSIBLE FOR SET-UP, LAYOUT, AND TACK-UP OF VARIOUS PRECISION FRAME WELDMENTS AND BRACKETS. HE/SHE ALSO MUST BE ABLE TO UNDERSTAND VARIOUS WELD FORM SYMBOLS ON BLUE PRINTS.

#### **A Structure Fabricator will be able to:**

1. Responsible for set-up, layout , and tack-up of various precision frame weldments and brackets.
2. Ability to tack up structures to tight tolerance.
3. Ability to weld out precision frames to exact tolerances.
4. To hold final required cosmetic finish with angle grinders and sanders.
5. Understand various weld form symbols on blue prints.
6. Good understanding of set up techniques.
7. Move parts and heavy frames on and off machinery.
8. Adhere to company standard operating procedures
9. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **STRUCTURE SENIOR DRAFTER**

A STRUCTURE SENIOR DRAFTER IS DESIGNATED TO PREPARE TECHNICAL DRAWINGS AND PLANS, WHICH ARE USED BY PRODUCTION AND CONSTRUCTION WORKERS TO BUILD STRUCTURES, AND SUPERVISE AND TRAIN JUNIOR DRAFTERS.

**A Structure Senior Drafter will be able to:**

1. Provide drawings to give visual guidelines and show how to construct a structure.
2. Drawing includes technical details and specifies dimensions, materials, and procedures.
3. Drafters fill in technical details using drawings, rough sketches, specifications and calculations made by engineers.
4. Use CAD systems to prepare drawings.
5. Supervise other junior structure drafters.
6. Produce drawings using computer assisted drafting systems (CAD) or drafting machines or by hand using compasses, dividers, protractors, triangles and other drafting devices.
7. Review rough sketches, drawings, specifications, and other engineering data received from civil engineers to ensure that they conform to design concepts.
8. Determine quality, cost, strength and quantity of required materials, and enter figures on material lists.
9. Explain drawings to production or construction teams and provide adjustments as necessary.
10. Determine the order of work and method of presentation, such as orthographic or isometric drawing.
11. Adhere to company standard operating procedures
12. Comply with safety and security procedures.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 4**

**STRUCTURE FABRICATOR SUPERVISOR**

A STRUCTURE FABRICATOR SUPERVISOR IS DESIGNATED TO SUPERVISE STRUCTURE FABRICATORS TO MEET WITH SCHEDULE AND REVIEW BLUEPRINTS FOR STRUCTURE FABRICATORS TO USE FOR ASSEMBLING AND USES OF EQUIPMENTS, AND ALSO TO ENSURE WORKS ARE COMPLETED ACCORDING TO SCHEDULE.

**A Structure Fabricator Supervisor will be able to:**

1. Supervise structure fabricators according to regulations.
2. Responsible for set-up, layout , and tack-up of various precision frame weldments and brackets.
3. Ability to tack-up structures to tight tolerance.
4. Ability to weld out precision frames to exact tolerances.
5. To hold final required cosmetic finish with angle grinders and sanders.
6. Supervise during moving parts and heavy frames on and off machineries.
7. Understand various weld form symbols on blue prints.
8. Ensure works are completed according to schedule.
9. Good understanding of set up techniques.
10. Adhere to company standard operating procedures
11. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 STRUCTURE DESIGNER**

A STRUCTURE DESIGNER IS DESIGNATED TO DRAFT DRAWINGS ACCORDING TO ENGINEERING SPECIFICATIONS, PERFORM ENGINEERING CALCULATION STRUCTURE DESIGNS, AND PRODUCTION OF 2D AND 3D DRAWINGS.

**A Structure Designer will be able to:**

1. Draft drawings according to engineering specifications.
2. Assist in the design and modification structure.
3. Produce models and drawings in 2D and 3D.
4. Review design and quality checks.
5. Design manufacturing and installation draft execution drawings;
6. Support in the development of design solutions on projects.
7. Assist with structural design drafting.
8. Field sketching such as layouts, details, and connections.
9. Adhere to company standard operating procedures.
10. Comply with safety and security procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **STRUCTURE FABRICATION SUPERINTENDANT**

A STRUCTURE FABRICATION SUPERINTENDANT IS DESIGNATED TO PROVIDE SUPPORT AND LEADERSHIP TO THE PROJECT TEAMS AND FABRICATOR. THEY WILL REVIEW CONSTRUCTABILITY OF PROJECT AND ENSURE GUIDELINES ARE FOLLOWED.

**A Structure Fabrication Superintendant will be able to:**

1. Responsible for providing support and leadership to the project teams and fabricators.
2. Responsible for planning, organising and implementing the fabrication projects that are under his control.
3. Must execute the orders and meet the timetable for delivery and the build-out phase.
4. Review the work prior to starting the project and review the pre-qualification, proposals and projects. Will work within his given budget, track budget expenses and maintain a minimum level of waste and excess material usage.
5. Review the constructability of the project and ensure that all fabricated portions of the work meet regulatory and the state inspection guidelines.
6. Responsible for reviewing subordinates' work and evaluating them on their work product.
7. Adhere to company standard operating procedures
8. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **STRUCTURE TECHNOLOGIST**

A STRUCTURE TECHNOLOGIST IS DESIGNATED TO PROVIDE TECHNICAL EXPERTISE AND PROJECT MANAGEMENT ASSISTANCE IN PRODUCING DESIGN AND WORKING DRAWINGS USING COMPUTER SOFTWARES.

**A Structure Technologist will be able to:**

1. Coordinate project drawings with project managers, CAD staff and others.
2. Ensure that project needs are met in a timely and effective manner.
3. Involve in preparation of engineering design drawings.
4. Provide technical support on project designs and drawings.
5. Construction detailing and interfacing.
6. Research and development on upgrade building science qualifications.
7. Adhere to company standard operating procedures
8. Comply with safety and security procedures.
9. Ensure that project needs are met in a timely and effective manner.
10. Perform any assignment as may be given from time to time by superior.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **FIXED PLATFORM SPECIALIST**

A FIXED PLATFORM SPECIALIST IS DESIGNATED TO PROVIDE MARINE ENGINEERING TECHNICAL SUPPORT TO PROJECT TEAMS THROUGH THE PHASES OF DEVELOPMENT OF FIXED PLATFORM OFFSHORE FACILITIES INCLUDING EARLY CONCEPT DEVELOPMENT, FRONT END ENGINEERING PHASE, TO DESIGN AND CONSTRUCTION, COMMISSIONING AND INSTALLATION PHASE.

**A Fixed Platform Specialist will be able to:**

1. Provide design engineering services for new build construction and conversion, repair and conversion/modification projects and marine systems.
2. Investigate engineering problems.
3. Work with vessel management team, manufacturers, regulatory community, and other industry experts to provide long term solutions and improvements.
4. Prepare technical reports, analysis, estimates and other documentation required to support upstream development projects.
5. Provide project coordination and technical support.
6. Conduct feasibility studies in areas such as platform performance, oil and gas transportation, tug and barge systems, fixed systems facilities, and new design concepts including economic evaluations and preparation of cost estimates.
7. Ability to review and analyse detailed marine engineering analytical work, heat balances, pipeline calculations, system analysis, heat transfer, pumping system design.
8. Provide support in contracting strategy development, bidding package development and knowledge gathering of market conditions.
9. Adhere to company standard operating procedures.
10. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **STRUCTURE CUSTODIAN/PRINCIPAL**

A STRUCTURE CUSTODIAN/PRINCIPAL IS DESIGNATED TO SUPERVISE AND LEAD A TEAM OF ENGINEERS AND DESIGNERS TO CARRY OUT DETAILED ENGINEERING WORK AND PROVIDE NECESSARY TECHNICAL INFORMATION AND SUPPORT FOR PROCUREMENT.

**A Structure Custodian/Principal will be able to:**

1. Determine methods and solution for complex engineering problem in tandem with the technical specialist.
2. Responsible for completion of the project within the budgeted time and cost.
3. Perform responsibility as a lead engineer on projects.
4. Review contract requirements for project execution.
5. Verify and conceptualise the most optimum work routes.
6. Coordinate with project planning on time schedule and develop manpower charts and schedules.
7. Ensure that the deliverables obtained from the vendor are of desired quality and delivered within the schedule.
8. Supervise and provide guidance in the development of plot plans, engineering drawings and technical documents.
9. Interface and meet with vendor representative and conduct internal progress meetings.
10. Participate in employee performance evaluations, establish performance criteria, and recommend training and development requirements.
11. Ensure strict compliance with safety and quality procedures.
12. Adhere to company standard operating procedures
13. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 HULL STRUCTURE FITTER**

A HULL STRUCTURE FITTER IS DESIGNATED TO FIT AND ASSEMBLE STRUCTURAL FRAMEWORKS FROM MATERIAL, FOLLOWING BLUEPRINT SPECIFICATIONS. THEY ALSO EXAMINE BLUEPRINTS AND MATERIAL LIST TO OBTAIN PARTS SPECIFICATIONS.

**A Hull Structure Fitter should be able to:**

1. Layout parts dimensions on worktable, using square, chalk line, and soapstone.
2. Tack-welds scrap metal to outline to provide jig for assembly.
3. Positions parts in jig and files, chisels, and grinds parts, as indicated, to fit them together.
4. May heat parts with acetylene torch and bend them, on anvil, or around stakes mounted in table.
5. Carry out heat parts with acetylene torch and dip parts in cyanide bath to harden.
6. Periodically compares dimensions of assembly to blueprint specifications, using square, rule, and callipers.
7. Anneal parts with acetylene torch to remove stresses of welding.
8. Fasten parts together with acetylene torch and brazing rod.
9. Adhere to company standard operating procedures
10. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **HULL STRUCTURE JUNIOR DRAFTER**

A HULL STRUCTURE JUNIOR DRAFTER IS DESIGNATED TO DEVELOP SPECIFICATIONS FOR EQUIPMENT AND PREPARE TECHNICAL DRAWINGS AND PLANS, WHICH ARE USED BY PRODUCTION AND CONSTRUCTION WORKERS TO BUILD STRUCTURES.

**A Hull Structure Junior Drafter will be able to:**

1. Provide drawings to give visual guidelines and show how to construct a structure.
2. Drawing includes technical details and specifies dimensions, materials, and procedures.
3. Drafters fill in technical details using drawings, rough sketches, specifications and calculations made by engineers.
4. Use CAD systems to prepare drawings.
5. Produce drawings using computer assisted drafting systems (CAD) or drafting machines or by hand using compasses, dividers, protractors, triangles and other drafting devices.
6. Review rough sketches, drawings, specifications, and other engineering data received from civil engineers to ensure that they conform to design concepts.
7. Determine quality, cost, strength and quantity of required materials, and enter figures on material lists.
8. Explain drawings to production or construction teams and provide adjustments as necessary.
9. Determine the order of work and method of presentation, such as orthographic or isometric drawing.
10. Adhere to company standard operating procedures
11. Comply with safety and security procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **HULL STRUCTURE SENIOR FITTER**

A HULL STRUCTURE SENIOR FITTER IS DESIGNATED TO FIT AND ASSEMBLE STRUCTURAL FRAMEWORKS FROM MATERIAL, FOLLOWING BLUEPRINT SPECIFICATIONS. THEY ALSO EXAMINE BLUEPRINTS AND MATERIAL LIST TO OBTAIN PARTS SPECIFICATIONS. THEY WILL ALSO SUPERVISE THE WORK OF STRUCTURE FITTER.

**A Hull Structure Senior Fitter will be able to:**

1. Layout parts dimensions on worktable, using square, chalk line, and soapstone.
2. Tack-weld scrap metal to outline to provide jig for assembly.
3. Positions parts in jig and files, chisels, and grinds parts, as indicated, to fit them together.
4. May heat parts with acetylene torch and bend them, on anvil, or around stakes mounted in table.
5. May heat parts with acetylene torch and dip parts in cyanide bath to harden.
6. Periodically compares dimensions of assembly to blueprint specifications, using square, rule, and callipers.
7. May anneal parts with acetylene torch to remove stresses of welding.
8. May fasten parts together with acetylene torch and brazing rod.
9. Adhere to company standard operating procedures
10. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **HULL STRUCTURE DRAFTER**

A HULL STRUCTURE DRAFTER IS DESIGNATED TO DEVELOP SPECIFICATIONS FOR EQUIPMENT AND PREPARE TECHNICAL DRAWINGS AND PLANS, WHICH ARE USED BY PRODUCTION AND CONSTRUCTION WORKERS TO BUILD STRUCTURES.

**A Hull Structure Drafter will be able to:**

1. Provide drawings to give visual guidelines and show how to construct a structure.
2. Drawing includes technical details and specifies dimensions, materials, and procedures.
3. Drafters fill in technical details using drawings, rough sketches, specifications and calculations made by engineers.
4. Use CAD systems to prepare drawings.
5. Supervise other junior hull structure drafters.
6. Explain drawings to production or construction teams and provide adjustments as necessary.
7. Determine the order of work and method of presentation, such as orthographic or isometric drawing.
8. Perform any assignment as may be given from time to time by superior.
9. Adhere to company standard operating procedures
10. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **HULL STRUCTURE SENIOR DRAFTER**

A HULL STRUCTURE SENIOR DRAFTER IS DESIGNATED TO PREPARE TECHNICAL DRAWINGS AND PLANS, WHICH ARE USED BY PRODUCTION AND CONSTRUCTION WORKERS TO BUILD STRUCTURES. HE/SHE WILL ALSO SUPERVISE AND TRAIN JUNIOR DRAFTERS.

**A Hull Structure Senior Drafter will be able to:**

1. Review rough sketches, drawings, specifications, and other engineering data received from civil engineers to ensure that they conform to design concepts.
2. Determine quality, cost, strength and quantity of required materials, and enter figures on material lists.
3. Explain drawings to production or construction teams and provide adjustments as necessary.
4. Provide drawings to give visual guidelines and show how to construct a structure.
5. Drawing includes technical details and specifies dimensions, materials, and procedures.
6. Supervise other junior hull structure drafters.
7. Produce drawings using computer assisted drafting systems (CAD) or drafting machines or by hand using compasses, dividers, protractors, triangles and other drafting devices.
8. Determine the order of work and method of presentation, such as orthographic or isometric drawing.
9. Drafters fill in technical details using drawings, rough sketches, specifications and calculations made by engineers.
10. Perform any assignment as may be given from time to time by superior.
11. Adhere to company standard operating procedures.
12. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **HULL STRUCTURE DESIGNER**

A HULL STRUCTURE DESIGNER IS DESIGNATED TO DRAFT DRAWINGS ACCORDING TO ENGINEERING SPECIFICATIONS, PERFORM ENGINEERING CALCULATION STRUCTURE DESIGNS, AND PRODUCTION OF 2D AND 3D DRAWINGS.

**A Hull Structure Designer will be able to:**

1. Assist in the design and modification structure.
2. Produce models and drawings in 2D and 3D.
3. Review design and quality checks.
4. Draft drawings according to engineering specifications.
5. Design manufacturing and installation draft execution drawings.
6. Support in the development of design solutions on projects.
7. Assist with structural design drafting.
8. Field sketching such as layouts, details, and connections.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **HULL SPECIALIST (FLOATERS)**

A HULL SPECIALIST (FLOATERS) IS DESIGNATED TO PROVIDE HULL AND MARINE ENGINEERING TECHNICAL SUPPORT TO PROJECT TEAMS THROUGH THE PHASES OF DEVELOPMENT OF FLOATING OFFSHORE FACILITIES INCLUDING EARLY CONCEPT DEVELOPMENT, FRONT END ENGINEERING PHASE, TO DESIGN AND CONSTRUCTION, COMMISSIONING AND INSTALLATION PHASE.

**A Hull Specialist (Floaters) will be able to:**

1. Provide design engineering services for new build construction and conversion, repair and conversion/modification projects and marine systems.
2. Investigate engineering problems.
3. Work with vessel management team, manufacturers, regulatory community, and other industry experts to provide long term solutions and improvements.
4. Prepare technical reports, analysis, estimates and other documentation required to support upstream development projects.
5. Provide project coordination and technical support.
6. Conduct feasibility studies in areas such as vessel performance, oil and gas transportation, tug and barge systems, floating systems facilities, and new design concepts including economic evaluations and preparation of cost estimates.
7. Ability to review and analyze detailed marine engineering analytical work, heat balances, pipeline calculations, system analysis, heat transfer, pumping system design.
8. Provide support in contracting strategy development, bidding package development and knowledge gathering of market conditions.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **HULL CUSTODIAN/PRINCIPAL**

A HULL CUSTODIAN/PRINCIPAL IS DESIGNATED TO SUPERVISE AND LEAD A TEAM OF ENGINEERS AND DESIGNERS TO CARRY OUT DETAILED ENGINEERING WORK AND PROVIDE NECESSARY TECHNICAL INFORMATION AND SUPPORT FOR PROCUREMENT.

**A Hull Custodian/Principal will be able to:**

1. Determine methods and solution for complex engineering problem in tandem with the technical specialist.
2. Responsible for completion of the project within the budgeted time and cost.
3. Perform responsibility as a lead engineer on projects.
4. Review contract requirements for project execution.
5. Verify and conceptualise the most optimum work routes.
6. Coordinate with project planning on time schedule and develop manpower charts and schedules.
7. Ensure that the deliverables obtained from the vendor are of desired quality and delivered within the schedule.
8. Supervise and provide guidance in the development of plot plans, engineering drawings and technical documents.
9. Interface and meet with vendor representative and conduct internal progress meetings.
10. Participate in employee performance evaluations, establish performance criteria, and recommend training and development requirements.
11. Ensure strict compliance with safety and quality procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **MECHANICAL JUNIOR DRAFTER**

A MECHANICAL JUNIOR DRAFTER IS DESIGNATED TO DEVELOP DETAILED DESIGN DRAWINGS AND SPECIFICATIONS FOR MECHANICAL EQUIPMENT, DIES/TOOLS AND CONTROLS, USING COMPUTER-ASSISTED DRAFTING (CAD) EQUIPMENT. THEY MUST ALSO KNOW HOW TO DESIGN SCALE OR FULL-SIZE BLUEPRINTS OF SPECIALTY ITEMS.

**A Mechanical Junior Drafter must be able to:**

1. Coordinate with and consult other worker to design, layout or detail components and systems and to resolve design or other problems.
2. Review and analyse specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
3. Compute mathematical formulas to develop and design detailed specification for components or machinery using computer-assisted equipment.
4. Position instructions and comments onto drawings.
5. Modify and revise designs to correct operating deficiencies or to reduce production problems.
6. Check dimensions or materials to be used and assign numbers to the materials.
7. Layout and draw schematic, orthographic, or angle views to depict functional relationship of components, assemblies, systems and machines.
8. Draw freehand sketched of designs, trace finished drawings onto designated paper for reproduction of blueprints, and reproduce working drawings on copy machines.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 PROCESS DRAFTER**

A PROCESS DRAFTER IS DESIGNATED TO PREPARE BASIC LEVEL CAD DETAILS AND ASSEMBLY DRAWINGS FROM SKETCHES, MARK-UP PRINTS AND OTHER REFERENCE, MATERIALS UNDER DIRECTION OF SENIOR LEVEL DRAFTERS, DESIGNERS, TECHNOLOGIST, SALES PERSONNEL OR SUPERVISOR.

**A Process Drafter must be able to:**

1. Create preliminary drawings with complete dimensional data for engineering or manufacturing purposes and reviews for accuracy, completeness and conformance to drafting, applicable design, component weight and system standards.
2. Create final drawings.
3. Prepare and process basic level sales or sequence drawings as directed.
4. Prepare and process Engineering Change Notice according to procedure, modifies existing drawings and modifies required DBI (Data Base Information) documentation.
5. Perform administrative and related responsibilities as assigned.
6. Adhere to company standard operating procedures.
7. Comply with safety and security procedures.
8. Report to Process Senior Drafter.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PROCESS SENIOR DRAFTER**

A PROCESS SENIOR DRAFTER IS DESIGNATED TO ASSIST DEPARTMENT MANAGER AS REQUIRED AND VERIFY CORRECT STAFFING LEVEL AND CAPABILITY OF THE CAD OFFICE.

**A Process Senior Drafter must be able to:**

1. Verify effective use of available resources.
2. Maintain quality, discipline and morale of the CAD operators.
3. Assign work appropriately to the CAD operators.
4. Maintain the Process Department CAD office filing system.
5. Adherence to Health and Safety, rules and regulations.
6. Perform any assignment as may be given from time to time by superior.
7. Adhere to company standard operating procedures.
8. Comply with safety and security procedures.
9. Perform supervisory functions.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 5**

**PROCESS DESIGN/COORDINATOR**

A PROCESS DESIGN/COORDINATOR MUST BE ABLE TO HAVE THE KNOWLEDGE OF TRANSFERING PROCESS DESIGN TO OPERATIONAL PROCEDURE FOR TRANSFORMATION OPERATIONS WITHIN TIMESCALES REQUIRED TO PERFORM LARGE SCALE MIGRATION.

**A Process Design/Coordinator must be able to:**

1. Deliver the operational procedures and processes required to perform transformation.
2. Integrate of process designs with existing customer processes and systems.
3. Identify of process improvement.
4. Transfer knowledge of process design to operational procedure authors and operational procedure users.
5. Process document associated with identified transformation solution.
6. Develop and review of process design documentation through working consultatively with different individuals across multiple functions.
7. Use agreed methodology and standards to re-engineer processes and implement best practice models.
8. Adhere to company standard operating procedures.
9. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **PROCESS TECHNOLOGIST**

A PROCESS TECHNOLOGIST IS DESIGNATED TO PERFORM PROCESS ENGINEERING DESIGN WORK IN WITH TRUE REGARD TO SAFETY BOTH IN DESIGN DETAIL AND ENGINEERING DESIGN EXECUTION. HE/SHE ARE ALSO RESPONSIBLE TO CARRY OUT DESIGN WOK UNDER DIRECTION FROM THE SENIOR/PRINCIPLE PROCESS TECHNOLOGIST.

**A Process Technologist must be able to:**

1. Engineer all design work in line with the Process QA manual.
2. Be innovative in design work with due regard to minimisation of cost whilst maintaining technical integrity.
3. Undertake all work within the estimated man hour budget and within schedule.
4. Maintain all files and process documentation in an orderly fashion.
5. Undertake process engineering work on the project to best of one ability.
6. Supervise of process design work, budget and schedule in project work where requested by the Principle/Senior engineer.
7. Quality Assurance- Responsible for working within provisions and guidelines of the Quality Assurance system relevant to the process.
8. Safety- Responsible for personal safety working practices for the process.
9. Adhere to company standard operating procedures.
10. Comply with safety and security procedures
11. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PROCESS SPECIALIST**

A PROCESS SPECIALIST MUST MAINTAIN A SENSE OF A TEAM WITHIN THE PROCESS DISCIPLINE AND PROMOTE COLLABORATIVE WORK WITH OTHERS IN THE OFFICE. HE/SHE MUST ALSO ENSURE PROJECT CONFORMS TO THE CLIENTS'S APPROVED BASIS OF DESIGN AND APPLICABLE REGULATORY AND CODE REQUIREMENTS.

**A Process Specialist must be able to:**

1. Manage and coordinate multidiscipline engineering activities to ensure projects are executed in a safe, efficient, cost effective and timely manner.
2. Act as technical coordination interface with client to ensure that the client's expectations are satisfied.
3. Take responsibility and accountability for the work performed.
4. Carry out process design and checking as necessary.
5. Maintain HSE focus within the team to ensure OHSE requirements included in design and procurement.
6. Maintain and build healthy clients relationships.
7. Compliance with WPMP and EMS
8. Comply with WP Code and Conduct.
9. Adhere to company standard operating procedures.
10. Comply with safety and security procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PROCESS SAFETY SPECIALIST**

A PROCESS SAFETY SPECIALIST MUST PROVIDES GUIDING EVALUATION OF ALTERNATIVE APPROACHED TO SOLVING PROBLEMS, PLANNING AND COMMITTING RESOURCES, SETTING DEADLINES AND FOLLOWING UP ON SUCCESSFUL COMPLETION FOF ANY ISSUES RELATED TO THE FINAL OR INTERMEDIATE PRODUCT ISSUES RELATED TO SAFETY, HEALTH AND ENVIRONMENTAL FOR ALL AFFILIATES.

**A Process Safety Specialist must be able to:**

1. Coordinate with other related departments in solving technical problems related to all affiliate's product safety.
2. Evaluate potential health hazards or damage that could occur from the misuse/mishandle of the process/product/equipment.
3. Investigate causes of accidents, injuries or illness related to the workplace to develop solutions to minimise or prevent recurrence.
4. Conduct audits when required to evaluate implementation of safety regulations related to his assigned activities and report back the findings.
5. Promote safety practices and ensure compliance with safety regulations at work sites for affiliates.
6. Adhere to company standard operating procedure.
7. Comply with the safety and security procedures.
8. Report to Process Safety Custodian.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **PROCESS CUSTODIAN/PRINCIPAL**

A PROCESS CUSTODIAN/PRINCIPAL MUST PROVIDE TECHNICAL LEADERSHIP, DEVELOPING THE PROCESS ENGINEERING CAPABILITY, INFLUENCING OTHER TECHNICAL SPECIALIST AND GUIDING BUSINESS DEVELOPMENT, PROJECT AND PROPOSALS MANAGERS.

**A Process Custodian/Principal must be able to:**

1. Verify Health Safety Environmental and Technology requirements are identified and taken into account.
2. Assist management in department administration.
3. Provide Process Engineering input to current and future development projects.
4. Oversee contractor performance in process engineering for conceptual work.
5. Develop Best Practise Guidelines.
6. Determine current facilities to maximise value of future development of assets/facilities.
7. Liaise with other disciplines to optimise development opportunities.
8. Identity technology development opportunities.
9. Involvement in Technical Assurance reviews and PEER Review/Assists.
10. Adhere to company standard operating procedure.
11. Comply with the safety and security procedures.
12. Provide consultancy service on process engineering.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **PROCESS SAFETY CUSTODIAN/PRINCIPAL**

A PROCESS SAFETY CUSTODIAN/PRINCIPAL MUST LIAISON WITH OTHER GROUPS AND DEPARTMENTS TO PROVIDE AN INTEGRATED SOLUTION TO THE CLIENT WHICH INCLUDES PROCESS, DYNAMIC SIMULATION, STRUCTURAL, ENVIRONMENTAL, AND HUMAN FACTORS.

**A Process Safety Custodian/Principal must be able to:**

1. Lead as a Project Manager on a variety of projects, in charge of a team of technologist and reporting directly to HSE Manager.
2. Contribute to develop numerous business activities.
3. Verify Health Safety Environmental and Technology requirements are identified and taken into account.
4. Assist Safety, Environment and Fire Department in the refinery in establishing process safety programs, policies and guidelines in consultation with corporate HSE department.
5. Verify various process safety requirements, programs and procedures are well understood and implemented by the department.
6. Lead Safety Engineering activities in major projects.
7. Groom young engineers in consulting environment.
8. Prepare and control of Safety Engineering budget and schedule.
9. Adhere to company standard operating procedure.
10. Comply with the safety and security procedures.
11. Provide consultancy service on process engineering.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **ELECTRICAL JUNIOR DRAFTER**

AN ELECTRICAL JUNIOR DRAFTER IS DESIGNATED TO VERIFY THE QUALITY AND CORRECTION OF DRAFTING WORK PRODUCE AND ENSURE EFFECTIVE USE OF TOOLS TO IMPROVE QUALITY AND PRODUCTIVITY OF WORK.

**An Electrical Junior Drafter must be able to;**

1. Verify the quality and correction of drafting work produce.
2. Timely deliver all work as requested by the lead designer/designer.
3. Verify effective use of tools to improve quality and productivity of work.
4. Reproduce working drawings on copy machines or trace drawings in ink.
5. Review completed construction drawings and cost estimates for accuracy and conformity to standards and regulations.
6. Explain drawings to production or construction teams and provide adjustments as necessary.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 ELECTRICAL DRAFTER**

AN ELECTRICAL DRAFTER IS DESIGNATED TO ENSURE THE QUALITY AND CORRECTION OF DRAFTING WORK PRODUCE AND ENSURE EFFECTIVE USE OF TOOLS TO IMPROVE QUALITY AND PRODUCTIVITY OF WORK.

**An Electrical Drafter must be able to:**

1. Verify the quality and correction of drafting work produce.
2. Timely deliver all work as requested by the lead designer.
3. Verify effective use of tools to improve quality and productivity of work.
4. Supervise and train other technologists, technicians and drafters.
5. Write technical reports and draw charts that display statistics and data.
6. Use computer-aided drafting equipment and/or conventional drafting stations, technical handbooks, tables, calculators, and traditional drafting tools such as boards, pencils, protractors, and T-squares.
7. Perform any assignment as may be given from time to time by superior.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 4**

**ELECTRICAL SENIOR DRAFTER**

AN ELECTRICAL SENIOR DRAFTER IS DESIGNATED TO WORK FROM ENGINEERING DRAWINGS, ELECTRICAL AND ELECTRONIC SCHEMATICS WITH LIMITED GUIDANCE TO FABRICATE, INSTALL, DIAGNOSE AND REPAIR ELECTRICAL AND ELECTRONIC INSTALLATIONS.

**An Electrical Senior Drafter must be able to:**

1. Verify the quality and correction of drafting work produce.
2. Timely deliver all work as requested by the lead designer/designer.
3. Verify effective use of tools to improve quality and productivity of work.
4. Supervise and train other technologists, technicians and drafters.
5. Write technical reports and draw charts that display statistics and data.
6. Use computer-aided drafting equipment and/or conventional drafting stations, technical handbooks, tables, calculators, and traditional drafting tools such as boards, pencils, protractors, and T-squares.
7. Perform any assignment as may be given from time to time by superior.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.
10. Perform supervisory function.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 ELECTRICAL DESIGNER**

AN ELECTRICAL DESIGNER IS DESIGNATED TO ASSIST THE DEPARTMENT MANAGER AS REQUIRED, MAINTAIN QUALITY, DISCIPLINE AND MORALE OF THE DESIGNERS AND DRAFTSMEN.

**An Electrical Designer must be able to:**

1. Assist the Department Manager as required.
2. Verify correct staging level and capability of the design/drawing office.
3. Verify effective use of available resources (i.e. if necessary, propose change to working methods and usage of tools such as 3D modeling to improve quality and productivity).
4. Maintain quality, discipline and morale of the designers and draftsmen.
5. Maintain the drawing office filing system.
6. Adhere to company standard operating procedure.
7. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1 ELECTRICAL FITTER**

AN ELECTRICAL FITTER IS DESIGNATED TO INSTALL, TEST, CONNECT, COMMISSION, MAINTAIN AND MODIFY ELECTRICAL EQUIPMENTS, WIRING AND CONTROL SYSTEMS.

**An Electrical Fitter must be able to:**

1. Install, test, connect commissions, maintain and modify electrical equipment, wiring and control systems. Registration or licensing is required.
2. Cooperate with co-workers in creating smooth work flow, including assisting with each other work, when necessary.
3. Mount and install meter and other electric equipment, such as time clocks, transformers, and circuit breakers, using electrician's hand tools.
4. Inspect and test electric meters, relays, and power, to detect cause of malfunction and inaccuracy, using hand tools and testing equipment.
5. Splice and connect cable from meter or current transformer to pull box or switchboard, using hand tools, to provide power.
6. Repair electric meters and components, such as transformers and relays, and changes faulty or incorrect wiring, using hand tools.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **ELECTRICAL SENIOR FITTER**

AN ELECTRICAL SENIOR FITTER IS DESIGNATED TO ENSURE THE QUALITY AND CORRECTION OF DRAFTING WORK PRODUCE AND ENSURE EFFECTIVE USE OF TOOLS TO IMPROVE QUALITY AND PRODUCTIVITY OF WORK.

**An Electrical Senior Fitter must be able to:**

1. Install, test, connect, commission, maintain and modify electrical equipment, wiring and control systems. Registration or licensing is required.
2. Cooperate with co-workers in creating smooth work flow, including assisting with each other work, when necessary.
3. Train and supervise electrical fitter.
4. Disconnect and remove electric power meters when defective or when customer accounts are in default, using hand tools.
5. Record meter reading and installation data on meter cards, work orders, or field service orders.
6. Cleans meter parts, using chemical solutions, brushes, sandpaper, soap and water.
7. Make adjustments to meter components, such as setscrews or timing mechanism to conform to specifications.
8. Perform any assignment as may be given from time to time by superior.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 ELECTRICAL FABRICATOR**

AN ELECTRICAL FABRICATOR IS DESIGNATED TO WORK FROM ENGINEERING DRAWINGS, ELECTRICAL AND ELECTRONIC SCHEMATICS WITH LIMITED GUIDANCE TO FABRICATE, INSTALL, DIAGNOSE AND REPAIR ELECTRICAL AND ELECTRONIC INSTALLATIONS.

**An Electrical Fabricator must be able to:**

1. Work from engineering drawings, electrical and electronic schematics with limited guidance to. Fabricate, install, diagnose and repair electrical and electronic installations.
2. Support the build up and operation of simulation laboratory test facilities.
3. Plan and accomplish substantially varied and complex tasks with minimal supervision and direction.
4. Install, test, connect, commission, maintain and modify electrical equipment, wiring and control systems. Registration or licensing is required.
5. Co-operate with co-workers in creating smooth work flow, including assisting with each other work, when necessary.
6. Disconnect and remove electric power meters when defective or when customer accounts are in default, using hand tools.
7. Record meter reading and installation data on meter cards, work orders, or field service orders.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **ELECTRICAL FABRICATOR SUPERVISOR**

AN ELECTRICAL FABRICATOR SUPERVISOR IS DESIGNATED TO MEASURE PRODUCTIVITY, PERFORM ADMINISTRATIVE DUTIES, MANAGE TOOL AND EQUIPMENT, AND MANAGE AND SUPERVISE CREW.

**An Electrical Fabricator Supervisor must be able to:**

1. Provide leadership to reach scheduling and production goals for electrical fabrication.
2. Measure productivity.
3. Provide hands-on workmanship, guidance, and support for layout and installation of electrical installations.
4. Understand and execute cost codes, construction schedules, and production schedules with project manager and project superintendent team members.
5. Perform administrative duties involving timecards, material orders, and other tasks as required.
6. Manage tools, equipment, and materials in electrical fabrication shop.
7. Manage and supervise crew of 1-10 electricians.
8. Comply with company safety policies and procedures.
9. Adhere to company standard operating procedure.
10. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **ELECTRICAL FABRICATOR SUPERINTENDENT**

AN ELECTRICAL FABRICATOR SUPERINTENDENT IS DESIGNATED TO SUPERVISE WORK TEAMS FOR EFFECTIVE DELIVERY OF OBJECTIVES AND EFFICIENCY IMPROVEMENT AND DEVELOP THE SKILLS OF WORKFORCE.

**An Electrical Fabricator Superintendent must be able to:**

1. Supervise work teams for effective delivery of objectives and efficiency improvement.
2. Enhance relationships in dealings with client, consultants and regulatory authorities to ensure all agreements are implemented.
3. Manage resources and equipment to achieve contract completion within budget and time.
4. Ensure Company's Health, Safety and Environment and quality policy and procedures are implemented to client satisfaction.
5. Identify and ensure skills of assigned manpower are aligned to project requirements to ensure technically competent personnel for the project.
6. Develop the skills of the workforce.
7. Perform any assignment as may be given from time to time by superior.
8. Adhere to company standard operating procedure.
9. Comply with company safety policies and procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 ELECTRICAL TECHNOLOGIST**

AN ELECTRICAL TECHNOLOGIST IS DESIGNATED TO ASSIST THE DEPARTMENT MANAGER IN ENSURING GOOD QUALITY DESIGN OUTPUTS, AS PER THE RELEVANT PROCEDURES AND PROVIDE MAN-HOURS AND MATERIAL COST ESTIMATES FOR PROPOSAL.

**An Electrical Technologist must be able to:**

1. Assist the Department Manager in ensuring good quality design outputs, as per the relevant procedures.
2. Produce the agreed deliverables as per the project requirement and schedules in a cost effective manner.
3. Provide man-hours and material cost estimates for proposal.
4. Develop other personnel's skill by providing on the job training and appraising their performance.
5. Identify and ensure skills of assigned manpower are aligned to project requirements to ensure technically competent personnel for the project.
6. Provide advice and check works in his fields of expertise when required.
7. Perform any assignment as may be given from time to time by superior.
8. Adhere to company standard operating procedure.
9. Comply with company safety policies and procedures.
10. Perform management duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 ELECTRICAL SPECIALIST**

AN ELECTRICAL SPECIALIST IS DESIGNATED TO ASSIST THE DEPARTMENT MANAGER IN ENSURING GOOD QUALITY DESIGN OUTPUTS, AS PER THE RELEVANT PROCEDURES AND PROVIDE MAN-HOURS AND MATERIAL COST ESTIMATES FOR PROPOSAL AND TRAIN ELECTRICAL ENGINEER.

**An Electrical Specialist must be able to:**

1. Assist the Department Manager in ensuring good quality design outputs, as per the relevant procedures.
2. Produce the agreed deliverables as per the project requirement and schedules in a cost effective manner.
3. Provide man-hours and material cost estimates for proposal.
4. Develop other personnel's skill by providing on the job training and appraising their performance identify and ensure skills of assigned manpower are aligned to project requirements to ensure technically competent personnel for the project.
5. Provide advice and check works in his fields of expertise when required.
6. Train and supervise electrical engineer.
7. Perform any assignment as may be given from time to time by superior.
8. Adhere to company standard operating procedure.
9. Comply with company safety policies and procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **ELECTRICAL CUSTODIAN/PRINCIPAL**

AN ELECTRICAL CUSTODIAN/PRINCIPAL IS DESIGNATED TO ASSIGN TASK OF SUPERINTENDENT, ENSURE THAT THE LEAD ELECTRICAL ENGINEER TO PREPARE CLOSE OUT REPORT FOR PROJECT HE IS HANDLING AND DEFINE ANNUAL DEPARTMENT OBJECTIVES IN- LINE WITH COMPANY GOALS AND POLICIES WHICH MAY INCLUDE QUALITY, HSE AND PRODUCTIVITY FOR CONTINUOUS IMPROVEMENT PURPOSES.

**An Electrical Custodian/Principal must be able to:**

1. Routine managing administration and assignment of task of the department.
2. Verify correct staging level and correct staff capability of the department by recruitment and training.
3. Verify availability and implementation of latest codes and standards to the various projects.
4. Act as local point with regards to matters related to the discipline.
5. Continuously upgrade the capability of the department.
6. Motivate, train and monitor performance of the staff in the department.
7. Assign staff from the department to various projects.
8. Be available for reassignment to line responsibility on specific project.
9. Liaise with other departments and third parties on behalf of the department.
10. Provide information such as man hour and materials cost estimate for proposal.
11. Ensure that the lead electrical engineer to prepare and close out report for project he is handling.
12. Adhere to company standard operating procedure.
13. Comply with company safety policies and procedures.
14. Provide consultation service on electrical.
15. Define annual department objectives in-line with company goals and policies which may include quality, HSE and productivity for continuous improvement purposes.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **INSTRUMENTATION AND CONTROL FITTER**

AN INSTRUMENTATION AND CONTROL FITTER IS DESIGNATED TO CALIBRATE, TEST, REPAIR, TROUBLESHOOT AND MAINTAIN VARIOUS DEVICES AND CONTROL LOOPS. THEY ALSO NEED TO READ AND USE THE INSTRUMENTATION AND CONTROL DRAWINGS.

**An Instrumentation and Control Fitter must be able to:**

1. Calibrate, test, and repair various devices and control loops.
2. Troubleshoot and maintain relay logic systems, PLCs, turbine controls, compressor surge flow totalising loops, air drying systems, local and remote annunciators, gas/oil fired heaters and reboilers, and valves of varying designs and manufacturers.
3. Work with tubing and piping fittings from vacuum to high pressures.
4. Use various types of test equipment.
5. Provide written and oral documentation of job status.
6. Read, use and update instrument and control drawing and schematics.
7. Perform other duties as required, including clean-up duties and the accurate and timely completion of paperwork.
8. Actively participates in company safety procedures and programs.
9. Welding of various size components.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **INSTRUMENTATION AND CONTROL JUNIOR DRAFTER**

AN INSTRUMENTATION AND CONTROL JUNIOR DRAFTER IS DESIGNATED TO PREPARE, REVISE AND MAINTAIN DETAILED AND ACCURATE DRAWINGS OF PARTS AND ASSEMBLIES. THEY WOULD ALSO BE ABLE TO CREATE SIMPLE BILLS OF MATERIAL AND PURCHASE REQUISITIONS.

**An instrumentation and Control Junior Drafter must be able to:**

1. Prepare detailed drawings of parts and assemblies from layouts, designs and working drawings including necessary projections, sectional views and standard specifications and corporate standards.
2. Create, revise, and maintain manufacturing and assembly drawings and 3-D models of components and systems.
3. Perform basic design modifications to current components and assemblies.
4. Familiar with manufacturing processes such as machining, castings, and forging.
5. Create simple Bills of Material.
6. Calculate weights of component parts.
7. Draw assemblies and parts of divisional products and components.
8. Make layouts of specific areas of machines.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **INSTRUMENTATION AND CONTROL SENIOR FITTER**

AN INSTRUMENTATION AND CONTROL SENIOR FITTER IS DESIGNATED TO CALIBRATE, TEST, REPAIR, TROUBLESHOOT AND MAINTAIN VARIOUS DEVICES AND CONTROL LOOPS. THEY ALSO NEED TO READ AND USE THE INSTRUMENTATION AND CONTROL DRAWINGS. THEY ARE INVOLVED IN PARTICIPATING CONTINUOUS PROCESS IMPROVEMENT, COST CONTROL, AND QUALITY POLICIES. THEY ALSO NEED TO ASSIST IN TRAINING APPRENTICE WELDER.

**An Instrumentation and Control Senior Fitter must be able to:**

1. Calibrate, test, troubleshoot, and repair various devices and control loops.
2. Troubleshoot and maintain relay logic systems, PLCs, turbine controls, compressor surge flow totalising loops, air drying systems, local and remote annunciators, gas/oil fired heaters and reboilers, and valves of varying designs and manufacturers.
3. Works with tubing and piping fittings from vacuum to high pressures.
4. Use various types of test equipment.
5. Provide written and oral documentation of job status.
6. Read, use and update instrument and control drawing and schematics.
7. Perform other duties as required, including clean-up duties and the accurate and timely completion of paperwork.
8. Participate actively in company safety procedures and programs.
9. Welding of various size components.
10. Assist in training apprentice welders.
11. Participate in continuous process improvement, cost control, quality policies, procedures and standards to maintain within company guidelines.
12. Comply with safety and security procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **INSTRUMENTATION AND CONTROL DRAFTER**

AN INSTRUMENTATION AND CONTROL DRAFTER IS DESIGNATED TO PREPARE, REVISE AND MAINTAIN DETAILED AND ACCURATE DRAWINGS OF PARTS AND ASSEMBLIES. THEY WOULD ALSO BE ABLE TO CREATE SIMPLE BILLS OF MATERIAL AND PURCHASE REQUISITIONS. THEY ALSO NEED TO COORDINATE WITH OTHER ENGINEERING EMPLOYEE FOR INTERGRATION PURPOSES.

**An Instrumentation and Control Drafter must be able to:**

1. Prepare detailed drawings of parts and assemblies from layouts, designs and working drawings including necessary projections, sectional views and standard specifications and corporate standards.
2. Produce accurate drawings exhibiting a strong proficiency in proper composition to adequately show and dimension all parts, relationships to other parts and the whole.
3. Create, revise, and maintain manufacturing and assembly drawings and 3-D models of components and systems.
4. Perform basic design modifications to current components and assemblies.
5. Familiar with manufacturing processes such as machining, castings, and forging.
6. Create simple Bills of Material and purchase requisitions.
7. Calculate weights of component parts.
8. Draw assemblies and parts of divisional products and components.
9. Make layouts of specific areas of machines.
10. Coordinate with other engineering employees to complete daily assignments.
11. Comprehend verbal instructions, compose and comprehend written material, good communication and, good organisational skills.
12. Make good and accurate decision making skills.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **INSTRUMENTATION AND CONTROL FABRICATOR**

AN INSTRUMENTATION AND CONTROL FABRICATOR IS DESIGNATED TO CONSTRUCT AND FABRICATE, REPAIR AND REBUILD AND MAINTAIN EQUIPMENTS. THEY ALSO NEED TO PERFORM SAFETY INSPECTION, TEST RUN ON EQUIPMENT.

**An Instrumentation and Control Fabricator must be able to:**

1. Construct and fabricate equipment, general shop duties, and train shop personnel.
2. Make a report to supervisor on a routine schedule.
3. Assembly and disassembly of tools relative to services provided per location.
4. Implement quality assurance process.
5. Fabrication, repair, rebuild, and maintain equipment.
6. Perform safety inspection, yard maintenance, and keep track of inventory in shop.
7. Perform test runs on equipment, keep reports on equipment. Not to include welding or major engine repairs.
8. Maintain tool and parts inventory.
9. Maintain tool history and records.
10. Forecast expenses for fiscal year.
11. Oversee safety meetings and assure safe working conditions.
12. Order shop supplies and parts as needed.
13. Assist mechanic and field technicians with equipment repairs.
14. Conduct trouble shooting for repairs of equipment.
15. Assist in training and orientate new employees.
16. Support and communicate with all field employees, Supervisors, Managers, and customers.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **INSTRUMENTATION AND CONTROL SENIOR DRAFTER**

AN INSTRUMENTATION AND CONTROL SENIOR DRAFTER IS DESIGNATED TO PREPARE DETAILED DRAWINGS AND DIAGRAMS OF PARTS, ASSEMBLIES WITH ACCURACY WHILE REVISE, MAINTAIN MANUFACTURING AND ASSEMBLY DRAWING. THEY ALSO NEED TO CHECK OTHER DRAFTERS DRAWINGS. EXECUTE NEW DRAWING OR DRAWING MODIFICATION REQUESTED OR ORDERED BY TECHNOLOGIST OR SUPERVISOR.

**An Instrumentation and Control Senior Drafter must be able to:**

1. Prepare detailed drawings of parts and assemblies from layouts, designs and working drawings including necessary projections, sectional views and standard specifications and corporate standards.
2. Produce accurate drawings exhibiting a strong proficiency in proper composition to adequately show and dimension all parts, relationships to other parts and the whole.
3. Create, revise, and maintain manufacturing and assembly drawings and 3-D models of components and systems.
4. Prepare neat and accurate process instrumentation and control diagrams from sketches prepared by Technologist by information specified in an engineering sales request (SOS).
5. Execute change orders that require drawing modifications as directed by a supervisor or by information specified in an engineering support request (ESR).
6. Perform thorough checking of drawings and design documents.
7. Prepare As-built drawings of company facilities from information sent in by the field or visit the field and collect information himself.
8. Prepare viewgraphs and other visual aid material as required.
9. Perform basic design modifications to current components and assemblies.
10. Enter database information associated with drawings and their bills of material into the company product lifecycle management database (PLM).

11. Assist in training and development of new workers.
12. Provide hands-on product support when required.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedures.
15. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **INSTRUMENTATION AND CONTROL FABRICATOR SUPERVISOR**

AN INSTRUMENTATION AND CONTROL FABRICATOR SUPERVISOR IS DESIGNATED TO LEAD, MOTIVATE AND GUIDE THE FABRICATION TEAM. THEY NEED TO READ AND SUPERVISE THE DRAWING WORK AND PREPARE THE SCHEDULE FOR THE FABRICATORS.

**An Instrumentation and Control Fabricator Supervisor must be able to:**

1. Lead, motivate and guide the team with experience.
2. Work as directed on appropriate by fabricator superintendent.
3. Thorough understanding, awareness and implementation of OHS in workplace.
4. Liaise closely with Superintendent on work schedules.
5. Communicate work schedules to your team.
6. Read drawings and prepare work schedules with the team
7. Manage raw materials and stock levels.
8. Manage multiple projects and meet strict output deadlines.
9. Working in a hands on capacity as a Boilermaker.
10. Dispatch of completed products.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedures.
13. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **INSTRUMENTATION AND CONTROL DESIGNER**

AN INSTRUMENTATION AND CONTROL DESIGNER IS DESIGNATED TO LEAD AND SUPERVISE THE DESIGN TEAM FOR TECHNICAL ACCURACY AND ENSURE THE DELIVABLE COMPLETED WITHIN BUDGET AND TIME SCHEDULE. THEY WOULD ALSO BE ABLE TO PRODUCE SOME DOCUMENT SUCH AS PFD AND P&ID.

**An Instrumentation and Control Designer must be able to:**

1. Prepare project drawings and documents using the appropriate software.
2. Check designs and drawings of design team for accuracy and conformance to technical specifications and procedures.
3. Verify Document Management System is maintained as per procedures.
4. Conduct site surveys and reports.
5. Participate in tuition and guidance of trainee designers.
6. Ensure deliverables are completed within budget and time schedule.
7. Be conversant with and ensure compliance with current CAD drafting standards and procedures.
8. Supervise the instrument section designers and drafters assigned to an asset or a project.
9. Ensure that asset or project discipline drafting activities are executed within budget and schedule, while maintaining technical integrity.
10. Participate in the development of CAD systems.
11. Produce
  - Process Flow Diagrams (PFD) and Piping and Instrumentation Diagrams (P&ID)
  - Site Plans and Piling Locations
  - Mechanical Equipment and Piping Layouts
  - Isometrics
  - Structural Steel Diagrams
12. Adhere to company standard operating procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **INSTRUMENTATION AND CONTROL FABRICATOR SUPERINTENDENT**

AN INSTRUMENTATION AND CONTROL SUPERINTENDENT IS DESIGNATED TO LEAD THE FABRICATORS TEAM BY COORDINATE THE WORK TASK AND PROVIDING SCHEDULE. THEY ALSO NEED TO COLLABORATE WITH OTHER DISCIPLINE SUPERINTENDENTS FOR INTERGRATION ISSUE.

**An Instrument and Control Fabricator Superintendent must be able to:**

1. Provide boundary input, constructability, comprehensive understanding of the scope of engineering work package (EWP).
2. Submit request for information as required for unclear scope.
3. Provide constructability analysis on any suggested changes.
4. Determining craft requirements for all drawings as submitted by the client.
5. Develop a strong understanding of the client's engineering specifications.
6. Verify functional checklist is signed off for each CWP, MWP, field installation, fabrication and MAWP.
7. Detail plans in the form of work tasks as per the standard task list.
8. Determine numbers of craft manpower requirements.
9. Provide schedule review and attainability.
10. Collaborate with other Discipline Superintendents and General Superintendent to identify and troubleshoot problems proactively to ensure minimal impact.
11. Participate in daily, weekly, or monthly planning meetings with General Superintendent and Operations to identify needs, deficiencies, and scheduling conflicts with other crews in the look ahead plan/schedule.
12. Ensure fair and consistent application of all Labor Relations policies and procedures, proper apprentice training and productivity of crews.
13. Participate in incident investigations and, in accordance with appropriate policies, develop reports and institute corrective actions.
14. May perform other duties as required.

15. Adhere to company standard operating procedure.
16. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **INSTRUMENTATION AND CONTROL TECHNOLOGIST**

AN INSTRUMENTATION AND CONTROL TECHNOLOGIST IS DESIGNATED TO LEAD AND MANAGE E&I CAPITAL PROJECT, MANAGE SUPPORT THE DESIGN AND ENGINEERING TEAM. THEY NEED TO BE RESPONSIBLE TO INTERFACE WITH SUPPLIERS, REPORT TO MANAGEMENT REGARDING COST, SCHEDULE AND QUALITY OF THE PROJECTS. THEY ALSO NEED TO TRAIN AND MENTOR THE APPRENTICES.

**An Instrumentation & Control Technologist must be able to:**

1. Lead and manage Electrical and Instrumentation (E&I) capital projects in a changing environment.
2. Develop and implement creative solutions.
3. Communicate with interpersonal skills and have the ability to use a consultative approach to achieve goals.
4. Direct the entire project process including concept development, scope development/control and schedule/budget compliance.
5. Manage engineering/design, procurement and construction efforts for multiple small to intermediate size revamp/retrofit/new projects.
6. Interface with local and offsite suppliers to obtain resources necessary to meet business objectives.
7. Issue periodic reports to management regarding cost, schedule and quality of projects.
8. Provide guidance and support to engineering and design teams,
9. Training and on-going mentoring for the application user community, maintain data and quality plans.
10. In charge in Instrumentation and Control Scheme.
11. Prepare Control Block Diagram (PLC, DCS, ESD/PESS, SCADA base).
12. Prepare of Instrument Panel Design, Plant/Skid Conduit/Cable Tray Layout.

13. Prepare Bill of Materials for Instrumentation and Control requirements.
14. Prepare Instruments/Equipment Data Sheet (INTOOL, EXCEL format).
15. Prepare Instruments Schematic Diagram.
16. Prepare Logic Diagram, Program (PLC, DCS, ESD/PESS, SCADA base).
17. Prepare Loop and Hook-up diagram.
18. Calibration and testing of various type instruments.
19. Adhere to company standard operating procedure.
20. Comply with safety and security procedures.
21. Perform managerial duties.
22. Support Fabrication, Installation, Maintenance and Commissioning.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **INSTRUMENTATION AND CONTROL SPECIALIST**

AN INSTRUMENTATION AND CONTROL SPECIALIST IS DESIGNATED TO LEAD IN DESIGNING THE TECHNICAL SOLUTIONS IN ACCORDANCE TO CLIENT SPECIFICATIONS. THEY NEED TO ALLOCATE DESIGN AND DRAFTING WORK, CHECK THEIR DRAWING PACKAGES, VISIT SITE TO CHECK CONSTRUCTION AND TO VALIDATE THE SPECIFICATIONS. THEY NEED TO WORK WITH LEAD TECHNOLOGIST IN IDENTIFYING POTENTIAL INCREMENTAL BUSINESS DEVELOPMENT.

**An Instrumentation and Control Specialist must be able to:**

1. Enter instrumentation tag details into SPI.
2. Work towards adequately specifying instrumentation such as control valves, pressure safety valves, measurement devices and other associated instrumentation.
3. Develop instrument specifications (datasheets).
4. Assist in P&ID development by providing instrumentation details and document checking.
5. Develop instrumentation material requisitions - quote, evaluate and purchase.
6. Support Lead Specialist or take project lead in designing Instrumentation Engineering technical solutions in accordance to client specifications.
7. Provide instrumentation consultancy to clients on appropriate solutions and methods for delivery of requirements.
8. Estimate project costs, resources and timelines for delivery of projects.
9. Allocate Design and Drafting work as appropriate to support the successful delivery of the projects.
10. Address technical queries and respond to project delivery issues, ensuring timely resolution to the client's satisfaction.
11. Check drawing packages and forward to Technologist for stamping.
12. Undertake site visits to check construction and to validate the specifications and design.

13. Provide technical product support to internal and external personnel as required.
14. Verify documents are controlled in a consistent format and all changes are recorded accurately.
15. Work with the Lead Specialist/Technologist in identifying potential incremental business development opportunities arising within the project/s.
16. Mentor specialists in training.
17. Adhere to company standard operating procedure.
18. Comply with safety and security procedures.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 8**

#### **INSTRUMENTATION AND CONTROL CUSTODIAN/PRINCIPAL**

AN INSTRUMENTATION AND CONTROL PRINCIPAL IS DESIGNATED TO ADVISE, APPLY, SUPPORT ON OPERATIONAL TECHNOLOGY OF ADVANCED KNOWLEDGE AND ALSO WOULD BE ABLE TO LEAD THE INTERGRATION ON THE IMPLEMENTATION, ANTICIPATE POTENTIAL PROBLEMS AND RECOMMEND SOLUTIONS, AND IDENTIFY INNOVATIVE TECHNICAL IDEAS.

**An Instrumentation and Control Principal must be able to:**

1. Advice, apply and provide implementation support on operational technology of advanced knowledge in key and base technologies of skill area or skill group.
2. Lead the integration on the implementation of operational technology within the respective business value-chain in several skill areas of the various skill groups.
3. Apply and implement specialised knowledge of pacing and emerging technologies in a particular area of specialty in projects.
4. Anticipate potential problems and recommend appropriate solutions by reviewing and critiquing the conceptual project framework in accordance to the strategic technology direction that include work processes in own skill area and related areas in skill group.
5. Keep abreast and identify innovative technical ideas introduced in technical advancement, new technology, research and development worldwide through established alliances worldwide with Specialist in own skill area or skill group.
6. Consult on specific technologies in own skill area or skill group, and contribute to current knowledge and transfer of technology through undertaking of internal training.
7. Present articles/papers on current technology for internal purpose, professional/technical journals and speak at accredited conferences.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedures.
10. Provide consultation service on instrument and control.

11. Resource person to other division/business units, mentor and identify potential talents in own skill area or skill group.
12. Conduct research on instrumentation and control facilities.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **TELECOMMUNICATION FITTER**

A TELECOMMUNICATION FITTER IS DESIGNATED TO CALIBRATE, TEST, REPAIR, TROUBLESHOOT AND MAINTAIN VARIOUS DEVICES AND CONTROL LOOPS. THEY ALSO NEED TO READ AND USE THE INSTRUMENTATION AND CONTROL DRAWINGS.

**A Telecommunication Fitter must be able to:**

1. Calibrate, test, and repair various devices and control loops.
2. Troubleshoot and maintain telecommunication varying designs and manufacturers.
3. Use various types of test equipment.
4. Provide written and oral documentation of job status.
5. Read, use and update telecommunication drawing and schematics.
6. Perform other duties as required, including clean-up duties and the accurate and timely completion of paperwork.
7. Actively participates in company safety procedures and programs.
8. Welding of various size components.
9. Adhere to company standard operating procedures
10. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **TELECOMMUNICATION JUNIOR DRAFTER**

A TELECOMMUNICATION JUNIOR DRAFTER IS DESIGNATED TO PREPARE, REVISE AND MAINTAIN DETAILED AND ACCURATE DRAWINGS OF PARTS AND ASSEMBLIES. THEY WOULD ALSO BE ABLE TO CREATE SIMPLE BILLS OF MATERIAL AND PURCHASE REQUISITIONS.

**A Telecommunication Junior Drafter must be able to:**

1. Prepare detailed drawings of parts and assemblies from layouts, designs and working drawings including necessary projections, sectional views and standard specifications and corporate standards.
2. Create, revise, and maintain manufacturing and assembly drawings and 3-D models of components and systems.
3. Perform basic design modifications to current components and assemblies.
4. Familiar with manufacturing processes such as machining, castings, and forging.
5. Create simple Bills of Material.
6. Calculate weights of component parts.
7. Draw assemblies and parts of divisional products and components.
8. Make layouts of specific areas of machines.
9. Adhere to company standard operating procedures
10. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **TELECOMMUNICATION SENIOR FITTER**

A TELECOMMUNICATION SENIOR FITTER IS DESIGNATED TO CALIBRATE, TEST, REPAIR, TROUBLESHOOT AND MAINTAIN VARIOUS DEVICES AND CONTROL LOOPS. THEY ALSO NEED TO READ AND USE THE INSTRUMENTATION AND CONTROL DRAWINGS. THEY ARE INVOLVED IN PARTICIPATING CONTINUOUS PROCESS IMPROVEMENT, COST CONTROL, QUALITY POLICIES. THEY ALSO NEED TO ASSIST IN TRAINING APPRENTICE WELDER.

**A Telecommunication Senior Fitter must be able to:**

1. Calibrate, test, troubleshoot, and repair various devices and control loops
2. Troubleshoot and maintain telecommunication system varying designs and manufacturers.
3. Use various types of test equipment.
4. Provide written and oral documentation of job status.
5. Read, use and update telecommunication drawing and schematics.
6. Perform other duties as required, including clean-up duties and the accurate and timely completion of paperwork
7. Participate actively in company safety procedures and programs.
8. Welding of various size components.
9. Assist in training apprentice welders.
10. Participate in continuous process improvement, cost control, quality policies, procedures and standards to maintain within company guidelines.
11. Adhere to company standard operating procedures
12. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **TELECOMMUNICATION DRAFTER**

A TELECOMMUNICATION DRAFTER IS DESIGNATED TO PREPARE, REVISE AND MAINTAIN DETAILED AND ACCURATE TELECOMMUNICATION SYSTEM DRAWINGS OF PARTS AND ASSEMBLIES. THEY ALSO NEED TO COORDINATE WITH OTHER ENGINEERING EMPLOYEE FOR INTERGRATION PURPOSES.

**A Telecommunication Drafter must be able to:**

1. Prepare detailed drawings of parts and assemblies from layouts, designs and working drawings including necessary projections, sectional views and standard specifications and corporate standards.
2. Produce accurate drawings exhibiting a strong proficiency in proper composition to adequately show and dimension all parts, relationships to other parts and the whole.
3. Create, revise, and maintain manufacturing and assembly drawings and 3-D models of components and systems.
4. Perform basic design modifications to current components and assemblies.
5. Calculate weights of component parts.
6. Draw assemblies and parts of divisional products and components.
7. Make layouts of specific areas of telecommunication equipments.
8. Coordinate with other engineering employees to complete daily assignments.
9. Comprehend verbal instructions, compose and comprehend written material, good communication skills, good organisational
10. Make good and accurate decision making skills.
11. Adhere to company standard operating procedures
12. Comply with safety and security procedures.





**OIL, GAS AND PETROCHEMICAL**

**LEVEL 3**

**TELECOMMUNICATION FABRICATOR**

A TELECOMMUNICATION FABRICATOR IS DESIGNATED TO CONSTRUCT AND FABRICATE, REPAIR AND REBUILD AND MAINTAIN TELECOMMUNICATION EQUIPMENTS. THEY ALSO NEED TO PERFORM SAFETY INSPECTION, TEST RUN ON EQUIPMENT.

**A Telecommunication Fabricator must be able to:**

1. Construct and fabricate equipment, general shop duties, and train shop personnel.
2. Make a report to supervisor on a routine schedule.
3. Assembly and disassembly of tools relative to services provided per location.
4. Implement quality assurance process.
5. Fabricate, repair, rebuild, and maintain equipment.
6. Perform safety inspection, yard maintenance, and keep track of inventory in shop.
7. Perform test runs on equipment, and keep reports on equipment. Not to include welding or major engine repairs.
8. Maintain tool and parts inventory.
9. Maintain tool history and records.
10. Forecast expenses for fiscal year.
11. Oversee safety meetings and assure safe working conditions.
12. Order shop supplies and parts as needed.
13. Assist mechanic and field technicians with equipment repairs.
14. Conduct trouble shooting for repairs of equipment.
15. Assist in training and orientate new employees.
16. Support and communicate with all field employees, Supervisors, Managers, and Customers.
17. Adhere to company standard operating procedures.
18. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **TELECOMMUNICATION SENIOR DRAFTER**

A TELECOMMUNICATION SENIOR DRAFTER IS DESIGNATED TO PREPARE DETAILED DRAWINGS AND DIAGRAMS OF PARTS, ASSEMBLIES WITH ACCURACY WHILE REVISE, MAINTAIN MANUFACTURING AND ASSEMBLY DRAWING. THEY ALSO NEED TO CHECK OTHER DRAFTER DRAWINGS, EXECUTE NEW DRAWING OR DRAWING MODIFICATION REQUESTED OR ORDERED BY TECHNOLOGIST OR SUPERVISOR.

**A Telecommunication Senior Drafter must be able to;**

1. Prepare detailed drawings of parts and assemblies from layouts, designs and working drawings including necessary projections, sectional views and standard specifications and corporate standards.
2. Produce accurate drawings exhibiting a strong proficiency in proper composition to adequately show and dimension all parts, relationships to other parts and the whole.
3. Create, revise, and maintain manufacturing and assembly drawings and 3-D models of components and systems.
4. Prepare neat and accurate process instrumentation and control diagrams from sketches prepared by Technologist by information specified in an engineering sales request (SOS).
5. Execute change orders that require drawing modifications as directed by a supervisor or by information specified in an engineering support request (ESR).
6. Perform thorough checking of drawings and design documents.
7. Prepare As-built drawings of company facilities from information sent in by the field or visit the field and collect information himself.
8. Prepare viewgraphs and other visual aid material as required.
9. Perform basic design modifications to current components and assemblies.
10. Enter database information associated with drawings and their bills of material into the company product lifecycle management database (PLM).
11. Assists in training and development of new worker.

12. Provide hands-on product support when required.
13. Adhere to company standard operating procedures.
14. Comply with safety and security procedures.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 4**

**TELECOMMUNICATION FABRICATOR SUPERVISOR**

A TELECOMMUNICATION FABRICATOR SUPERVISOR IS DESIGNATED TO LEAD, MOTIVATE AND GUIDE THE FABRICATION TEAM. THEY NEED TO READ AND SUPERVISE THE DRAWING WORK AND PREPARE THE SCHEDULE FOR THE FABRICATORS.

**A Telecommunication Fabricator Supervisor must be able to:**

1. Lead, motivate and guide the team with experience.
2. Work as directed on appropriate by fabricator superintendent.
3. Thorough understanding, awareness and implementation of OHS in workplace.
4. Liaise closely with Superintendent on work schedules.
5. Communicate work schedules to your team.
6. Read drawings and prepare work schedules with the team.
7. Managing raw materials and stock levels.
8. Manage multiple projects and meet strict output deadlines.
9. Working in a hands on capacity as a Boilermaker.
10. Dispatch of completed products.
11. Adhere to company standard operating procedures.
12. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **TELECOMMUNICATION DESIGNER**

A TELECOMMUNICATION DESIGNER IS DESIGNATED TO LEAD DESIGNER AND TEAM CONTRIBUTOR IN DEVELOPING INTERGRATED COMMUNICATION SYSTEM, STANDARD DEVELOPMENT, DESIGN SYSTEM, EQUIPMENT PANEL DESIGN AND OVERVIEW.

**A Telecommunication Designer must be able to:**

1. Lead designer and/or team contributor.
2. Responsible and be able to perform standards development.
3. Generate and produce design System.
4. Participate in performing system integration.
5. Responsible for equipment panel design and overview.
6. Prepare project drawings and documents using an appropriate software.
7. Check designs and drawings of design team for accuracy and conformance to technical specifications and procedures.
8. Conduct site surveys and reports.
9. Participate in tuition and guidance of trainee designers.
10. Ensure deliverables are completed within budget and time schedule.
11. Adhere to company standard operating procedures.
12. Comply with safety and security procedures.
13. Familiar with these system;
  - o UHF/VHF system design
  - o Microwave
  - o Telephony - PABX, VoIP
  - o Public Address /General Alarm
  - o VSAT
  - o TCP/IP network design
  - o CCTV Monitoring



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **TELECOMMUNICATION FABRICATOR SUPERINTENDENT**

A TELECOMMUNICATION FABRICATOR SUPERINTENDENT IS DESIGNATED TO LEAD THE FABRICATORS TEAM BY COORDINATE THE WORK TASK, PROVIDING SCHEDULE. THEY ALSO NEED TO COLLABORATE WITH OTHER DISCIPLINE SUPERINTENDENTS FOR INTERGRATION ISSUE.

**A Telecommunication Fabricator Superintendent must be able to:**

1. Provide boundary input, constructability, comprehensive understanding of the scope of Engineering work package (EWP).
2. Submit request for information as required for unclear scope.
3. Provide constructability analysis on any suggested changes.
4. Determine craft requirements for all drawings as submitted by the client.
5. Develop a strong understanding of the client's engineering specifications.
6. Verify functional checklist is signed off for each CWP, MWP, field installation, fabrication and MAWP.
7. Detail plans in the form of work tasks as per the standard task list.
8. Determine numbers of craft manpower requirements.
9. Provide Schedule review and attainability.
10. Collaborate with other Discipline Superintendents and General Superintendent to identify and troubleshoot problems proactively to ensure minimal impact.
11. Participate in daily, weekly, or monthly planning meetings with General Superintendent and Operations to identify needs, deficiencies, and scheduling conflicts with other crews in the look ahead plan/schedule.
12. Verify fair and consistent application of all Labor Relations policies and procedures, proper apprentice training and productivity of crews.
13. Participate in incident investigations and, in accordance with appropriate policies, develop reports and institutes corrective actions.



14. May perform other duties as required.
15. Adhere to company standard operating procedures.
16. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **TELECOMMUNICATION TECHNOLOGIST**

A TELECOMMUNICATION TECHNOLOGIST IS DESIGNATED TO ANALYSE, DETERMINE AND SPECIFY THE TELECOM, ELECTRICAL AND INSTRUMENTATION REQUIREMENTS AND CONSIDERATIONS APPLICABLE TO THE CMS DEPARTMENT PRODUCTS AND PROPOSALS, PROVIDE TECHNICAL SUPPORT, LEAD AND GIVE DIRECTIONS TO GROUPS OF TECHNOLOGIST AND TECHNICIANS ON TELECOM ISSUES, AND TO IDENTIFY AND RECOMMEND TELECOM INSPECTION REQUIREMENTS ON PROJECTS.

**A Telecommunication Technologist must be able to:**

1. Analyse, determine and specify the Telecom, Electrical and Instrumentation requirements and considerations applicable to the CMS Department products and proposals.
2. Define and write specification for suitable Telecom equipment for CALM terminal: modems, antenna, cables, etc.
3. Review and analysis vendor's offers analyse and take action on any discrepancies with project specifications or proposition for which the Telecom component is not considered sound, or in accordance with our RFQ.
4. Provide technical support, lead and give directions to groups of technologies and technicians on Telecom issues.
5. Perform calculation of system power consumption, define cable schedule and interconnection diagram. Interface with Process Dept for P&Id definition.
6. Provide technical support to Services Sales group and Proposal/Estimating Dept.
7. Identify and follow-up design changes and to inform and depending on the amount of man-hours involved, help the TPM to prepare a proposal for variation order.
8. Recommend and follow all quality assurance and safety factors/requirements applicable to the Telecom design.
9. Identify and recommend Telecom inspection requirements on projects.

10. Monitor and review internal drawings, specifications and documentation.
11. Help to prepare technical papers/presentation on Telecom and E&I aspects.
12. Adhere to company standard operating procedures
13. Comply with safety and security procedures.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **TELECOMMUNICATION SPECIALIST**

A TELECOMMUNICATION SPECIALIST IS DESIGNATED TO PREPARE TECHNICAL PAPERS/PRESENTATION ON TELECOM AND E&I ASPECTS, TO APPROVE INTERNAL DRAWINGS, SPECIFICATIONS AND DOCUMENTATION, AND TO APPROVE TECHNICAL SUPPORT TO SERVICES SALES GROUP AND PROPOSAL/ESTIMATING DEPARTMENT.

**A Telecommunication Specialist must be able to:**

1. Review, oversee the design work by FEED/EPIC Contractors.
2. Prepare technical papers/presentation on Telecom and E&I aspects.
3. Approve internal drawings, specifications and documentation.
4. Investigate and report on system failures or underperformance on the Company's products.
5. Attend training courses, seminars etc. when required.
6. Approve technical support to Services Sales group and Proposal/Estimating Dept.
7. Approve specification for suitable Telecom equipments.
8. Adhere to company standard operating procedures
9. Comply with safety and security procedures.



## **OIL AND GAS ENGINEERING**

### **LEVEL 8**

#### **TELECOMMUNICATION CUSTODIAN/PRINCIPAL**

A TELECOMMUNICATION CUSTODIAN/PRINCIPAL IS DESIGNATED TO MOTIVATE AND LEAD A TEAM OF TELECOM TECHNOLOGIST AND DESIGNERS, SUPERVISE ALL ASPECTS OF TELECOM RELATED SCOPE DELIVERY AND OPTIMISATION OF THE DESIGN IN MOST COST EFFECTIVE MANNER TO THE SATISFACTION OF THE COMPANY AND CLIENT FOR LARGE-SIZED PROJECTS AND MANAGE THE DEVELOPMENT/PREPARATION OF TELECOM SYSTEM SCHEMES AND IDENTIFICATION OF TELECOM EQUIPMENT SPECIFICATIONS AND INTERFACES.

**A Telecommunication Custodian/Principal must be able to:**

1. Motivate and lead a team of telecom technologist and designers.
2. Prepare and compile necessary technical information for procurement in compliance with Client specifications/engineering data sheets and standards in the premise of budgeted man-hour and project schedules.
3. Review alternative methods and solutions for complex telecom engineering problems and selects the most efficient.
4. Supervise all aspects of telecom related scope delivery and optimisation of the design in most cost effective manner to the satisfaction of the Company and Client for large-sized projects.
5. Ensure that the optimised design meets performance, safety, reliability and functional requirements of the Client, and that the product delivered is of acceptable quality.
6. Provide prime technical interface and interaction with Client for successful resolution of discipline related scope and technical issues.
7. Plan, manage prioritising and scheduling workload and various project activities related to discipline scope.
8. Responsible for Contract review, early identification of potential changes and development of Telecoms Technical Document Resister (TDR).

9. Manage the development/preparation of telecom system schemes and identification of telecom equipment specifications and interfaces.
10. Research and develop ideas and engineering solutions which enhance Departmental and Company performance.
11. Adhere to company standard operating procedures
12. Comply with safety and security procedures.
13. Provide consultation service on telecommunication engineering.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **ENGINEERING PROJECT MANAGEMENT CLERK**

AN ENGINEERING PROJECT MANAGEMENT CLERK IS DESIGNATED TO PERFORM  
CLECK WORK JOB SCOPE FOR THIS INDUSTRY ACCORDING TO APPOINTED  
DIVISION, RESPONSIBLE FOR OFFICE MANAGEMENT AND EXPENSES.

**An Engineering Project Management Clerk must be able to:**

1. Receive and file incoming letters and documents.
2. Supply and manage office equipment, machines or properties to office and manufactures.
3. Prepare schedule for meeting.
4. Receive visitors relating to work.
5. Maintain office efficiency, plan and implement office systems, layouts, and equipment procurement.
6. Verify rules and procedures in place regarding working hours, lunch, office closure and communications about security.
7. Create, control, and monitor all administrative requirements of other departments.
8. Prepare financial plans, budgets and forecasts.
9. Record, monitor expenses and raises monthly invoices.
10. Monitor on-going activities and revise contracts.
11. Maintain stationary supplies and coordinating deliveries.
12. Manage supply chain and resource requirements.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **ENGINEERING PROJECT MANAGEMENT SENIOR CLERK**

A ENGINEERING PROJECT MANAGEMENT SENIOR CLERK IS DESIGNATED TO PROVIDE SUPERVISION TO RECEPTIONIST VOLUNTEERS, TAKE AND TRANSCRIBE MINUTES OF BOARD AND COMMUNITEE MEETINGS PERFORM CLECK WORK JOB SCOPE FOR THIS INDUSTRY ACCORDING TO APPOINTED DIVISION, RESPONSIBLE FOR OFFICE MANAGEMENT AND EXPENCES, AND ASSIST STAFF WITH ADMINSTRATIVE DUTIES.

**A Engineering Project Management Senior Clerk must be able to:**

1. Provide supervision to reception volunteers.
2. Take and transcribe minutes of Board and Committee meetings.
3. Assist staff with administrative duties as requested.
4. Develop and maintain agency inventory system.
5. Distribute incoming mail and prepare outgoing mail including bulk mail.
6. Record incoming checks and donations.
7. Cooperate in the maintenance or modification of agency data collection system to ensure it meets requirements.
8. Oversee database management for quality assurance.
9. Provide training to staff on database encoding.
10. Assist with report completion.
11. Compile statistical information for Program Coordinators as requested.
12. Order office supplies and monitor inventory.
13. Update and maintain mailing lists.
14. Assist as needed with equipment loan bank.
15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3 ADMINISTRATOR**

AN ADMINISTRATOR IS DESIGNATED TO UNDERTAKE A RANGE OF FUNCTIONS TO MAKE SURE THE ADMINISTRATION ACTIVITIES WITHIN AN ORGANISATION RUN SMOOTHLY. THEY MAY BE RESPONSIBLE FOR THE MANAGEMENT OF HUMAN RESOURCES, BUDGETS, ACCOMMODATION AND PROPERTY FACILITIES AND RECORDS.

**An Administrator must be able to:**

1. Supervise and coordinate activities of staff.
2. Conduct orientation programs for new employees.
3. Involve in staff training and development, the preparation of job descriptions, staff assessments and promotions.
4. Prepare annual estimates of expenditure.
5. Maintain budgetary and inventory controls.
6. Make recommendations to management.
7. Maintain management information systems.
8. Provide and maintain business premises and other facilities including plant and equipment.
9. Review and answer correspondence.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4 DOCUMENT CONTROLLER**

A DOCUMENT CONTROLLER IS DESIGNATED TO TAKE DIRECTION FROM SKILLED DOCUMENT CONTROL PERSONNEL TO ENHANCE SKILL SET, PROCESS ALL PROJECT OFFICIAL DOCUMENTATION, PERFORM QUALITY CONTROL CHECKS, ACCURATELY AND CONSTANTLY MAINTAIN THE METADATA OF PROJECT DOCUMENTS.

**A Document Controller must be able to:**

1. Take direction from skilled document control personnel to enhance skill set within Project Document Control team as well as the company's Document Control team.
2. Process all Project official documentation (includes engineering/technical, correspondence, project management – commercial, legal) generated by the company and contractor to be stored in the Document Management System.
3. Process transmittal of information between company and contractor.
4. Perform quality control checks to ensure compliant documentation according to non-technical procedural processes
5. Expedite and track status of all documents reviewed internally by the Project.
6. Assist in documentation collection in the progression of the Project Phases with regard to completeness and accuracy.
7. Process transmittal of information between company and contractor to expedite information flow.
8. Provide technical assistance with the import of data from corporate, vendor, partner and other sources.
9. Accurately and constantly maintain the metadata of project documents.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.
12. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **DOCUMENT AND CONTROL SENIOR CIRCULATION (DCC)**

A DOCUMENT AND CONTROL SENIOR CIRCULATION (DCC) IS DESIGNATED TO MAINTAIN, STORE AND DELIVER DOCUMENTATION IN A CONTROLLED ENVIRONMENT SATISFYING THE NEEDS OF ONSHORE, OFFSHORE AND ANY COMPANY APPOINTED AS 3RD PARTIES OR PARTNERS, AND TO DEPUTISE FOR DOCUMENT CONTROL TEAM LEAD IN PERIODS OF THEIR ABSENCE.

**A Document and Control Senior Circulation (DCC) must be able to:**

1. Receive registration and distribution of both Engineering and Supplier Documentation.
2. Quality checking of information uploaded to the Company database.
3. Maintenance of onshore Controlled Documentation.
4. Search and retrieval of documentation from company database.
5. Maintenance of Technical documentation, both within soft copy and hard copy.
6. Archival of Documentation.
7. Control of Original Documentation issued for formal approval.
8. Mentor and guide any additional Document Controllers in conjunction with Document Control Team Lead.
9. Assist Offshore Document Controller with regards to establishing Installation Libraries offshore.
10. Liaison with offshore regarding documentation issues.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 PROJECT COORDINATOR**

A PROJECT COORDINATOR IS DESIGNATED TO COORDINATE PROJECT WORK, INTERGRATE PROJECT DIVISION, DEVELOP AND MAINTAIN A DETAILED PROJECT SCHEDULE, ENSURE ADHERENCE TO DEADLINE, RESPONSIBLE TO TRACK PROJECT CHANGES AND PRODUCE UPDATED SITE, AND COMPILE SUMMARY DOCUMENTS.

**A Project Coordinator will be able to:**

1. Develop and maintain a detailed project schedule which includes administrative tasks and all sites involved in the project.
2. Coordinate meetings, including travel arrangements and expense reports.
3. Prepare and edit meeting minutes, presentations and tables.
4. Verify adherence to deadlines.
5. File all project documents (hard and soft copies).
6. Verify coordination of the interfaces of all disciplines.
7. Responsible to track project changes and produces updated site based schedule as agreed with engineering and project management.
8. Compile summary documents.
9. Responsible to take input from the business analysts and project engineers to develop and maintain the detailed schedule.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.
12. Perform managerial duties.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4 CAD ADMIN SUPPORT**

A CAD ADMIN SUPPORT IS DESIGNATED TO SUPPORT CAD ADMINISTRATION. BESIDES CAD ADMIN SUPPORT WILL ASSIST CLIENT IN PLANNING AND EXECUTING PROJECT.

**A CAD Admin Support must be able to:**

1. Carry out General CAD administration tasks to include project administration associated with information received, drawings produced, archive procedures and data issue in various formats.
2. Satisfy the quality control procedures, as set out within the company CAD System Procedures Manual.
3. Carry out minor amendments to CAD drawings by liaising with the CAD Manager and engineering staff to fully understand the drafting task and the programmed to be met.
4. Comply with safety and security procedure.
5. Adhere to company standard operating procedure.
6. Perform supervisory function.
7. Assist CAD administrator.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **CAD ADMINISTRATOR**

A CAD ADMINISTRATOR IS DESIGNATED TO PROVIDE ADMINISTRATION AND SUPPORT FOR CLIENT'S CAD SYSTEMS, PERFORM SOFTWARE MAINTENANCE UPDATES AND HOT FIXES, MAINTAIN INSTALLATION PROCEDURES AND LIST OF TOOL VERSIONS TO EMPLOYEE AND LAB INSTALLATIONS, CONDUCT TROUBLESHOOTING AND UNCOVER ROOT CAUSES OF BROAD RANGE OF TECHNICAL PROBLEMS ENCOUNTERED, EXECUTE DATA BACKUP AND DISASTER RECOVERY REQUIREMENTS AS ESTABLISHED IN CLIENT PROCEDURES.

**A CAD Administrator must be able to:**

1. Provide administration and support for client's CAD systems.
2. Perform software maintenance updates and hot fixes.
3. Maintain installation procedures and list of tool versions to employee and lab installations.
4. Conduct troubleshooting and uncover root causes of broad range of technical problems encountered.
5. Collaborate with internal Engineering Management and IT Field Support to identify and deploy required software and toolsets.
6. Provide technical CAD support to other client sites as required.
7. Execute data backup and disaster recovery requirements as established in client procedures.
8. Test new releases of CAD tools prior to deployment on active programs.
9. Write scripts to improve productivity.
10. Develop and improve Library and CAD tool process documentation.
11. Perform system analysis, tuning and optimisation for local client systems.
12. Analyse and resolve data corruption and localised performance issues.
13. Define and document best practices and oversee user adoption.

14. Assist end users and peers in areas of application use, problem solving and training to achieve measurable skill improvement.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **COMPUTER AIDED DESIGN (CAD) ADMIN MANAGER**

A COMPUTER AIDED DESIGN ADMIN MANAGER IS DESIGNATED TO MANAGE AND SUPERVISE COMPUTER AIDED DESIGN (CAD) ADMINISTATOR, RESPONSIBLE FOR COMPANY CAD MATTER MANAGEMENT, INVOLVE IN CAD ADMIN ENTRY-LEVEL RECRUTMENT AND TRAINING.

**A Computer Aided Design (CAD) Admin Manager must be able to:**

1. Provide production CAD support.
2. Develop, implement and enforce CAD Standards.
3. Supply technical support for all CAD software.
4. Provide support for plotting and electronic file submissions.
5. Interact on project standards coordination with clients.
6. Provide training and supervision of in-house CAD users.
7. Generate written technology evaluations for future software adoption.
8. Provide a budget for all CAD technology items.
9. Maintain CAD document archive and retrieval for projects.
10. Provide leadership and vision to the firm in the area of CAD.
11. Maintain CAD Software inventory.
12. Order new hardware.
13. Compile completed project.
14. Provide input to business development.
15. Conduct project related model reviews.
16. Adhere to company standard operating procedure.
17. Comply with safety and security procedure.
18. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4 INSPECTOR QA/QC**

AN INSPECTOR QA/QC DESIGNATED TO VERIFY INCOMING MATERIALS TO MEET THE REQUIREMENT, ACT AS AN INTERNAL INDEPENDENT PARTY TO CONDUCT INSPECTION OF SUCH NATURE, CONDUCT INSPECTION AND TEST ON THE WORKS, PREPARE AND COMPILE REPORTS AND MONITOR WORKER'S PERFORMANCE.

**An Inspector QA/QC must be able to:**

1. Verify incoming materials to meet the requirements required.
2. Act as an internal independent party to conduct inspection of such nature.
3. Conduct inspection and tests on the works to meet with the standard codes.
4. Prepare and compile quality, inspection and non-conforming reports throughout projects, and follow up on necessary corrective actions.
5. Monitor the performance of workers, while implementing and monitoring proper storage and usage procedures for tools and equipment.
6. Adhere to company standard operating procedure.
7. Perform supervisory function.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **QA/QC COORDINATOR**

A QA/QC COORDINATOR IS DESIGNATED TO REVIEW AND EVALUATE PROFESSIONAL, TECHNICAL AND CLERICAL WORK IN ORDER TO MAINTAIN HIGH QUALITY WORK STANDARD, IN CHARGE PERSON FOR QA AND QC REGULATION MATTER, ASSIST DEPARTMENTS WITH COORDINATION OF AUDIT INFORMATION AND RESPONSIBLE FOR QUALITY-ASSURANCE STUDIES.

**A QA/QC Coordinator must be able to:**

1. Assign, review, and evaluate the work of professional, technical, and clerical staff.
2. Interpret and implement quality assurance standards.
3. Monitor unusual occurrences, report follow-up procedures, and report monthly and year-to-date comparisons.
4. Assist the director with records form revisions and procedures.
5. Review quality assurance standards, study existing policies and procedures, and interview personnel and customers to evaluate effectiveness of quality assurance program.
6. Writes quality assurance policies and procedures.
7. Review, evaluate and apply quality assurance criteria.
8. Perform quality-assurance functions to accomplish business coordination, monitor, and report quality-assurance studies according to the QA/UR plan.
9. Responsible for knowing current QA regulations and informing the Director of any new and revised regulations imposed.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) MANAGER**

A QUALITY ASSURANCE/QUALITY CONTROL MANAGER (QA/QC) MANAGER IS DESIGNATED TO ENSURE THE QUALITY OF THE SITE INSTALLATIONS IS CONSISTENT WITH THE COMPANY'S POLICY REQUIREMENTS TOGETHER WITH NATIONAL AND INTERNATIONAL STANDARDS AND THE CUSTOMERS SPECIFICATIONS.

**A QA/QC Manager must be able to:**

1. Implement the QA/QC management system at site.
2. Coordinate with the customer's representative on all quality matters.
3. Coordinate all receipt inspections.
4. Distribute relevant QA/QC documentation to site subcontractors.
5. Verify that the quality related site activities are in accordance with the applicable codes and standards.
6. Participate in the site internal and external site audits.
7. Coordinate all the quality site inspections through the site QC inspectors.
8. Control all non-conformance reports and undertake remedial action.
9. Complete site quality control instructions and action remedial responses.
10. Monitor the implementation of the approved site QC plan.
11. Complete and coordinate the approval of the sites QC technical submittals to the customer.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.
14. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PROJECT JUNIOR PLANNER**

A PROJECT JUNIOR PLANNER IS DESIGNATED TO IDENTIFY PROJECT PROBLEM; CONDUCT EXTENSIVE RESEARCH, AND DEVELOP NEW STRATEGIES TO PROMOTE PROJECT DEVELOPMENT.

**A Project Junior Planner must be able to;**

1. Initiate actions necessary to correct deficiencies or violations of regulations.
2. Assist with updates and maintenance of Comprehensive Plan and land development regulations.
3. Conduct extensive research in specific or general project areas.
4. Write and present formal and technical reports, working papers, and correspondence.
5. Identify project problems, issues, and opportunities in order to do better planning.
6. Develop strategies to promote economic and efficient project development.
7. Evaluate adequacy of community facilities in meeting current and projected needs.
8. Adhere to company standard operating procedure.
9. Perform supervisory function.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 PROJECT PLANNER**

A PROJECT PLANNER IS DESIGNATED TO FOCUS ON THE PLANNING FUNCTION TO THE PROJECTS AND BE RESPONSIBLE FOR THE QUALITY AND TIMELY DELIVERY OF THE SERVICE. HE/SHE UNDERTAKES PLANNING AND RESOURCE LOADING FOR THE WORK SCOPE AND GIVING ADVICE ON FEASIBILITY OF PLANS.

**A Project Planner must be able to:**

1. Use various planning specific software to develop plans.
2. Prepare and regularly update master schedule taking into account all contractual milestones and completion dates.
3. Develop detail area schedules, bar charts, and resource graphs.
4. Prepare all design activities indicating information interfaces and deliverable timetable.
5. Review changes to all contractor's schedules and report any abnormality or area of concern.
6. Maintain open communication channels and ensure cooperation and coordination with disciplines in the project service group and other project personnel.
7. Assist managers on projects in planning functions associated with activities under their responsibility.
8. Prepare work breakdown structures to enable the associated resource and cost budgets.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 PROJECT SENIOR PLANNER**

A PROJECT SENIOR PLANNER IS DESIGNATED TO MANAGE DAY TO DAY WORK OF THE PLANNING FUNCTION TO THE ASSIGNED PROJECT AND BE RESPONSIBLE FOR THE QUALITY AND TIMELY DELIVERY OF THE SERVICE. HE/SHE UNDERTAKES PLANNING AND RESOURCE.

**A Project Senior Planner must be able to:**

1. Provide expert planning services to the project team using various planning specific software.
2. Prepare and regularly update master schedule taking into account all contractual milestones and completion dates.
3. Prepare detail area schedules, bar charts, and resource graphs.
4. Monitor all design activities indicating information interfaces and deliverable timetable.
5. Review changes to all contractor's schedules and report any abnormality or area of concern.
6. Maintain open communication channels and ensure cooperation and coordination with disciplines in the project service group and other project personnel.
7. Assist managers on projects in planning functions associated with activities under their responsibility.
8. Prepare work breakdown structures to enable the associated resource and cost budgets.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.
11. Perform managerial duties.



**OIL, GAS AND PETROCHEMICALS**

**LEVEL 4**

**COST JUNIOR CONTROLLER**

A COST JUNIOR CONTROLLER IS DESIGNATED TO PROVIDE DAY TO DAY FINANCIAL AND ACCOUNTING SERVICES AND MANAGEMENT WITHIN THE GUIDELINES FROM COMPANY, HANDLE OVERALL TAXATION MATTERS, STATUTORY AND INTERNAL AUDITS, COMPANY LAW AND OTHER LEGAL MATTERS FINALISATION, CONTROL PROPER ANALYTICAL BOOKING AND ACCOUNT REVIEW, AND HANDLE BANK ACCOUNT AND CASH MANAGEMENT.

**A Cost Junior Controller must be able to:**

1. Provide and oversee day to day financial and accounting services and management within the guidelines from company.
2. Handle overall Taxation matters, Statutory Audits, Internal Audit, Company Law and other legal matters finalisation of Accounts and Audit.
3. Control proper analytical booking and account review, manage invoicing process, the team dedicated to it and first level of customer relationship.
4. Handle bank accounts and cash management.
5. Engage relationship with Auditors, Banks, Clients financial representative and other actors Budget and performance follow up and group reporting process together with Finance Manager.
6. Adhere to company standard operating procedure.
7. Comply with safety and security procedure.
8. Perform supervisory function.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 COST CONTROLLER**

A COST CONTROLLER IS DESIGNATED TO ACT AS A PRIMARY FOCUS FOR PROJECT COST ESTIMATING, TRACKING AND ANALYSIS. COST CONTROL IS A CENTRALISED FUNCTION WITHIN THE PROJECT SERVICES GROUP.

**A Cost Controller must be able to:**

1. Develop Generic Projects Cost Structure and Cost Account Codes Directory under Standard Work Breakdown Structures for various generic project types.
2. Prepare project cost estimate of resources and other expenses through discussions with functional leaders
3. Assist Project Planner in entering the cost estimate in the project plans in Primavera or other Project Management tools.
4. Liaise with Accounts Department to charge company's overheads (indirect costs) according to company's overhead allocation system/procedures.
5. Generate weekly and monthly cost reports in tabular and graphical formats for each project.
6. Revise project cost estimate at the end of every reporting period.
7. Facilitate and provide information to Accounts Department for accrued invoices at required frequency.
8. Predetermined project payment milestones so the invoices can be issued to the clients and maintain Invoice Register.
9. Perform cost analysis and advise project leaders on cost over-runs in a timely manner so the corrective actions can be taken.
10. Maintain electronic and hard copy filing for project cost reports and other cost related documents.
11. Assist in preparing cost estimation, tracking and control procedure and continuously look at the ways of improving processes and revise procedure accordingly.
12. Adhere to company standard operating procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4 MATERIAL CONTROLLER**

A MATERIAL CONTROLLER IS DESIGNATED TO MANAGE THE DAY TO DAY REQUIREMENTS OF SPARE PARTS AND MAINTENANCE MATERIAL TO INSURE THAT ADEQUATE STOCK LEVELS ARE MAINTAINED IN ORDER TO MINIMISE THE EQUIPMENT DOWNTIME.

**A Material Controller must be able to:**

1. Manage and control the daily requirement of spare parts and materials by reviewing with department Managers the stock requirement of each section.
2. Review and approve the stock levels changes and stock replenishment on daily basis to maintain adequate stock levels.
3. Manage the storage area availability for the safe and efficient storage of material in order to keep such material in a useable and secure condition.
4. Identify the redundant stock and discuss with the technical sections the redundant stock interchange-ability.
5. Assist the section head in formulating and implementing written procedures within which, all users of material, are required to operate.
6. Analyse the stock movement and provide the section head monthly stock performance reports.
7. Manage day to day store operation to ensure efficient and safe operation in all stores.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 PROJECT BUYER**

A PROJECT BUYER IS DESIGNED TO MANAGE ALL PROJECT PURCHASING ACTIVITIES ASSIGNED MATERIALS, COORDINATE BETWEEN SUPPLIERS AND INTERNAL CUSTOMERS, SOURCE FOR NEW SUPPLIERS AND MAINTAIN EFFECTIVE RELATIONSHIP WITH SUPPLIERS, PLACE ORDERS, ENTER AND MAINTAIN DATABASE AND PURCHASE ORDERS, ENSURE ALL COMPANY'S COMMERCIAL AND LEGAL INTERESTS ARE PROTECTED.

#### **A Project Buyer must be able to:**

1. Manage all project purchasing activities and purchase assigned materials, supplies and consumables, services and equipment in the most cost-effective manner
2. Coordinate between suppliers and internal customers to ensure all specifications are met.
3. Look for new suppliers and maintain effective relationships with existing key suppliers
4. Place orders and ensure timely availability of all supplies and services to support internal customers' requirements
5. Enter and maintain database and purchase orders in computerized systems
6. Verify that all company's commercial and legal interests are protected, and all corporate and regulatory bodies' requirements are complied with
7. Adhere to company standard operating procedure
8. Comply with safety and security procedure



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 COST SENIOR CONTROLLER**

A COST SENIOR CONTROLLER IS DESIGNATED TO CONTROL THE PROJECT COST BY UTILISING ESTABLISHED PROCEDURES FOR THE PREPARATION OF DEFINITIVE CODED BUDGET, TIMELY COLLECTION OF COST DATA AND EXPENDITURES, PERIODIC REPORTING OF COST INFORMATION AND RECOMMENDATIONS FOR COST CONTROL ACTION.

**A Cost Senior Controller must be able to:**

1. Work closely with the project manager on a technical basis in order to layout the cost commitments for the project.
2. Review cash flow for the project:
3. Inform Field Management of the cost status of its field budget and provide it with the forecast trend and cost data necessary to control field performance.
4. Evaluate the cost commitments.
5. Control the funding and lay down the complete monthly commitments.
6. Inform the Project Manager and Project Director of the cost status of the overall project.
7. Provide Project Manager and Project Director with forecast trend and cost data necessary to control the cost of the project.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.
10. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4 HSE EXECUTIVE**

A HSE EXECUTIVE IS DESIGNATED TO PLAN HSE ACTIVITIES FOR PROJECT, OFFICE AND HSE ACTIVITIES, LEAD AND MANAGE THE RELEVANT HSE REQUIREMENTS, RESPONSIBLE FOR COMPLIANCE TO AUTHORITIES REQUIREMENT ON ALL ITEMS, MONITOR THE MOVEMENTS OF ALL DANGEROUS SOURCES, ITEMS, MATERIALS AND APPARATUS, DEVELOP AND IMPLEMENT SAFETY ACTIVITIES AND AWARENES.

#### **A HSE Executive must be able to:**

1. Plan and carry out HSE activities for project, office and other HSE initiatives in line with internal and external business requirements.
2. Lead and manage the relevant HSE requirements by Authorities governing the Environmental and Safety aspects.
3. Responsible for compliance to authorities requirements on all items.
4. Responsible to monitor the movements of all item that has capability to cause harm and injuries.
5. Responsible in developing and implementing activities and programs including safety procedures in line with internal and external legal and clients' requirements.
6. Adhere to company standard operating procedure.
7. Comply with safety and security procedure.
8. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 HSE COORDINATOR**

A HSE COORDINATOR IS DESIGNATED TO DEAL WITH ALL MATTERS RELATING TO HEALTH, SAFETY, AND ENVIRONMENTAL ISSUES AND DEVELOP APPROPRIATE HSE SYSTEMS THAT MEET ALL REGULATORY REQUIREMENTS.

**A HSE Coordinator must be able to:**

1. Develop and implement appropriate safety, occupational health and environment systems and documentation.
2. Verify that management and all staffs are involved in implementation of the safety management plan.
3. Oversee and review the overall safety performance of staff and workplace.
4. Undertake regular safety audits and inspections.
5. Investigate and report on hazards, near misses, incidents and injuries.
6. Verify compliance with all regulatory requirements.
7. Contributing to their safety focused culture through the provision of health, safety and environment information and guidance, including medical and emergency response issues.
8. Train employees, supervisors, managers and other personnel in relation to HSE processes.
9. Act as an initial point of contact in relation to HSE dispute resolution.
10. Audit contractor compliance with HSE management plans, process and systems.
11. Hold monthly safety meetings.
12. Developing and maintain associated project/facility procedures.
13. Adhere to company standard operating procedure
14. Comply with safety and security procedure





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **HEALTH, SAFETY AND ENVIRONMENTAL (HSE) MANAGER**

A HEALTH, SAFETY AND ENVIRONMENTAL (HSE) MANAGERS IS DESIGNATED TO PLAN, COORDINATE AND IMPLEMENT ISSUES AND DIRECTIVES WITHIN THE ORGANISATION. THEY ENSURE SAFE ENVIRONMENTAL WORKING CONDITIONS FOR ALL EMPLOYEES. THEY WORK TO PREVENT ACCIDENTS, INFECTIONS, INJURIES AND PROPERTY LOSS DUE TO NATURAL CAUSES OR DAILY LIFE CIRCUMSTANCES.

**A HSE Manager must be able to:**

1. Coordinate the activities of the HSE Team.
2. Establish and maintain Risk Management procedure.
3. Take part in the planning and execution of the companies drilling activities.
4. Implement and follow up a process for annual review of HSE performance and management system.
5. Identify and draft HSE initiatives with the focus on execution and KPI.
6. Coordinate and support incident investigations of local incidents, providing recommendations and corrective actions where required.
7. Advocate and maintain the HSE elements of the management system and champion the HSE culture of the assets.
8. Establish the assets risk matrix and management plan, ensuring that it is reviewed as part of the business process.
9. Support the development and operation teams in delivering a continual improvement culture with the goal of zero injuries or serious incidents.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.
12. Perform managerial duties.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4 PERMITTING OFFICER**

A PERMITTING OFFICER IS DESIGNATED TO PROVIDE GUIDANCE AND ADVOCATING REGULATORY REQUIREMENTS IN OPERATIONS, INTERPRET REGULATIONS AND PERMIT PROCESSES.

**A Permitting Officer must be able to:**

1. Ensure compliance with regulations standards for all projects.
2. Develop permitting processes including development of programmed, field coordination and compliance to regulatory requirements.
3. Work with consultants to assist with regulatory filings and permit activities.
4. Provide strategic planning, tactical execution and cost control measures to meet regional goals and prepare permit applications.
5. Verify projects are developed in compliance with all regulatory programs.
6. Prepare and maintain permit database.
7. Contribute to the development of appropriate regulatory strategies.
8. Review practice and project activities to comply with regulatory standards.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.
11. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **PERMITTING LICENCE OFFICER**

A PERMITTING LICENCE OFFICER IS DESIGNATED TO DEVELOP AND ADMINISTER PERMITTING PROCEDURES, OVERSEE CONTRACTORS COMPLIANCE TO PROJECT PERMITTING STANDARDS, ADVISE AND SUPPORT TO LINE MANAGERS, SUPPORT ISOLATION AND PERMIT INCIDENT MANAGEMENT, NOTIFICATION, INVESTIGATION AND REPORTING OF INCIDENTS.

**A Permitting License Officer must be able to:**

1. Oversee contractors' compliance to project permitting standards.
2. Provide advice and support to line managers in the practical implementation of project related permit procedures.
3. Gather ongoing site information relevant to permit issuing needs.
4. Prepare issue and maintain permit records and data as required.
5. Read, understand and ensure relevance of interfacing documentation and procedures required for overall Project Management.
6. Undertake a supporting role in isolation and permit Incident Management, Notification, Investigation and Reporting of Incidents.
7. Verify adequate supplies of permit related equipment is maintained on site for use as appropriate.
8. Verify compliance to permit requirements of work undertaken at site.
9. Assist with the authorisation of Permits and authority's to work.
10. Assume the delegated authority of and approval levels of the Permit Superintendent if required.
11. Conduct regular site inspections of the contractors operations as defined.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **REGULATORY/PERMITTING MANAGER**

A REGULATORY/PERMITTING MANAGER IS DESIGNATED TO IMPLEMENT AND MAINTAIN THE EFFECTIVENESS OF THE QUALITY SYSTEM, AND DEVELOP AND PERMIT STRATEGIES ON PROJECTS.

**A Regulatory/Permitting Manager must be able to:**

1. Responsible for implementing and maintaining the effectiveness of the quality system.
2. Provide regulatory direction to technical staff engaged in process development or improvement.
3. Review practices and project plans for compliance to regulatory standards and ensure alignment with current regulatory strategy.
4. Manage and contribute to the development of appropriate regulatory strategies.
5. Provide advice and counsel to staff to resolve issues where few precedents exist.
6. Recognise and remove barriers to project or task completion.
7. Responsible for performance assessment to growth and development planning and regulatory strategies.
8. Manage and coordinate activities to achieve all regulatory requirements to achieve project financial closing and construction.
9. Prepare milestone schedules budgets and staffing requirements to complete permitting on projects.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.
12. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 PROJECT MANAGER**

A PROJECT MANAGER IS DESIGNATED TO LEAD THE PROJECT TEAM TO MAKE SURE PROJECT MEET INTERNAL AND CLIENT EXPECTTION, LEAD AND MANAGE THE TEAMS MEMBERS, MANAGE AND COMMUNICATE WITH STAKEHOLDERS AND CLIENTS, MAKE SURE PROJECT QUALITY AND MEET THE DEMAND, ALLOCATE AND MANAGE BUDGET AND REVENUE.

**A Project Manager must be able to:**

1. Explain implications of changes to project scope and objectives to the client and to the project team.
2. Lead the team to prioritise signed off project work based on analysis of strategic importance, tasks outstanding, obstacles or barriers, budgets, resources and deadlines.
3. Create or participate in the creation of project documentation.
4. Establish and maintain a usable and well-communicated schedule for all phases of a project.
5. Work with the account director to ensure changes are understood.
6. Forecast revenue, profitability, margins, bill rates and utilisation accurately.
7. Assure project legal documents are completed and signed.
8. Manage project budget.
9. Follow up with clients, when necessary, regarding unpaid invoices.
10. Analyses project profitability, revenue, margins, bill rates and utilisation.
11. Manage scope creep through client change orders, internal change orders, phased delivery or other methods to ensure projects deliver on time line, scope, and budget and strategy expectations.
12. Evaluate all key project deliverable, as well as final products to ensure traceability of requirements, high quality and client acceptance.

13. Ensure project meets internal and client expectations with respect to quality, budget, delivery time lines, and strategy.
14. Work with account director to ensure clients achieve an understanding of expectations, deliverable, dependencies, risks, progress and the bright works development process.
15. Create customised reporting for the client or team with account management and/or team leads, to secure sign off on deliverable or documentation.
16. Use sound judgment in all project communication and ensure that key stakeholders including the team, client and management are apprised of project activities in a timely manner.
17. Communicate progress, risks, expectations, time lines, milestones and other key project metrics to clients and team members.
18. Track and report weekly on percent complete, budget burn, earned value, slippage, project effort and duration to complete and other key project metrics.
19. Keep an accurate risk tracking document with an associated mitigation plan.
20. Determine project roles of team members based on project requirements, time frames and budget.
21. Adhere to company standard operating procedure.
22. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **PRODUCTION JUNIOR TECHNICIAN**

A PRODUCTION JUNIOR TECHNICIAN IS DESIGNATED TO PERFORM ROUTINE TASK RELATED TO THE OPERATION OF A PRODUCTION PROCESS UNSER THE GUIDANCE OF EXPERIENCE TECHNICAL STAFF, AND CARRY OUT SAFE AND OPTIMUM OPERATION OF HYDROCARBON PROCESS.

**A Production Junior Technician must be able to:**

1. Perform routine tasks related to the operation of a production process under the guidance and close supervision of experience technical staff.
2. Carry out safe and optimum operation of hydrocarbon process.
3. Monitor and control production plant equipment, protective systems (fire and gas and ESD) and all support and utility systems (include Ballast Control).
4. Maintain detailed production records.
5. Perform general production maintenance.
6. Operate hoists, slings, lift truck, manipulators and other equipment.
7. Assist in removal of process waste as well as the decontamination of facilities and equipment.
8. Act as a back-up Shipper and perform other related duties as required.
9. Perform any assignment as may be given from time to time by superior.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2 PRODUCTION TECHNICIAN**

A PRODUCTION TECHNICIAN IS DESIGNATED TO CARRY OUT SAFE AND OPTIMUM OPERATION OF HYDROCARBON PROCESS, MONITOR AND CONTROL PRODUCTION PLANT EQUIPMENT, PROTECTIVE SYSTEMS (FIRE AND GAS AND ESD) AND ALL SUPPORT AND UTILITY SYSTEMS (INCLUDE BALLAST CONTROL), AND CARRY OUT RISK ASSESSMENT; HAZOP, HAZID, AS REQUESTED OR AS NECESSARY TO ENSURE LEGISLATIVE COMPLIANCE.

**A Production Technician must be able to:**

1. Carry out safe and optimum operation of hydrocarbon process.
2. Monitor and control production plant equipment, protective systems (fire and gas and ESD) and all support and utility systems (include Ballast Control).
3. Initiate and co-ordinate response instructions during emergency situations.
4. Carry out actions to prevent or rectify abnormal plant and production stations.
5. Minimise any risk of harm to personnel, environmental damage, or asset damage.
6. Carry out risk assessment exercises.
7. Review and monitor compliance with safe work systems and maintenance procedures.
8. Carry out risk assessment; HAZOP, HAZID, as requested or as necessary to ensure legislative compliance.
9. Recommend improvements or adjustments to enhance operational safety or efficiency.
10. Monitor compliance with maintenance procedures and safe systems of work through regular review and audit including regular offshore visits.
11. Perform any assignment as may be given from time to time by superior.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **PRODUCTION SENIOR TECHNICIAN**

A PRODUCTION SENIOR TECHNICIAN IS DESIGNATED TO CARRY OUT SAFE AND OPTIMUM OPERATION OF HYDROCARBON PROCESS, MONITOR AND CONTROL PRODUCTION PLANT EQUIPMENT, PROTECTIVE SYSTEMS (FIRE AND GAS AND ESD) AND ALL SUPPORT AND UTILITY SYSTEMS (INCLUDE BALLAST CONTROL), INITIATE AND CO-ORDINATE RESPONSE INSTRUCTIONS DURING EMERGENCY SITUATIONS.

**A Production Senior Technician must be able to:**

1. Carry out safe and optimum operation of hydrocarbon process.
2. Monitor and control production plant equipment, protective systems (fire and gas and ESD) and all support and utility systems (include Ballast Control).
3. Initiate and co-ordinate response instructions during emergency situations.
4. Carry out actions to prevent or rectify abnormal plant and production stations.
5. Minimise any risk of harm to personnel, environmental damage, or asset damage.
6. Carry out risk assessment exercises.
7. Perform any assignment as may be given from time to time by superior.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PRODUCTION**

### **LEVEL 4**

#### **LEAD PRODUCTION TECHNICIAN**

A LEAD PRODUCTION TECHNICIAN IS DESIGNATED TO CARRY OUT SAFE AND OPTIMUM OPERATION OF HYDROCARBON PROCESS, INITIATE AND COORDINATE RESPONSE INSTRUCTIONS DURING EMERGENCY SITUATIONS, CARRY OUT ACTIONS TO PREVENT OR RECTIFY ABNORMAL PLANT AND PRODUCTION STATIONS, AND ANALYSE PRODUCTION RATE AND PROCESS BEHAVIOR.

**A Lead Production Technician must be able to:**

1. Carry out safe and optimum operation of hydrocarbon process.
2. Monitor and control production plant equipment, protective systems (fire and gas and ESD) and all support and utility systems (include Ballast Control).
3. Initiate and co-ordinate response instructions during emergency situations.
4. Carry out actions to prevent or rectify abnormal plant and production stations.
5. Minimise any risk of harm to personnel, environmental damage, or asset damage.
6. Prepare daily production reports and logs.
7. Verify all record keeping and production reporting is carried out.
8. Analyse production rate and process behaviour to ensure the early identification of trends and problems.
9. Monitor and direct Production Operators out on the plant to ensure continuity of operations and timely implementation of production routines.
10. Assist with planning and scheduling of routine shutdown and shutdown maintenance.
11. Identify plant, equipment, and process isolations within the bounds of the permit to work system and in accordance with company policies and procedures.
12. Responsible for the administration of the PTW system and all associated certification, recording, log keeping, and document control.
13. Fulfil the allocation responsibilities of the Divisional and Vessel Safety Management Systems.
14. Perform managerial function.

15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **PLATFORM PRODUCTION SUPERVISOR**

A PLATFORM PRODUCTION SUPERVISOR IS DESIGNATED TO PREPARE WEEKLY PRODUCTION REPORTS FOR ENGINEERING INTERFACE MEETING WITH ASSET ENGINEERS AND OPERATION SUPERINTENDENT, TRACK INDIVIDUAL PRODUCTION TECHNICIAN'S WORK PERFORMANCE, AND RESPONSIBLE FOR THE INTEGRITY OF ALL EQUIPMENTS ON PLATFORM.

**A Platform Production Supervisor must be able to:**

1. Prepare weekly production reports for engineering interface meeting with asset engineers and operation superintendent.
2. Track individual production technician's work performance.
3. Responsible for the integrity of all equipments on platform.
4. Collaborate with the asset engineers such as reservoir (well optimisation) and facility (process equipment).
5. Responsibility for quality control (handling of corrosion improvements) and machinery (rotary equipments such as gas compressor, genset and MOL pump).
6. Prepare and review of work procedures.
7. Carry out daily spot-check of work permit.
8. Carry out verification/validation of work procedures.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **FLOATERS PRODUCTION SUPERVISOR**

A FLOATERS PRODUCTION SUPERVISOR IS DESIGNATED TO PREPARE WEEKLY PRODUCTION REPORT FOR ENGINEERING INTERFACE MEETING, TRACK INDIVIDUAL PRODUCTION TECHNICIAN, INTEGRATE ALL EQUIPMENT ON PLATFORM, COLLABORATE WITH ASSET ENGINEER, AND PREPARE AND REVIEW WORK PROCEDURES AND CARRY OUT DAILY SPOT-CHECK OF WORK PERMIT.

**A Floaters Production Supervisor must able to:**

1. Prepare weekly production reports for engineering interface meeting with Asset engineers and operation superintendent.
2. Track individual production technician's work performance.
3. Responsible for the integrity of all equipments on platform.
4. Collaborate with the asset engineers such as reservoir (well optimisation) and facility (process equipment),
5. Responsibility for quality control (handling of corrosion improvements) and machinery (rotary equipments such as gas compressor, genset and MOL pump).
6. Prepare and review of work procedures.
7. Carry out daily spot-check of work permit.
8. Carry out verification/validation of work procedures.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.





OIL, GAS AND PETROCHEMICAL

## LEVEL 5

### SUBSEA PRODUCTION SUPERVISOR

A SUBSEA PRODUCTION SUPERVISOR IS DESIGNATED TO COLLABORATE WITH ONSHORE PRODUCTION ENGINEER ON PRODUCTION ISSUES, COLLABORATE WITH ONSHORE OPERATIONS ENGINEERS ON PRODUCTION AND WATER INJECTION PROCESS ISSUES, CONDUCT TROUBLESHOOTING AS REQUIRED AND PERFORM RECOVERING FROM PRODUCTION OUTAGES AS THEY OCCUR (PROVIDING 24 HOUR CALL OUT ASSISTANCE AS REQUIRED).

**A Subsea Production Supervisor must be able to:**

1. Collaborate with onshore Production Engineer on production issues.
2. Collaborate with onshore operations engineers on production and water injection process issues.
3. Verify the effective administration of the Permit to Work System.
4. Conduct troubleshooting as required.
5. Perform recovering from production outages as they occur (providing 24 hour call out assistance as required).
6. Monitor results of analysis ensuring optimal chemical usage and compliance with environmental policy.
7. Direct and control platform operations on start-up, or in the event of process upset, to minimise the loss of production.
8. Facilitate the execution of all platform maintenance work by maintaining close contact with Discipline Supervisors.
9. Verify that all plant, processes and equipment are functioning efficiently, with any failure of safety critical.
10. Advise on all matters concerning plant, process, equipment and personnel.
11. Consult with onshore Operations Engineer on any operational concerns
12. Provide full logs and reports on handover and information on a shift by shift back to back basis to ensure the best flow of information and experience.

13. Manage and control the activities of the Production Teams.
14. Adhere to company standard operating procedure.
15. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **PLATFORM SUPERINTENDENT**

A PLATFORM SUPERINTENDENT IS DESIGNATED TO LEAD THE IMPLEMENTATION OF FIELD INTEGRATED PRODUCTION PLANT AND COORDINATE THE SITE PLANT, PROVIDE INPUTS ON OPERATIONS, IMPLEMENT IMPROVEMENT INITIATIVES TO ENHANCE PRODUCTION AND PROVIDE REVIEW AND QUALITY CONTROL.

**A Platform Superintendent must be able to:**

1. Provide review and quality control to ensure that relevant field data are accurately reported for performance review and analysis.
2. Lead the implementation of field HSE Plans through continuous performance reviews and mitigations to meet HSE statutory and regulatory.
3. Coach, mentor and guide staff and conduct periodic performance review, counsel/motivate staff to install right mindset, behaviours and values to attain high performance standard.
4. Lead the implementation of field integrated production plans through optimisation of resources and efficient operation of facilities to meet production targets.
5. Maximise process uptime and minimising facilities downtime to ensure gas venting/flaring is kept within the permissible limit.
6. Lead and coordinate the site planning and execution of shutdown activities inclusive of site supervision of simultaneous operations
7. Collaborate with Maintenance, Logistics and Procurement support in order to ensure safe execution, resources and shutdown optimisation.
8. Lead and manage the implementation of first-line maintenance.
9. Review and evaluate the equipment uptime.
10. Provide recommendation to enhance maintenance strategies to improve equipment and facilities uptime.
11. Perform managerial function.
12. Adhere to company standard operating procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **FLOATERS SUPERINTENDENT**

A PLATFORM SUPERINTENDENT IS DESIGNATED TO LEAD THE IMPLEMENTATION OF FIELD INTEGRATED PRODUCTION PLANT AND COORDINATE THE SITE PLANT, MAXIMISE PROCESS UPTIME AND MINIMISING FACILITIES DOWNTIME TO ENSURE GAS VENTING/FLARING IS KEPT WITHIN THE PERMISSIBLE LIMIT, IMPLEMENT IMPROVEMENT INITIATIVES TO ENHANCE PRODUCTION AND PROVIDE REVIEW AND QUALITY CONTROL.

**A Platform Superintendent must be able to:**

1. Lead the implementation of field integrated production plans through optimisation of resources and efficient operation of facilities to meet production targets.
2. Maximise process uptime and minimising facilities downtime to ensure gas venting/flaring is kept within the permissible limit.
3. Lead and coordinate the site planning and execution of shutdown activities inclusive of site supervision of simultaneous operations.
4. Collaborate with Maintenance, Logistics and Procurement support in order to ensure safe execution, resources and shutdown optimisation.
5. Lead and manage the implementation of first-line maintenance.
6. Review and evaluate the equipment uptime.
7. Provide recommendation to enhance maintenance strategies to improve equipment and facilities uptime.
8. Implement improvement initiatives to enhance production performance and facilities uptime, cost effectiveness and operational excellence.
9. Provide review and quality control to ensure that relevant field data are accurately reported for performance review and analysis.

10. Lead the implementation of field HSE plans through continuous performance reviews and mitigations to meet HSE statutory and regulatory compliance and inculcate behavioural-based safety.
11. Perform managerial function.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **SUBSEA SUPERINTENDENT**

A SUBSEA SUPERINTENDENT IS DESIGNATED TO LEAD THE IMPLEMENTATION OF FIELD INTEGRATED PRODUCTION PLANT AND LEAD AND COORDINATE THE SITE PLANNING AND EXECUTION OF SHUTDOWN ACTIVITIES INCLUSIVE OF SITE SUPERVISION OF SIMULTANEOUS OPERATIONS, IMPLEMENT IMPROVEMENT INITIATIVES TO ENHANCE PRODUCTION AND PROVIDE REVIEW AND QUALITY CONTROL.

**A Subsea Superintendent must be able to:**

1. Lead the implementation of field integrated production plans through optimisation of resources and efficient operation of facilities to meet production targets.
2. Maximise process uptime and minimising facilities downtime to ensure gas venting/flaring is kept within the permissible limit.
3. Lead and coordinate the site planning and execution of shutdown activities inclusive of site supervision of simultaneous operations.
4. Collaborate with Maintenance, Logistics and Procurement support in order to ensure safe execution, resources and shutdown optimisation.
5. Lead and manage the implementation of first-line maintenance.
6. Review and evaluate the equipment uptime.
7. Provide recommendation to enhance maintenance strategies to improve equipment and facilities uptime.
8. Implement improvement initiatives to enhance production performance and facilities uptime, cost effectiveness and operational excellence.
9. Provide review and quality control to ensure that relevant field data are accurately reported for performance review and analysis.
10. Lead the implementation of field HSE Plans through continuous performance reviews and mitigations to meet HSE statutory and regulatory compliance and inculcate behavioural-based safety.



11. Perform managerial function.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PLATFORM OPERATION SPECIALIST**

A PLATFORM OPERATION SPECIALIST IS DESIGNATED TO LEAD THE IMPLEMENTATION OF FIELD INTEGRATED PRODUCTION PLANT AND COORDINATE THE SITE PLANT, MAXIMISE PROCESS UPTIME AND MINIMISING FACILITIES DOWNTIME TO ENSURE GAS VENTING/FLARING IS KEPT WITHIN THE PERMISSIBLE LIMIT, IMPLEMENT IMPROVEMENT INITIATIVES TO ENHANCE PRODUCTION AND PROVIDE REVIEW AND QUALITY CONTROL.

**A Platform Operation Specialist must be able to:**

1. Lead the implementation of field integrated production plans through optimisation of resources and efficient operation of facilities to meet production targets.
2. Maximise process uptime and minimise facilities downtime to ensure gas venting/flaring is kept within the permissible limit.
3. Lead and coordinate the site planning and execution of shutdown activities inclusive of site supervision of simultaneous operations.
4. Collaborate with Maintenance, Logistics and Procurement support in order to ensure safe execution, resources and shutdown optimisation.
5. Lead and manage the implementation of first-line maintenance.
6. Review and evaluate the equipment uptime.
7. Provide recommendation to enhance maintenance strategies to improve equipment and facilities uptime.
8. Implement improvement initiatives to enhance production performance and facilities uptime, cost effectiveness and operational excellence.
9. Provide review and quality control to ensure that relevant field data are accurately reported for performance review and analysis.
10. Lead the implementation of field HSE Plans through continuous performance reviews and mitigations to meet HSE statutory and regulatory compliance and inculcate behavioural-based safety.

11. Mentor and guide staff training and conduct periodic performance review.
12. Adhere to company standard operating procedure.
13. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **FLOATERS OPERATION SPECIALIST**

A FLOATERS OPERATION SPECIALIST IS DESIGNATED TO LEAD THE IMPLEMENTATION OF FIELD INTEGRATED PRODUCTION PLANT AND COORDINATE THE SITE PLANT, LEAD AND MANAGE THE IMPLEMENTATION OF FIRST-LINE MAINTENANCE, IMPLEMENT IMPROVEMENT INITIATIVES TO ENHANCE PRODUCTION AND PROVIDE REVIEW AND QUALITY CONTROL.

**A Floaters Operation Specialist must be able to:**

1. Supervise the platform superintendent's works.
2. Lead the implementation of field integrated production plans through optimisation of resources and efficient operation of facilities to meet production targets.
3. Maximise process uptime and minimise facilities downtime to ensure gas venting/flaring is kept within the permissible limit.
4. Lead and coordinate the site planning and execution of shutdown activities inclusive of site supervision of simultaneous operations.
5. Collaborate with Maintenance, Logistics and Procurement support in order to ensure safe execution, resources and shutdown optimization.
6. Lead and manage the implementation of first-line maintenance.
7. Review and evaluate the equipment uptime.
8. Provide recommendation to enhance maintenance strategies to improve equipment and facilities uptime.
9. Implement improvement initiatives to enhance production performance and facilities uptime, cost effectiveness and operational excellence.
10. Provide review and quality control to ensure that relevant field data are accurately reported for performance review and analysis.
11. Lead the implementation of field HSE Plans through continuous performance reviews and mitigations to meet HSE statutory and regulatory compliance and inculcate behavioural-based safety.

12. Mentor and guide staff training and conduct periodic performance review.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **SUBSEA OPERATION SPECIALIST**

A SUBSEA OPERATION SPECIALIST IS DESIGNATED TO CARRY OUT TECHNICAL AUTHORITY ACTIONS FOR SUBSEA, UMBILICAL, RISER AND FLOWLINE STRUCTURE AND CONTROL SYSTEM, AND DELIVER ENGINEERING DOCUMENTATION TO SATISFY THE DESIGN REQUIREMENTS IN COMPLIANCE.

**A Subsea Operation Specialist must be able to:**

1. Deliver engineering documentation to satisfy the design requirements in compliance.
2. Review and check documents submitted by engineering contractors.
3. Verify that the level of Technical Integrity required for the safe and long term operation of the Surface Facilities is maintained through all stages of Project development.
4. Set and maintain high standards for HSE, QA and ethical behaviours.
5. Provide technical guidance and mentoring for discipline engineers.
6. Assess the technical specification and fitness-for-purpose of the subsea controls equipment as part of the annual Condition Assessment of the client's subsea facilities.
7. Provide specialist input to repair plans for ageing subsea controls equipment; encompassing umbilical, jumpers, power and signal cables.
8. Plan and supervise offshore diagnostics testing and repair plan implementation, attending offshore worksites as appropriate.
9. Provide functional support to members of the Production Support Team.
10. Write engineering reports.
11. Prepare schedules and develop cost estimates.
12. Provide specialist controls system technical support at risk assessments.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **PRODUCTION JUNIOR TECHNICIAN**

A PRODUCTION JUNIOR TECHNICIAN IS DESIGNATED TO PERFORM ROUTINE TASK RELATED TO THE OPERATION OF A PRODUCTION PROCESS UNSER THE GUIDANCE OF EXPERIENCE TECHNICAL STAFF.

**A Production Junior Technician must be able to:**

1. Maintain detailed production records and perform general housekeeping.
2. Become familiar with company policy regarding engineering change notice processes and initiate action when discrepancies are identified.
3. Perform other duties as assigned by supervisory personnel.
4. Follow all safety and ESD procedures.
5. Follow detailed instruction as outlined in controlled documentation and manufacturing policies and procedures.
6. Adhere to company standard operating procedure.
7. Comply with safety and security procedure.
8. Perform other duties as assigned by Production Technician.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **PRODUCTION TECHNICIAN (FIELD OPERATOR)**

A PRODUCTION TECHNICIAN (FIELD OPERATOR) IS DESIGNATED TO BECOME FAMILIAR WITH COMPANY POLICY REGARDING ENGINEERING CHANGE NOTICE PROCESSES AND INITIATE ACTION WHEN DISCREPANCIES ARE IDENTIFIED.

**A Production Technician (Field Operator) must be able to:**

1. Follow detailed instruction as outlined in controlled documentation and manufacturing policies and procedures.
2. Create and maintain records for the quality department.
3. Troubleshoot and repair equipment used in the production process.
4. Calibrate and maintain any test equipment used in the process.
5. Assist engineering or development personnel in the testing of product or procedure.
6. Perform other duties as assigned by supervisory personnel.
7. Follow all safety and ESD procedures.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **PRODUCTION SENIOR TECHNICIAN (PANEL OPERATOR)**

A PRODUCTION SENIOR TECHNICIAN (PANEL OPERATOR) IS DESIGNATED TO COORDINATE ALL PRODUCTION FUNCTIONS TO INSURE THAT CUSTOMER DELIVERY AND QUALITY REQUIREMENT ARE MET IN SATISFACTORY MANNER IN ACCORDANCE WITH THE POLICIES, PRACTICES AND PROCEDURES OF THE COMPANY.

**A Production Senior Technician (Panel Operator) must be able to:**

1. Provide technical support.
2. Provide assistance and guidance to Plant Production Supervisor.
3. Work with Production Planner on daily production planning and brief safety precautionary measure/PPE during issuance of work order.
4. Ensure that occupational safety, health and environment policies are observed and complied with during the production activities.
5. Work with all departments in the use of established corrective and preventive action procedures to ensure that root cause are identified and permanent resolution is achieved.
6. Formulate, recommend and implement manufacturing or production policies and programs that are in line with overall business plan.
7. Liaise with relevant departments on annual stock take event, troubleshoot if any stock discrepancies.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PLANT PRODUCTION SUPERVISOR**

A PLANT PRODUCTION SUPERVISOR IS DESIGNATED TO MAXIMISE PRODUCTION WHILST ENSURING SAFE AND EFFICIENT OPERATION OF THE PROCESS AND UTILITY SYSTEM WITHIN THE INSTALLATION SAFETY MANAGEMENT SYSTEM AND TO THE STANDARD DEMANDED BY REGULATORY AUTHORITIES.

**A Plant Production Supervisor must be able to:**

1. Ensure the safe and efficient operating of the process facilities.
2. Direct shift process to technicians.
3. Start up and operation of the equipments.
4. Steam operation for line cleaning purposes.
5. Liaise with the Maintenance Supervisor to schedule maintenance and inspection programmed with down turn in production nominations.
6. Prepare daily, weekly and monthly reports.
7. Responsible for carrying out daily activities in the facilities including management of chemicals.
8. Ensure and coordinate with the HSSE Coordinator that the HSSE and safety management system requirement are met.
9. Perform supervisory function.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 SHIFT MANAGER**

A SHIFT MANAGER IS DESIGNATED TO REGULARLY PATROL HIS AREA AND VERIFY THAT EQUIPMENT IS PERFORMING IN THE DESIGNED, SAFE MANNER AND THAT STANDBY SPARE EQUIPMENT ARE AVAILABLE FOR IMMEDIATE USE IF REQUIRED, MAINTAIN ACCURATE AND TIMELY LOG DATA OF EQUIPMENT IN HIS AREA, CLOSELY FOLLOW THEIR PERFORMANCE AND RAISE TIMELY WORK ORDERS FOR CORRECTION WHEN REQUIRED.

**A Shift Manager must be able to:**

1. Regularly patrol his area and ensure that equipment is performing in the designed, safe manner and that standby spare equipment are available for immediate use if required.
2. Maintain accurate and timely log data of equipment in his area, closely follow their performance and raise timely work orders for correction when required.
3. React to plant process/safety emergencies promptly and carry out actions as laid down in procedures.
4. Participate in the first intention team for managing emergencies in the plant.
5. Maintain effective communication with senior operators and supervisory staff to ensure that accurate condition of field equipment is passed on.
6. Comply with Health Safety and Environment as well as Work Permit, policies and procedures.
7. Understand and comply with departmental standing instruction and procedures.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **GAS PLANT OPERATION TECHNOLOGIST**

A GAS PLANT OPERATION TECHNOLOGIST IS DESIGNATED TO ADJUST TEMPERATURE, PRESSURE, VACUUM, LEVEL, FLOW RATE, AND TRANSFER OF GAS TO MAINTAIN PROCESSES AT REQUIRED LEVELS, CONTROLLING FRACTIONING COLUMNS, COMPRESSORS, PURIFYING TOWERS AND HEAT EXCHANGERS, MONITORING EQUIPMENT FUNCTIONING, OBSERVING TEMPERATURE LEVEL, AND FLOW GAUGES, AND PERFORMING REGULAR UNIT CHECKS, MONITORING TRANSPORTATION AND STORAGE OF FLAMMABLE AND OTHER POTENTIALLY DANGEROUS PRODUCTS.

**A Gas Plant Operation Technologist must be able to:**

1. Adjust temperature, pressure, vacuum, level, flow rate, and transfer of gas to maintain processes at required levels
2. Correct problems, calculate gas ratios to detect deviations from specifications, use testing apparatus and controlling equipment to regulate flow and pressure of gas.
3. Control fractioning columns, compressors, purifying towers, heat exchangers, and related equipment in order to extract nitrogen and oxygen from air.
4. Control operation of compressors, scrubbers, evaporators, and refrigeration equipment in order to liquefy, compress, or degasify natural gas.
5. Determine causes of abnormal pressure variances, and make corrective recommendations.
6. Monitor equipment functioning, observe temperature level, and flow gauges, and perform regular unit checks, in order to ensure that all equipment is operating as it should.
7. Test gas, chemicals, and air during processing to assess factors.
8. Detect quality problems or gas or chemical leaks, change charts in recording meters, clean, maintain and repair equipment, using hand tools.
9. Monitor transportation and storage of flammable and other potentially dangerous



products to ensure that safety guidelines are followed.

10. Read log sheets to determine product demand and disposition.
11. Detect malfunctions, record, review, and compile operations records, test results, and gauge readings.
12. Perform managerial duties.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6 GAS PLANT MANAGER**

A GAS PLANT MANAGER IS DESIGNATED TO VERIFY SAFE WORKING CONDITIONS AND ENVIRONMENTAL COMPLIANCE, PERFORM ALL HOUSEKEEPING AND LANDSCAPING DUTIES TO BE COMPLETED BY PLANT MANAGER, NOTIFY IMMEDIATELY OF ANY ADVERSE CONDITIONS AFFECTING PLANT OUTPUT AND COMMUNICATE REGULARLY WITH MARKET AREA GAS OPERATION MANAGER.

**A Gas Plant Manager must be able to:**

1. Verify safe working conditions and environmental compliance.
2. Verify all housekeeping and landscaping duties to maintain standards of building and grounds appearance. This includes all janitorial duties to be completed by plant manager.
3. Verify repairs and maintenance on all facility equipment. Any 3<sup>rd</sup> party repairs must be approved by Operations Manager in advance.
4. Assist well-field technician to maintain compliance in well field.
5. Communicate timely with operations managers regarding plant status in addition to weekly reporting of plant related issues.
6. Notify immediately of any adverse conditions affecting plant output
7. Communicate regularly with Market Area Gas Operations Mgr (MA-GOM) regarding scheduled plant maintenance, compliance or well-field issues.
8. Perform all administrative duties regarding proper reporting of plant output and performance in a timely manner consistent with reporting guidelines.
9. Schedule and conduct plant tours as necessary to support good community relations.
10. Completion of special assignments/tasks as required by Operations Manager, Market Area Gas Operations Manager or Site Manager.
11. Adhere to company standard operating procedure



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7 GAS PLANT SPECIALIST**

A GAS PLANT SPECIALIST IS DESIGNATED TO PROVIDE TECHNICAL LEADERSHIP FOR PLANT OPERATION TECHNOLOGY, DEVELOP THE PLANT OPERATION ENGINEERING CAPABILITY, INFLUENCE OTHER TECHNICAL SPECIALIST AND GUIDE BUSINESS DEVELOPMENT, PROJECT AND PROPOSALS MANAGERS.

**A Gas Plant Specialist must be able to:**

1. Act as Gas Plant Specialist in winning work and delivering selected projects, with responsibility for planning and managing resources, carry out process design work and supervise the work of others.
2. Verify the health, safety environmental and technology requirements are identified and taken into account.
3. Optimise auxiliary plant loads to meet efficiency targets.
4. Take lead a role in liaising with other disciplines so projects requirements are understood and met.
5. Assist management in department administration.
6. Recommend ways to improve business performance.
7. Support colleagues in their development by providing training and mentoring.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **GAS PIPELINE TRANSMISSION JUNIOR TECHNICIAN**

A GAS PIPELINE TRANSMISSION JUNIOR TECHNICIAN IS DESIGNATED TO PERFORM ROUTINE TASK RELATED TO THE OPERATION OF A PRODUCTION PROCESS UNDER THE GUIDANCE OF EXPERIENCE TECHNICAL STAFF.

**A Gas Pipeline Transmission Junior Technician must be able to:**

1. Maintain detailed production records and perform general housekeeping.
2. Become familiar with company policy regarding engineering change notice processes and initiate action when discrepancies are identified.
3. Perform other duties as assigned by supervisory personnel.
4. Follow all safety and ESD procedures.
5. Follow detailed instruction as outlined in controlled documentation and manufacturing policies and procedures.
6. Perform other duties as assigned by Gas Pipeline Transmission Technician.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **GAS PIPELINE TRANSMISSION TECHNICIAN**

A GAS PIPELINE TRANSMISSION TECHNICIAN IS DESIGNATED TO HANDLING SURVEY TEAM, MICROWAVE PROJECTIONS FOR THE ADDITIONAL SITE ROLLOUT AND CAPACITY, REQUIREMENT AND ENHANCEMENT PLANNING, GOOD UNDERSTANDING OF PROPAGATION PARAMETERS AND RELATED ITU RECOMMENDATIONS, GOOD UNDERSTANDING OF TRANSMISSION EQUIPMENT AND INVOLVEMENT IN LOOP PROTECTION FOR NETWORK.

**A Gas Pipeline Transmission Technician must be able to:**

1. Transmission engineering in designing backbone links.
2. Transmission network design, link budgeting for transmission links.
3. Capacity Planning of the Network.
4. Planning of network in city and backbone to have a reliable network.
5. Handling Survey Team.
6. Good understanding of propagation parameters and related ITU recommendations.
7. Good understanding of transmission equipment.
8. Involvement in Loop Protection for network.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 3**

**GAS PIPELINE TRANSMISSION SENIOR TECHNICIAN  
(FIELD OPERATOR)**

A GAS PIPELINE TRANSMISSION SENIOR TECHNICIAN IS DESIGNATED TO PROVIDE TROUBLESHOOTING, PROGRAMMING AND MAINTENANCE FOR CUSTOMER DELIVERY STATION PNEUMATIC AND ELECTRONIC CONTROLLERS, RELAYS, AND METERS, ASSIST PROJECT AND CONTROLS ENGINEERING IN METER STATION AND CONTROL DESIGN, COORDINATE TRAINING FOR I&E SKILL SETS IN THE GROUP, DEVELOP MAINTENANCE PROCEDURES, SERVE AS TECHNICAL RESOURCE DURING CUSTOMER MEETINGS.

**A Gas Pipeline Transmission Senior Technician must be able to:**

1. Provide leadership as calibration and meter specialist providing field support in the calibration and continuous improvement of meter calibrations.
2. Provide troubleshooting, programming and maintenance for customer delivery station pneumatic and electronic controllers, relays, and meters.
3. Provide troubleshooting, programming and maintenance for cellular and hard line phone modem set up and configuration for multiple communications systems and interface between plants, customer meters, field controls, PBS, SCADA and Leak Detection Systems.
4. Assist Project and Controls Engineering in meter station and control design.
5. Coordinate training for I&E skill sets in the group.
6. Develop maintenance procedures.
7. Serve as technical resource during customer meeting.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **GAS PIPELINE TRANSMISSION SUPERVISOR**

A GAS PIPELINE TRANSMISSION SUPERVISOR IS DESIGNATED TO SUPERVISE EMPLOYEES AND CONTRACTORS ENGAGED IN THE OPERATION AND MAINTENANCE OF NATURAL GAS HANDLING FACILITIES AND RELATED EQUIPMENT, PERFORM THE SAFE, RELIABLE AND EFFICIENT OPERATION, MONITOR AND INSPECT JOB SITES, FACILITIES AND DATABASES, MONITOR FLOWS, PRESSURES, AND GAS QUALITIES ACROSS THE SYSTEM, PERFORM PIPELINE INTEGRITY AND TO OPTIMISE MANPOWER AND EQUIPMENT PERFORMANCE AND AVAILABILITY.

**A Gas Pipeline Transmission Supervisor must be able to:**

1. Supervise employees and contractors engaged in the operation and maintenance of natural gas handling facilities and related equipment.
2. Perform the safe, reliable and efficient operation of natural gas transmission and storage facilities and equipment.
3. Monitor and inspect job sites, facilities and databases to ensure company procedures are followed and that compliance is maintained relative to all applicable local, state and federal regulatory requirements.
4. Monitor flows, pressures, and gas qualities across the system using computerised control and communication system.
5. Give overall supervision of internal source and contractors' activity to perform operation and maintenance of all pipelines, pipeline, flow line, piping and equipment within an assigned area.
6. Perform pipeline integrity and to optimise manpower and equipment performance and availability.
7. Perform supervisory function.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **GAS PIPELINE TRANSMISSION CHIEF MANAGER**

A GAS PIPELINE TRANSMISSION CHIEF MANAGER IS DESIGNATED TO PERFORM CONTINUITY OF GAS SERVICE BY ANTICIPATING, DETERMINING AND DIRECTING FULFILLMENT OF QUANTITY AND PRESSURE REQUIREMENTS IN A SAFE, RELIABLE, AND EFFICIENT MANNER, DIRECT THE ANALYSIS OF HISTORIC AND PROJECTED GAS SUPPLY AND REQUIREMENTS DATA FOR MODELING, DEVELOPING AND RECOMMENDING FACILITY AND OPERATIONAL PLANS, MONITOR GAS QUANTITIES, AND COORDINATE AND ASSIST IN THE OPERATION OF GAS CONTROL.

**A Gas Pipeline Transmission Chief Manager must be able to:**

1. Perform continuity of gas service by anticipating, determining and directing fulfilment of quantity and pressure requirements in a safe, reliable, and efficient manner.
2. Direct the analysis of historic and projected gas supply and requirements data for modelling, developing and recommending facility and operational plans.
3. Monitor gas quantities to ensure pressures do not exceed Maximum Allowable Operating Pressures (MAOP).
4. Coordinate and assist in the operation of gas control.
5. Give directions, assist and guide gas controllers on complex, non-routine system operations.
6. Comply with Health Safety and Environment as well as Work Permit, policies and procedures.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **GAS PIPELINE TRANSMISSION REGIONAL MANAGER**

A GAS PIPELINE TRANSMISSION REGIONAL MANAGER IS DESIGNATED TO OVERSEA AND LEAD TRANSMISSION GAS CONTROL, COMPRESSION SYSTEMS, AND FACILITY OPTIMISATION AND PIPELINE FUEL PROCESS FUNCTIONS, DIRECT AND ENSURE THE ATTAINMENT OF OBLIGATIONS TO CUSTOMERS, SYSTEM RELIABILITY, SAFE OPERATIONS, AND SYSTEM EFFICIENCY, MANAGE LARGE PROJECT SCOPING, COST ESTIMATING, PLANNING AND SCHEDULING, COST MONITORING, AND PROGRESS REPORTING.

**A Gas Pipeline Transmission Regional Manager must be able to:**

1. Oversea and lead transmission gas control, compression systems, and facility optimisation and pipeline fuel process functions.
2. Direct and ensure the attainment of obligations to customers, system reliability, safe operations, and system efficiency.
3. Manage large project scoping, cost estimating, planning and scheduling, cost monitoring, and progress reporting.
4. Prepare RFPs, bid documents, and construction contracts.
5. Comply with Health Safety and Environment as well as Work Permit, policies and procedures.
6. Pipeline integrity assessments and pipeline encroachments.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **GAS PIPELINE TRANSMISSION TECHNOLOGIST**

A GAS PIPELINE TRANSMISSION TECHNOLOGIST IS DESIGNATED TO DEVELOP AND DESIGN CONSTRUCTION, OPERATING, AND MAINTENANCE PROPOSALS, LEAD MULTIPLE CAPITAL PROJECTS AND IMPROVEMENT PROJECTS, LEAD THE FACILITIES DEVELOPMENT PROCESS AND ENSURE STREAMLINED COMMUNICATIONS, AND ACHIEVE INTEGRATED SUPPORT ACROSS DISCIPLINES.

**A Gas Pipeline Transmission Technologist must be able to:**

1. Develop and design construction, operating, and maintenance proposals for gas pipelines, storage facilities, compressor stations, and other installations.
2. Work on day-to-day operational issues with the gas system, develop cost-effective solutions, provide recommendations, and implement resolutions.
3. Lead multiple capital projects and improvement projects, by estimating and scheduling projects, working on permit applications and reviews.
4. Make sure all installations and projects follow with Department of Transportation (DOT) regulations, and all safety regulations.
5. Lead the facilities development process and ensure streamlined communications.
6. Achieve integrated support across disciplines within organisation and with outside contacts.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **GAS PLANT TRANSMISSION SPECIALIST**

A GAS PLANT TRANSMISSION SPECIALIST IS DESIGNATED TO MANAGE SUPERVISORY AND/OR NON-SUPERVISORY EMPLOYEES AND CONTRACTORS, ENGAGED IN THE OPERATION AND MAINTENANCE OF NATURAL GAS HANDLING FACILITIES AND RELATED EQUIPMENT AT MAJOR WORK LOCATIONS, ENSURE THE SAFE, RELIABLE AND EFFICIENT OPERATION OF NATURAL GAS TRANSMISSION AND STORAGE FACILITIES AND EQUIPMENT, AND MONITOR AND INSPECT JOB SITES, FACILITIES AND DATABASES.

**A Gas Plant Transmission Specialist must be able to:**

1. Manage supervisory and/or non-supervisory employees and contractors.
2. Engaged in the operation and maintenance of natural gas handling facilities and related equipment at major work locations.
3. Ensure the safe, reliable and efficient operation of natural gas transmission and storage facilities and equipment.
4. Monitor and inspect job sites, facilities and databases to ensure company procedures are followed and that compliance is maintained relative to all applicable local, state and federal regulatory requirements.
5. Coordinate maintenance and outage schedules with field operations and other involved departments.
6. Develop and monitor budgets for Capital and O&M in operating area.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **PRODUCTION JUNIOR TECHNICIAN**

A PRODUCTION JUNIOR TECHNICIAN IS DESIGNATED TO MAINTAIN DETAILED PRODUCTION RECORDS AND PERFORM GENERAL HOUSEKEEPING, BECOME FAMILIAR WITH COMPANY POLICY REGARDING ENGINEERING CHANGE NOTICE PROCESSES AND INITIATE ACTION WHEN DISCREPANCIES ARE IDENTIFIED.

**A Production Junior Technician must be able to:**

1. Maintain detailed production records and perform general housekeeping.
2. Become familiar with company policy regarding engineering change notice processes and initiate action when discrepancies are identified.
3. Perform other duties as assigned by supervisory personnel.
4. Follow detailed instruction as outlined in controlled documentation and manufacturing policies and procedures.
5. Perform other duties as assigned by Production Technician.
6. Adhere to company standard operating procedure.
7. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **PRODUCTION TECHNICIAN (FIELD OPERATOR)**

A PRODUCTION TECHNICIAN (FIELD OPERATOR) IS DESIGNATED TO BECOME FAMILIAR WITH COMPANY POLICY REGARDING ENGINEERING CHANGE NOTICE PROCESSES AND INITIATE ACTION WHEN DISCREPANCIES ARE IDENTIFIED.

**A Production Technician (Field Operator) must be able to:**

1. Follow detailed instruction as outlined in controlled documentation and manufacturing policies and procedures.
2. Create and maintain records for the quality department.
3. Troubleshoot and repair equipment used in the production process.
4. Calibrate and maintain any test equipment used in the process.
5. Assist engineering or development personnel in the testing of product or procedure.
6. Perform other duties as assigned by supervisory personnel.
7. Follow all safety and ESD procedures.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **PRODUCTION SENIOR TECHNICIAN (PANEL OPERATOR)**

A PRODUCTION SENIOR TECHNICIAN (PANEL OPERATOR) IS DESIGNATED TO COORDINATE ALL PRODUCTION FUNCTIONS TO INSURE THAT CUSTOMER DELIVERY AND QUALITY REQUIREMENT ARE MET IN SATISFACTORY MANNER IN ACCORDANCE WITH THE POLICIES, PRACTICES AND PROCEDURES OF THE COMPANY.

**A Production Senior Technician (Panel Operator) must be able to:**

1. Provide technical support.
2. Provide assistance and guidance to Plant Production Supervisor.
3. Work with Production Planner on daily production planning and brief safety precautionary measure/PPE during issuance of work order.
4. Ensure that occupational safety, health and environment policies are observed and complied with during the production activities.
5. Work with all departments in the use of established corrective and preventive action procedures to ensure that root cause are identified and permanent resolution is achieved.
6. Formulate, recommend and implement manufacturing or production policies and programs that are in line with overall business plan.
7. Liaise with relevant departments on annual stock take event, troubleshoot if any stock discrepancies.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 4  
PLANT PRODUCTION SUPERVISOR**

A PLANT PRODUCTION SUPERVISOR IS DESIGNATED TO MAXIMISE PRODUCTION WHILST ENSURING SAFE AND EFFICIENT OPERATION OF THE PROCESS AND UTILITY SYSTEM WITHIN THE INSTALLATION SAFETY MANAGEMENT SYSTEM AND TO THE STANDARD DEMANDED BY REGULATORY AUTHORITIES.

**A Plant Production Supervisor must be able to:**

1. Perform the safe and efficient operating of the process facilities.
2. Direct shift process to technicians.
3. Start up and operation of the equipments.
4. Steam operation for line cleaning purposes.
5. Liaise with the Maintenance Supervisor to schedule maintenance and inspection programmed with down turn in production nominations.
6. Prepare daily, weekly and monthly reports.
7. Responsible for carrying out daily activities in the facilities including management of chemicals.
8. Perform and coordinate with the HSSE Coordinator that the HSSE and safety management system requirement are met.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5 SHIFT MANAGER**

A SHIFT MANAGER IS DESIGNATED TO MONITOR AND ENSURE THE EFFICIENT OPERATION OF THE EQUIPMENT IN HIS DESIGNATED AREA, HANDLING OVER TO THE INCOMING SHIFT IN A SYSTEMATIC AND AN ORDERLY MANNER.

**A Shift Manager must be able to:**

1. Regularly patrol his area and ensure that equipment is performing in the designed, safe manner and that standby spare equipment are available for immediate use if required.
2. Maintain accurate and timely log data of equipment in his area, closely follow their performance and raise timely work orders for correction when required.
3. Prepare and hand over equipment in a safe manner to maintenance staff for repair and take back in service after checks as per PTW procedure.
4. React to plant process/safety emergencies promptly and carry out actions as laid down in procedures.
5. Participate in the first intention team for managing emergencies in the plant.
6. Maintain effective communication with senior operators and supervisory staff to ensure that accurate condition of field equipment is passed on.
7. Comply with Health Safety and Environment as well as Work Permit, policies and procedures.
8. Understand and comply with departmental standing instruction and procedures.
9. Carry out field functional test of standby and safety/protective devices as per schedule.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **OIL REFINERY PLANT OPERATION MANAGER**

AN OIL REFINERY PLANT OPERATION MANAGER IS DESIGNATED TO VERIFY THE CONTINUOUS IMPROVEMENT OF OPERATIONS PERFORMANCE IN ORDER TO ACHIEVE THE FLOW COST AND HIGH RELIABILITY TARGETS.

**An Oil Refinery Plant Operation Manager must be able to:**

1. High degree of the operating reliability.
2. Effectively manage assets.
3. Verify operations personnel are properly trained.
4. Operating procedures are in place and followed.
5. Required internal and regulatory records are accurately maintained.
6. Technical and safeguarding integrity of the facilities are not compromised by lack of maintenance, changes and other types of technical modifications.
7. Correct reporting of operational data.
8. Availability and correct record keeping of spares and consumables for laboratory.
9. Participate in continuous improvement programmes in the search for operations excellence.
10. Supervise lab activities.
11. Verify compliance with the operating procedures.
12. Meet succession needs of the operations organisation by establishing succession plans and developing operations staff.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **OIL REFINERY PLANT OPERATION TECHNOLOGIST**

AN OIL REFINERY PLANT OPERATION TECHNOLOGIST IS DESIGNATED TO PROVIDE PROCESS DESIGN ANALYSIS TO ENABLE SAFE AND EFFICIENT IMPLEMENTATION OF MODIFICATIONS WITHIN PROJECTS TARGETS AND ASSIST IN THE PREPARATION OF PROJECT/OPERATIONAL WORK PLANS.

**An Oil Refinery Plant Operation Technologist must be able to:**

1. Prepare/review/follow up modifications dossiers to allow the safe implementation of construction/commissioning/operation works.
2. Review/update operating procedures.
3. Analyse and resolve production/process issues utilising the appropriate techniques, liaise with other departments and group/external specialist where necessary.
4. Provide other department with technical/operational input.
5. Prioritise work in line with team and company objectives.
6. Conduct periodic site Process Safety reviews/audits in line with Operation schedule.
7. Review and respond to Technical Queries as required.
8. Review and approve shutdown leak test work packs prepared by 3<sup>rd</sup> parties.
9. Participate in regular performance management and progress dialogues with Chief Facilities.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **OIL REFINERY PLANT SPECIALIST**

AN OIL REFINERY PLANT SPECIALIST IS DESIGNATED TO CARRY OUT PROCESS DESIGN WORK AND SUPERVISING THE WORK OF OTHERS, VERIFY THE HEALTH, SAFETY ENVIRONMENTAL AND TECHNOLOGY REQUIREMENTS ARE IDENTIFIED AND TAKEN INTO ACCOUNT, AND OPTIMISE AUXILIARY PLANT LOADS TO MEET EFFICIENCY TARGETS.

**An Oil Refinery Plant Specialist must be able to:**

1. Act as Lead Plant Operation Engineer in winning work and delivering selected projects, with responsibility for planning and managing resources.
2. Carry out process design work and supervising the work of others.
3. Verify the health, safety environmental and technology requirements are identified and taken into account.
4. Optimise auxiliary plant loads to meet efficiency targets.
5. Take lead a role in liaising with other disciplines so projects requirements are understood and met.
6. Assist management in department administration.
7. Recommend ways to improve business performance.
8. Support colleagues in their development by providing training and mentoring.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **PETROCHEMICAL PLANT OPERATION MANAGER**

A PETROCHEMICAL PLANT OPERATION MANAGER IS DESIGNATED TO VERIFY THE CONTINUOUS IMPROVEMENT OF OPERATIONS PERFORMANCE IN ORDER TO ACHIEVE THE FLOW COST AND HIGH RELIABILITY TARGETS.

**A Petrochemical Plant Operation Manager must be able to:**

1. Save operation.
2. High degree of the operating reliability.
3. Effective management of assets.
4. Ensure operations personnel are properly trained.
5. Operating procedures are in place and followed.
6. Required internal and regulatory records are accurately maintained.
7. Technical and safeguarding integrity of the facilities are not compromised by lack of maintenance, changes and other types of technical modifications.
8. Correct reporting of operational data.
9. Availability and correct record keeping of spares and consumables for laboratory.
10. Participate in continuous improvement programmes in the search for operations excellence.
11. Liaise with other facilities.
12. Supervise lab activities.
13. Verify compliance with the operating procedures.
14. Meet succession needs of the operations organisation by establishing succession plans and developing operations staff.
15. Act as a mentor.
16. Adhere to company standard operating procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **PETROCHEMICAL PLANT OPERATION TECHNOLOGIST**

A PETROCHEMICAL PLANT OPERATION TECHNOLOGIST IS DESIGNATED TO PROVIDE PROCESS DESIGN ANALYSIS TO ENABLE SAFE AND EFFICIENT IMPLEMENTATION OF MODIFICATIONS WITHIN PROJECTS TARGETS AND ASSIST IN THE PREPARATION OF PROJECT/OPERATIONAL WORK PLANS.

**A Petrochemical Plant Operation Technologist must be able to:**

1. Prepare/review/follow up modifications dossiers to allow the safe implementation of construction/commissioning/operation works.
2. Review/update operating procedures.
3. Analyse and resolve production/process issues utilising the appropriate techniques, liaise with other departments and group/external specialist where necessary.
4. Provide other department with technical/operational input.
5. Prioritise work in line with team and company objectives.
6. Conduct periodic site Process Safety reviews/audits in line with Operation schedule.
7. Review and respond to Technical Queries as required.
8. Review and approve shutdown leak test work packs prepared by 3<sup>rd</sup> parties.
9. Participate in regular performance management and progress dialogues with Chief Facilities.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PETROCHEMICAL PLANT SPECIALIST**

A PETROCHEMICAL PLANT SPECIALIST IS DESIGNATED TO MANAGE AND COORDINATE MULTIDISCIPLINE ENGINEERING ACTIVITIES TO ENSURE PROJECTS ARE EXECUTED IN A SAFE, EFFICIENT, COST EFFECTIVE AND TIMELY MANNER.

**A Petrochemical Plant Specialist must be able to:**

1. Act as technical coordination interface with client to ensure client's expectations are satisfied.
2. Maintaining a sense of a team within the Petrochemical Plant Operation discipline and promoting collaborative work with others in the office.
3. Maintains HSE focus within the team to ensure OHSE requirements included in design and procurement.
4. Client relationship.
5. Maintain and build healthy client relationships.
6. Identify documents, communicate and meet the client's requirements Commercial Management.
7. Proactively resolves performance, scope and schedule issues with the Client as they arise.
8. Compliance with requirement of the contract.
9. Comply with WP code and Conduct.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **GAS PROCESSING LAB JUNIOR TECHNICIAN**

A GAS PROCESSING LAB JUNIOR TECHNICIAN IS DESIGNATED TO SUPERVISE SUBORDINATES FOR COLLECTION OF GAS SAMPLES, CARRY OUT PHYSICAL AND CHEMICAL TESTS, UPKEEP OF ALL LABORATORY AREAS, CARRY OUT DAILY ANALYSIS, STANDARDISATION OF CHEMICAL SOLUTIONS AND REAGENTS, AND PREPARE ANALYTICAL REPORTS.

**A Gas Processing Lab Junior Technician must be able to:**

1. Monitor subordinates for collection of gas samples.
2. Perform physical and chemical tests on chemicals and hydrocarbons used or produced by Gas Processing operations.
3. Upkeep of all laboratory areas.
4. Standardise the chemical solutions and reagents.
5. Carry out the daily sampling, analysis of gas, liquid streams as per schedule.
6. Perform calibration and routine maintenance of lab equipment.
7. Perform variety of day to day duties including the preparation of detailed analytical reports.
8. Perform full range of natural gas feedstock analysis.
9. Prepare management plan for laboratory spare parts and consumables.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **GAS PROCESSING LAB TECHNICIAN**

A GAS PROCESSING LAB TECHNICIAN IS DESIGNATED TO CONDUCT THE SAMPLING OF GASES SAMPLES, PERFORM PHYSICAL AND CHEMICAL TEST ON FINISHED PRODUCTS, HANDLE THE CHEMICAL COMPOUND, AND MONITOR AND GUIDE JUNIOR LABORATORY TECHNICIAN.

**A Gas Processing Lab Technician must be able to:**

1. Conduct the sampling of gases, LPG, high pressure gas/liquid samples, acid gas and liquid sulphur.
2. Perform physical and chemical tests on finished products or at intermediate stage and incoming feed streams.
3. Handle the chemicals compound which commonly used in the process.
4. Adheres to international standard testing methods like ASTM, UOP, IP, SMS, HACH, LOVIBOND, APHA and USEPA.
5. Perform any assignment as may be given from time to time by superior.
6. Monitor and guide junior laboratory technician.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **GAS PROCESSING LAB SENIOR TECHNICIAN**

A GAS PROCESSING LAB SENIOR TECHNICIAN IS DESIGNATED TO SUPERVISE SUBORDINATES, CARRY OUT PHYSICAL AND CHEMICAL TESTS, UPKEEP OF ALL LABORATORY AREAS, CARRY OUT DAILY ANALYSIS, STANDARDISATION OF CHEMICAL SOLUTIONS AND REAGENTS AND PREPARE ANALYTICAL REPORTS.

**A Gas Processing Lab Senior Technician must be able to:**

1. Monitor subordinates for collection of gas samples.
2. Perform physical and chemical tests on chemicals and hydrocarbons used or produced by Gas Processing operations.
3. Upkeep of all laboratory areas.
4. Standardise the chemical solutions and reagents.
5. Carry out the daily sampling, analysis of gas, liquid streams as per schedule.
6. Perform calibration and routine maintenance of lab equipments.
7. Perform variety of day to day duties including the preparation of detailed analytical reports.
8. Perform full range of natural gas feedstock analysis.
9. Prepare management plan for laboratory spare parts and consumables.
10. Monitor and guide laboratory technician.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **GAS PROCESSING LAB SUPERVISOR**

A GAS PROCESSING LAB SUPERVISOR IS DESIGNATED TO MONITOR THE DAY TO DAY OPERATION OF THE LABORATORY, CONDUCT PLANNED AND/OR SPONTANEOUS TOURS OF THE FACILITY, COUNSEL EMPLOYEES WITH REGARD TO PROBLEMS ENCOUNTERED, OPERATE VARIOUS LABORATORY AND OFFICE EQUIPMENT.

**A Gas Processing Lab Supervisor must be able to:**

1. Monitor the day to day operation of the laboratory.
2. Operate various laboratory and office equipment.
3. Provide personnel shifts to accommodate fluctuating workloads.
4. Counsel employees with regard to problems encountered in daily operations.
5. Check and transfer data as necessary and takes steps to correct possibly inaccurate data.
6. Conduct planned or spontaneous tours of the facility.
7. Maintain telephone communication with various agencies and individuals concerning status of samples.
8. Perform supervisory function.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 5**

**GAS PROCESSING ASSISTANT CHEMIST**

A GAS PROCESSING ASSISTANT CHEMIST IS DESIGNATED TO ASSIST CHEMIST TO DIRECT AND SUPERVISE GAS EVALUATION STUDIES, VERIFY THE AVAILABILITY OF CHEMICAL, EQUIPMENT, GLASSWARE AND SPARES, PREPARE LABORATORY TEST METHOD, PROVIDE GUIDELINE FOR THE PREPARATIONS OF SPECIAL BLENDS, REVIEW AND APPROVE TESTING FOR PREPARATION OF PRODUCTS, AND TRAIN LABORATORY PERSONNEL ON THE OPERATION.

**A Gas Processing Assistant Chemist must be able to:**

1. Assist chemist to direct and supervise gas evaluation studies.
2. Help chemist to verify the availability of chemicals, equipment, glassware and spares for the Laboratory.
3. Assist chemist to uses company laboratory software program for Lab equipment maintenance requirements, inventory control of Laboratory consumables, and preparation of purchase requisitions.
4. Help chemist to prepare laboratory test methods based on vendor's equipment manuals and methods.
5. Assist chemist to provide guidelines for the preparations of special blends needed for various product studies.
6. Help chemist to review and approve testing for preparation of quality certificates of finished petroleum products.
7. Assist chemist to train laboratory personnel on the operation of sophisticated computerised laboratory.
8. Help chemist to hold periodic training of Laboratory staff to update them on the latest analytical techniques in testing methods.
9. Assist Chemist to prepare capital and operating budget based on laboratory objectives.

10. Assist chemist to prepare purchase requisitions for the procurement of equipment and materials for Laboratory use.
11. Help Chemist to evaluate bids for technical acceptability of Laboratory equipment, glassware, chemicals and other consumables.
12. Assist Chemist to evaluate non-compliance reports submitted by auditors and generate reports for corrective actions.
13. Help chemist organise activities required for retention samples for shore tanks, loading lines and vessels.
14. Adhere to company standard operating procedure.
15. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **GAS PROCESSING TECHNOLOGIST**

A GAS PROCESSING TECHNOLOGIST IS DESIGNATED TO DIRECT AND SUPERVISE GAS EVALUATION STUDIES, VERIFY THE AVAILABILITY OF CHEMICAL, EQUIPMENT, GLASSWARE AND SPARES, PREPARE LABORATORY TEST METHOD, PROVIDE GUIDELINE FOR THE PREPARATIONS OF SPECIAL BLENDS, REVIEW AND APPROVE TESTING FOR PREPARATION OF PRODUCTS, AND TRAIN LABORATORY PERSONNEL ON THE OPERATION.

**A Gas Processing must be able to:**

1. Direct and supervise gas evaluation studies.
2. Verify the availability of chemicals, equipment, glassware and spares for the Laboratory.
3. Use company laboratory software program for Lab equipment maintenance requirements, inventory control of Laboratory consumables and preparation of purchase requisitions.
4. Prepare laboratory test methods based on vendor's equipment manuals and methods.
5. Provide guidelines for the preparations of special blends needed for various product studies.
6. Review and approve testing for preparation of quality certificates of finished petroleum products.
7. Train laboratory personnel on the operation of sophisticated computerised laboratory.
8. Hold periodic training of Laboratory staff to update them on the latest analytical techniques in testing methods.
9. Prepare capital and operating budget based on laboratory objectives.
10. Prepare purchase requisitions for the procurement of equipment and materials for Laboratory use.

11. Evaluate bids for technical acceptability of Laboratory equipment, glassware, chemicals and other consumables.
12. Evaluate non-compliance reports submitted by auditors and generate reports for corrective actions.
13. Organise activities required for retention samples for shore tanks, loading lines and vessels.
14. Perform managerial duties.
15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **GAS PROCESSING SPECIALIST**

A GAS PROCESSING SPECIALIST SHOULD BE ABLE TO EVALUATE COMMERCIAL OPERATIONS, PARTICIPATE IN R&D DELIVERY AND TECHNOLOGY IMPROVEMENT PROJECTS, BRINGING COMMERCIAL PERSPECTIVES AND KEY, MENTOR LESS EXPERIENCED ENGINEERS AND SCIENTISTS, CONTRIBUTE TO SHORT AND LONG TERM DEVELOPMENT PROJECT IDEAS IN EXISTING MARKETS TO IMPROVE QUALITY OR TO MEET NEW CUSTOMER GOALS.

**A Gas Processing Specialist must be able to:**

1. Evaluate commercial operations, through remote monitoring or on-site troubleshooting gas processing technology.
2. Participate in R&D delivery and technology improvement projects, bringing commercial perspectives.
3. Provide sales support including technical and commercial perspective, recommendations on guarantees, start-up support requirements and commercial operating experience.
4. Lead guarantee resolution projects by coordinating problem investigation efforts and developing solutions.
5. Create operating procedures and process improvement techniques.
6. Mentor less experienced engineers and scientists.
7. Contribute to short and long term development project ideas in existing markets.
8. Generate idea on the changes and improvement in technologies supported via innovation.
9. Participate in engineering review meetings for new units and revamps.
10. Develop, prepare, update and present training materials.
11. Develop, prepare and update training, general operating, and process technology manuals.

12. Ensure that Engineering Design Critique Reports prepared by advisor are reviewed and appropriate design and technical modifications.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **OIL PROCESSING LAB JUNIOR TECHNICIAN**

AN OIL PROCESSING LAB JUNIOR TECHNICIAN IS DESIGNATED TO SUPERVISE SUBORDINATES FOR COLLECTION OF OIL SAMPLES, CARRY OUT PHYSICAL AND CHEMICAL TESTS, UPKEEP OF ALL LABORATORY AREAS, CARRY OUT DAILY ANALYSIS, STANDARDISATION OF CHEMICAL SOLUTIONS AND REAGENTS AND PREPARE ANALYTICAL REPORTS.

**A Oil Processing Lab Junior Technician must be able to:**

1. Monitor subordinates for collection of oil samples.
2. Perform physical and chemical tests on chemicals and hydrocarbons used or produced by oil processing operations.
3. Upkeep of all laboratory areas.
4. Standardise the chemical solutions and reagents.
5. Carry out the daily sampling, analysis of oil, liquid streams as per schedule.
6. Perform calibration and routine maintenance of lab equipments.
7. Perform variety of day to day duties including the preparation of detailed analytical reports.
8. Perform full range of natural gas feedstock analysis.
9. Prepare management plan for laboratory spare parts and consumables.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **OIL PROCESSING LAB TECHNICIAN**

AN OIL PROCESSING LAB TECHNICIAN IS DESIGNATED TO PERFORM ROUTINE AND NON-ROUTINE LABORATORY ANALYSIS, PREPARE STANDARD CHEMICAL STOCK SOLUTIONS AND REAGENTS, PERFORM ROUTINE LABORATORY ANALYSIS, CONDUCT CHEMICAL TESTING OF RAW AND PACKAGING MATERIALS.

**An Oil Processing Lab Technician will be able to:**

1. Perform routine and non-routine laboratory analysis, wet chemistry and polymers testing
2. Use analytical instruments to address quality assurance and quality control issues.
3. Prepare standard chemical stock solutions and reagents.
4. Perform routine laboratory analysis on products and process samples.
5. Conduct chemical testing of raw and packaging materials.
6. Conduct inspection of in-process and finished products.
7. Check and approve labels of finished products.
8. Generate reports for test results on every raw material and finished product tested.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **OIL PROCESSING LAB SENIOR TECHNICIAN**

AN OIL PROCESSING LAB SENIOR TECHNICIAN IS DESIGNATED TO SUPERVISE SUBORDINATES FOR COLLECTION OF OIL SAMPLES, CARRY OUT PHYSICAL AND CHEMICAL TESTS, UPKEEP OF ALL LABORATORY AREAS, CARRY OUT DAILY ANALYSIS, STANDARDISATION OF CHEMICAL SOLUTIONS AND REAGENTS AND PREPARE ANALYTICAL REPORTS.

**An Oil Processing Lab Senior Technician must be able to:**

1. Monitor subordinates for collection of oil samples.
2. Perform physical and chemical tests on chemicals and hydrocarbons used or produced by oil refinery operations.
3. Upkeep of all laboratory areas.
4. Standardise the chemical solutions and reagents.
5. Carry out the daily sampling, analysis of oil, and liquid streams as per schedule.
6. Perform calibration and routine maintenance of lab equipments.
7. Perform variety of day to day duties including the preparation of detailed analytical reports.
8. Perform full range of natural gas feedstock analysis.
9. Prepare management plan for laboratory spare parts and consumables.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **OIL PROCESSING LAB SUPERVISOR**

AN OIL PROCESSING LAB SUPERVISOR IS DESIGNATED TO MONITOR THE DAY TO DAY OPERATION OF THE LABORATORY, CONDUCTS PLANNED AND/OR SPONTANEOUS TOURS OF THE FACILITY, COUNSEL EMPLOYEES WITH REGARD TO PROBLEMS ENCOUNTERED, AND OPERATE VARIOUS LABORATORY AND OFFICE EQUIPMENT.

**An Oil Processing Laboratory Supervisor must be able to:**

1. Monitor the day to day operation of the laboratory.
2. Operate various laboratory and office equipment.
3. Provide personnel shifts to accommodate fluctuating workloads.
4. Counsel employees with regard to problems encountered in daily operations.
5. Check and transfer data as necessary and take steps to correct possibly inaccurate data.
6. Conduct planned or spontaneous tours of the facility.
7. Maintain telephone communication with various agencies and individuals concerning status of samples.
8. Perform supervisory function.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **OIL REFINERY ASSISTANT CHEMIST**

AN OIL REFINERY ASSISTANT CHEMIST IS DESIGNATED TO ASSIST CHEMIST TO DIRECT AND SUPERVISE OIL EVALUATION STUDIES, VERIFY THE AVAILABILITY OF CHEMICAL, EQUIPMENT, GLASSWARE AND SPARES, PREPARE LABORATORY TEST METHOD, PROVIDE GUIDELINE FOR THE PREPARATIONS OF SPECIAL BLENDS, REVIEW AND APPROVE TESTING FOR PREPARATION OF PRODUCTS, AND TRAIN LABORATORY PERSONNEL ON THE OPERATION.

**An Oil Refinery Assistant Chemist must be able to:**

1. Assist chemist to direct and supervise oil evaluation studies.
2. Help chemist to verify the availability of chemicals, equipment, glassware and spares for the Laboratory.
3. Assist chemist to use company laboratory software program for Lab equipment maintenance requirements, inventory control of Laboratory consumables and preparation of purchase requisitions.
4. Help chemist to prepare laboratory test methods based on vendor's equipment manuals and methods.
5. Assist chemist to provide guidelines for the preparations of special blends needed for various product studies.
6. Help chemist to review and approve testing for preparation of quality certificates of finished petroleum products.
7. Assist chemist to train laboratory personnel on the operation of sophisticated computerised laboratory.
8. Help chemist to hold periodic training of Laboratory staff to update them on the latest analytical techniques in testing methods.
9. Assist chemist to prepare capital and operating budget based on laboratory objectives.

10. Assist chemist to prepare purchase requisitions for the procurement of equipment and materials for Laboratory use.
11. Help chemist to evaluate bids for technical acceptability of Laboratory equipment, glassware, chemicals and other consumables.
12. Assist chemist to evaluate non-compliance reports submitted by auditors and generate reports for corrective actions.
13. Help chemist organise activities required for retention samples for shore tanks, loading lines and vessels.
14. Adhere to company standard operating procedure.
15. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **OIL REFINERY TECHNOLOGIST**

AN OIL REFINERY TECHNOLOGIST IS DESIGNATED TO DIRECT AND SUPERVISE GAS EVALUATION STUDIES, VERIFY THE AVAILABILITY OF CHEMICAL, EQUIPMENT, GLASSWARE AND SPARES, PREPARE LABORATORY TEST METHOD, PROVIDE GUIDELINE FOR THE PREPARATIONS OF SPECIAL BLENDS, REVIEW AND APPROVE TESTING FOR PREPARATION OF PRODUCTS, AND TRAIN LABORATORY PERSONNEL ON THE OPERATION.

**An Oil Refinery Technologist must be able to:**

1. Direct and supervise gas evaluation studies.
2. Verify the availability of chemicals, equipment, glassware and spares for the Laboratory.
3. Use company laboratory software program for Lab equipment maintenance requirements, inventory control of Laboratory consumables and preparation of purchase requisitions.
4. Prepare laboratory test methods based on vendor's equipment manuals and methods.
5. Provide guidelines for the preparations of special blends needed for various product studies.
6. Reviews and approve testing for preparation of quality certificates of finished petroleum products.
7. Train laboratory personnel on the operation of sophisticated computerised laboratory.
8. Hold periodic training of Laboratory staff to update them on the latest analytical techniques in testing methods.
9. Prepare capital and operating budget based on laboratory objectives.
10. Prepare purchase requisitions for the procurement of equipment and materials for Laboratory use.

11. Evaluate bids for technical acceptability of Laboratory equipment, glassware, chemicals and other consumables.
12. Evaluate non-compliance reports submitted by auditors and generate reports for corrective actions.
13. Organise activities required for retention samples for shore tanks, loading lines and vessels.
14. Perform managerial duties.
15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **OIL REFINERY SPECIALIST**

AN OIL REFINERY SPECIALIST SHOULD BE ABLE TO EVALUATE COMMERCIAL OPERATIONS, PARTICIPATE IN R&D DELIVERY AND TECHNOLOGY IMPROVEMENT PROJECTS, BRINGING COMMERCIAL PERSPECTIVES AND KEY, MENTOR LESS EXPERIENCED ENGINEERS AND SCIENTISTS, CONTRIBUTE TO SHORT AND LONG TERM DEVELOPMENT PROJECT IDEAS IN EXISTING MARKETS TO IMPROVE QUALITY OR TO MEET NEW CUSTOMER GOALS.

**An Oil Refinery Specialist must be able to:**

1. Evaluate commercial operations, through remote monitoring or on-site troubleshooting oil refinery technology.
2. Participate in R&D delivery and technology improvement projects, bringing commercial perspectives.
3. Provide sales support including technical and commercial perspective, recommendations on guarantees, start-up support requirements and commercial operating experience.
4. Lead guarantee resolution projects by coordinating problem investigation efforts and developing solutions.
5. Create operating procedures and process improvement techniques.
6. Mentor less experienced engineers and scientists.
7. Contribute to short and long term development project ideas in existing markets.
8. Generate idea on the changes and improvement in technologies supported via innovation.
9. Participate in engineering review meetings for new units and revamps.
10. Develop, prepare, update and present training materials.
11. Develop, prepare and update training, general operating, and process technology manuals.

12. Ensure that Engineering Design Critique Reports prepared by advisor are reviewed and appropriate design and technical modifications.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **PETROCHEMICAL LAB JUNIOR TECHNICIAN**

A PETROCHEMICAL LAB JUNIOR TECHNICIAN IS DESIGNATED TO PERFORM PHYSICAL AND CHEMICAL TEST ON CHEMICAL AND HYDROCARBON, UPKEEP OF ALL LABORATORY AREAS, CARRY OUT DAILY ANALYSIS, SAMPLING OF PETROLEUM; PERFORM FULL RANGE OF PETROLEUM FEEDSTOCK ANALYSIS, AND PREPARE ANALYTICAL REPORTS.

**A Petrochemical Lab Junior Technician must be able to:**

1. Perform physical and chemical tests on chemicals and hydrocarbons used or produced.
2. Upkeep of all laboratory areas.
3. Standardise the chemical solutions and reagents.
4. Carry out the daily sampling, analysis of petroleum.
5. Perform calibration and routine maintenance of lab equipments.
6. Perform variety of day to day duties including the preparation of detailed analytical reports.
7. Perform full range of petroleum feedstock analysis.
8. Prepare management plan for laboratory spare parts and consumables.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 2**

#### **PETROCHEMICAL LAB TECHNICIAN**

A PETROCHEMICAL LAB TECHNICIAN IS DESIGNATED TO PERFORM ROUTINE AND NON-ROUTINE LABORATORY ANALYSIS, PREPARE STANDARD CHEMICAL STOCK SOLUTIONS AND REAGENTS, PERFORM ROUTINE LABORATORY ANALYSIS, CONDUCT CHEMICAL TESTING OF RAW AND PACKAGING MATERIALS.

**A Petrochemical Lab Technician will be able to:**

1. Perform routine and non-routine laboratory analysis, wet chemistry and polymers testing.
2. Use analytical instruments to address quality assurance and quality control issues.
3. Prepare standard chemical stock solutions and reagents.
4. Perform routine laboratory analysis on products and process samples.
5. Conduct chemical testing of raw and packaging materials.
6. Conduct inspection of in-process and finished products.
7. Check and approve labels of finished products.
8. Generate reports for test results on every raw material and finished product tested.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **PETROCHEMICAL LAB SENIOR TECHNICIAN**

A PETROCHEMICAL LAB SENIOR TECHNICIAN IS DESIGNATED TO PERFORM PHYSICAL AND CHEMICAL TEST ON CHEMICAL AND HYDROCARBON; UPKEEP OF ALL LABORATORY AREAS, CARRY OUT DAILY ANALYSIS, SAMPLING OF PETROLEUM, PERFORM FULL RANGE OF PETROLEUM FEEDSTOCK ANALYTICAL, PREPARE ANALYTICAL REPORTS, AND MONITOR AND GUIDE NEW ENTRY LABORATORY TECHNICIAN.

**A Petrochemical Lab Senior Technician must be able to:**

1. Perform physical and chemical tests on chemicals and hydrocarbons used or produced.
2. Upkeep of all laboratory areas.
3. Standardise the chemical solutions and reagents.
4. Carry out the daily sampling, analysis of petroleum.
5. Perform calibration and routine maintenance of lab equipments.
6. Perform variety of day to day duties including the preparation of detailed analytical reports.
7. Perform full range of petroleum feedstock analysis.
8. Prepare management plan for laboratory spare parts and consumables.
9. Monitor and guide new entry laboratory technician.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PETROCHEMICAL LAB SUPERVISOR**

A PETROCHEMICAL LAB SUPERVISOR IS DESIGNATED TO MONITOR THE DAY TO DAY OPERATION OF THE LABORATORY, CONDUCT PLANNED AND/OR SPONTANEOUS TOURS OF THE FACILITY, COUNSEL EMPLOYEES WITH REGARD TO PROBLEMS ENCOUNTERED, AND OPERATE VARIOUS LABORATORY AND OFFICE EQUIPMENT.

**A Petrochemical Lab Supervisor must be able to:**

1. Monitor the day to day operation of the laboratory.
2. Operate various laboratory and office equipment.
3. Provide personnel shifts to accommodate fluctuating workloads.
4. Counsel employees with regard to problems encountered in daily operations.
5. Check and transfer data as necessary and take steps to correct possibly inaccurate data.
6. Conduct planned or spontaneous tours of the facility.
7. Maintain telephone communication with various agencies and individuals concerning status of samples.
8. Perform supervisory function.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **PETROCHEMICAL ASSISTANT CHEMIST**

A PETROCHEMICAL ASSISTANT CHEMIST IS DESIGNATED TO ASSIST CHEMIST TO DIRECT AND SUPERVISE GAS EVALUATION STUDIES, VERIFY THE AVAILABILITY OF CHEMICAL, EQUIPMENT, GLASSWARE AND SPARES, PREPARE LABORATORY TEST METHOD, PROVIDE GUIDELINE FOR THE PREPARATIONS OF SPECIAL BLENDS, REVIEW AND APPROVE TESTING FOR PREPARATION OF PRODUCTS, TRAIN LABORATORY PERSONNEL ON THE OPERATION.

**A Petrochemical Assistant Chemist must be able to:**

1. Assist chemist to direct and supervise petrochemical evaluation studies.
2. Help chemist to verify the availability of chemicals, equipment, glassware and spares for the Laboratory.
3. Assist chemist to uses company laboratory software program for Lab equipment maintenance requirements, inventory control of Laboratory consumables and preparation of purchase requisitions.
4. Help chemist to prepare laboratory test methods based on vendor's equipment manuals and methods.
5. Assist chemist to provide guidelines for the preparations of special blends needed for various product studies.
6. Help chemist to review and approve testing for preparation of quality certificates of finished petroleum products.
7. Assist chemist to train laboratory personnel on the operation of sophisticated computerised laboratory.
8. Help chemist to hold periodic training of Laboratory staff to update them on the latest analytical techniques in testing methods.
9. Assist Chemist to prepare capital and operating budget based on laboratory objectives.

10. Assist chemist to prepare purchase requisitions for the procurement of equipment and materials for Laboratory use.
11. Help Chemist to evaluate bids for technical acceptability of Laboratory equipment, glassware, chemicals and other consumables.
12. Assist Chemist to evaluate non-compliance reports submitted by auditors and generate reports for corrective actions.
13. Help chemist organise activities required for retention samples for shore tanks, loading lines and vessels.
14. Adhere to company standard operating procedure.
15. Comply with safety and security procedure.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **PETROCHEMICAL TECHNOLOGIST**

A PETROCHEMICAL TECHNOLOGIST IS DESIGNATED TO DIRECT AND SUPERVISE GAS EVALUATION STUDIES, VERIFY THE AVAILABILITY OF CHEMICAL, EQUIPMENT, GLASSWARE AND SPARES, PREPARE LABORATORY TEST METHOD, PROVIDE GUIDELINE FOR THE PREPARATIONS OF SPECIAL BLENDS, REVIEW AND APPROVE TESTING FOR PREPARATION OF PRODUCTS, AND TRAIN LABORATORY PERSONNEL ON THE OPERATION.

**A Petrochemical Technologist must be able to:**

1. Direct and supervise gas evaluation studies.
2. Verify the availability of chemicals, equipment, glassware and spares for the Laboratory.
3. Use company laboratory software program for Lab equipment maintenance requirements, inventory control of Laboratory consumables and preparation of purchase requisitions.
4. Prepare laboratory test methods based on vendor's equipment manuals and methods.
5. Provide guidelines for the preparations of special blends needed for various product studies.
6. Review and approve testing for preparation of quality certificates of finished petroleum products.
7. Train laboratory personnel on the operation of sophisticated computerised laboratory.
8. Hold periodic training of Laboratory staff to update them on the latest analytical techniques in testing methods.
9. Prepare capital and operating budget based on laboratory objectives.
10. Prepare purchase requisitions for the procurement of equipment and materials for Laboratory use.

11. Evaluate bids for technical acceptability of Laboratory equipment, glassware, chemicals and other consumables.
12. Evaluate non-compliance reports submitted by auditors and generate reports for corrective actions.
13. Organise activities required for retention samples for shore tanks, loading lines and vessels.
14. Perform managerial duties.
15. Adhere to company standard operating procedure.
16. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PETROCHEMICAL SPECIALIST**

A PETROCHEMICAL SPECIALIST IS DESIGNATED TO COORDINATE PETROCHEMICAL SALES AND HAS WIDE KNOWLEDGE OF SUPPLY CHAIN PROCESS, OPERATION CONSTRAINS, PRICE FORMULAS AND TERMS AND CONDITIONS OF PETROCHEMICAL SALE AGREEMENTS BOTH MONOMER AND POLYMER, ADMINISTRATE PETROCHEMICAL MARKETING AGREEMENT AND ITS UPDATES PROVIDE MARKETING AND MANAGEMENTS WITH REQUIRED ANALYTICAL OR ENHANCEMENTS REPORTS AND STUDIES; MAINTAIN THE CONTRACTUAL OBLIGATIONS, PRICES, SCHEDULES AND CALL OFF, REPORT EVENTS ON DUE TIME, ENGAGED IN STRATERGIC STUDIES AND MARKET ANALYSIS, MARKETER SELLING PERFORMANCE, COMMUNICATIONS, AND SYSTEM CONTRACT MAINTAINER.

**A Petrochemical Specialist would be able to:**

1. Contribute in preparations and negotiations of yearly Marketing plan and its update.
2. Verify adherence to marketing agreement through effective implementation, monitoring and controls.
3. Develop and improve the Internal Control environment.
4. Support process and system improvements through leading and participating in various project initiatives.
5. Maintain contractual obligations, prices, schedules and execution in reference to Annual Marketing approved Plan.
6. Reconcile petrochemical sales information to finance figure.
7. Provide strategic petrochemical studies.
8. Claim analysis and verifications.
9. Monitor for inventory and its impacts on company netback and compliance with warehouse strategy.
10. Assist marketing and production planning with demand forecasts.
11. Work in coordination with the corporate team in formulation sales strategies.

12. Lead petrochemical sales activities.
13. Set the vision for the future develops and adheres to a business plan to attain this vision.
14. Evaluate market trends and sales forecast together with the Marketer and Marketing section
15. Provide full support to Marketing section of variance studies.
16. Adhere to company standard operating procedure.
17. Comply with safety and security procedure.



## **LEVEL 1**

### **ELECTRICAL AND INSTRUMENTATION MAINTENANCE JUNIOR TECHNICIAN**

AN ELECTRICAL AND INSTRUMENTATION MAINTENANCE JUNIOR TECHNICIAN IS DESIGNATED TO ENSURE THAT PLANT, EQUIPMENT AND SYSTEM DOWNTIME IS MINIMISED BY UTILISING TRADE KNOWLEDGE BY PARTICIPATING IN FAULT DIAGNOSIS AND REPAIR OF THAT SYSTEM, CONTRIBUTE TO THE OPTIMISATION OF PLANT, EQUIPMENT AND SYSTEMS BY PARTICIPATING IN QUALITY ACTIVITIES AND CARRYING OUT NECESSARY MODIFICATIONS.

**An Electrical and Instrumentation Maintenance Junior Technician will be able to:**

1. Ensures that plant, equipment and system downtime is minimised by utilising trade knowledge by participating in fault diagnosis and repair of that system.
2. Carries out general maintenance across the refinery by providing service and repairs to HV and LV equipment, motor drives (soft start, VSD), PLC and Device Net systems, TDC-LCN and UCN process control, burner management systems (FSC).
3. Contribute to the optimisation of plant, equipment and systems by participating in quality activities and carrying out necessary modifications.
4. Carry out Environmental, Quality and Safety system maintenance as per site requirements, and document according to the standards required for each location (determined by SPA's). The level of documentation will be sufficient to meet both internal and external requirements, as these directly impact on the company's certification and license regulations.
5. Contributes to the overall plant maintenance program by participating in the complete range of maintenance planning activities and assisting in the development of maintenance strategies.
6. Plan own whole job, including the acquisition of parts and coordinating activities with other teams.
7. Contribute to the minimisation of maintenance costs by participating in various team activities and prioritising individual work schedules across the whole range of electrical maintenance activities.

8. Ensure the integrity of plant, equipment and systems by carrying out all maintenance activities in accordance with Statutory Regulations (includes Gas systems).
9. Ensure the development of technical skills and knowledge of Apprentices by providing a sound interpretation of the trade whilst ensuring safe working practices.
10. Contribute to the satisfactory introduction of new equipment by participating in the planning, modification, upgrading, installation and commissioning of that equipment.
11. Contributes to the optimisation of the plant maintenance program by participating in various condition monitoring activities.
12. Contributes to the minimisation of maintenance labour costs by carrying out a range of duties across all electrical installation and/or instrumentation.
13. Contribute to the skills enhancement of other Electrical and/or Instrument Tradespersons by participating in the development and delivery of training programs to Electrical/Instrument maintenance personnel.
14. Keep abreast of technology by undertaking appropriate training in technical and inter personal skills relevant to the role.
15. Contribute to operating safety by writing, updating and inputting of procedures such as SWI's, JSA's Equipment Isolation.
16. Install various types of Electrical/Instrument equipment and fixed wiring.
17. Contribute to the commissioning of LCN, UCN and PLC systems as well as general Electrical and Instrument equipment in conjunction with contractors, engineering and process personnel.
18. Ensure practical, timely and economic solutions to equipment failures.
19. Adhere to company standard operating procedure.
20. Comply with safety and security procedure.





**LEVEL 2**  
**INSTRUMENTATION MAINTENANCE TECHNICIAN**

AN INSTRUMENTATION MAINTENANCE TECHNICIAN IS DESIGNATED TO ENSURE THAT PLANT, EQUIPMENT AND SYSTEM DOWNTIME IS MINIMIZED BY UTILIZING TRADE KNOWLEDGE BY PARTICIPATING IN FAULT DIAGNOSIS AND REPAIR OF THAT SYSTEM; CONTRIBUTE TO THE OPTIMIZATION OF PLANT, EQUIPMENT AND SYSTEMS BY PARTICIPATING IN QUALITY ACTIVITIES AND CARRYING OUT NECESSARY MODIFICATIONS.

**An Instrumentation Maintenance Technician will be able to:**

1. Contributes to the optimization of plant, equipment and systems by participating in quality activities and carrying out necessary modifications.
2. Carries out Environmental, Quality and Safety system maintenance as per site requirements, and document according to the standards required for each location (determined by SPA's).
3. Ensures that plant, equipment and system downtime is minimized by utilizing trade knowledge by participating in fault diagnosis and repair of that system.
4. Carries out general maintenance across the refinery by providing service and repairs to HV and LV equipment, motor drives (soft start, VSD), PLC and DeviceNet systems, TDC-LCN and UCN process control, burner management systems (FSC), including ring associated field instrumentation, condition monitoring, lighting, power systems and inputting to formal planned maintenance programs.
5. Contributes to the overall plant maintenance program by participating in the complete range of maintenance planning activities and assisting in the development of maintenance strategies.
6. Contributes to the skills enhancement of other Electrical and/or Instrument Tradespersons by participating in the development and delivery of training programs to Electrical/Instrument maintenance personnel.

7. Keeps abreast of technology by undertaking appropriate training in technical and inter personal skills relevant to the role.
8. Contributes to operating safety by writing, updating & inputting of procedures such as SWI's, JSA's Equipment Isolation sheets.(Currently APSS)
9. Installs various types of Electrical/Instrument equipment and fixed wiring, i.e. lighting, power and control circuitry.
10. Contributes to the commissioning of LCN, UCN and PLC systems as well as general Electrical and Instrument equipment in conjunction with contractors, engineering and process personnel.
11. Plan own whole job, including the acquisition of parts and coordinating activities with other teams.
12. Contributes to the minimization of maintenance costs by participating in various team activities and prioritizing individual work schedules across the whole range of electrical maintenance activities.
13. Ensures the integrity of plant, equipment and systems by carrying out all maintenance activities in accordance with Statutory Regulations. (includes Gas systems)
14. Ensures the development of technical skills and knowledge of Apprentices by providing a sound interpretation of the trade whilst ensuring safe working practices.
15. Contributes to the satisfactory introduction of new equipment by participating in the planning, modification, upgrading, installation and commissioning of that equipment.
16. Contributes to the optimization of the plant maintenance program by participating in various condition monitoring activities.
17. Contributes to the minimization of maintenance labour costs by carrying out a range of duties across all electrical installation and/or instrumentation.
18. Adhere to company standard operating procedure.
19. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **INSTRUMENTATION MAINTENANCE SENIOR TECHNICIAN**

AN INSTRUMENTATION MAINTENANCE SENIOR TECHNICIAN IS DESIGNATED TO ENSURE THAT PLANT, EQUIPMENT AND SYSTEM DOWNTIME IS MINIMISED BY UTILISING TRADE KNOWLEDGE BY PARTICIPATING IN FAULT DIAGNOSIS AND REPAIR OF THAT SYSTEM, CONTRIBUTE TO THE OPTIMISATION OF PLANT, EQUIPMENT AND SYSTEMS BY PARTICIPATING IN QUALITY ACTIVITIES AND CARRYING OUT NECESSARY MODIFICATIONS.

**An Instrumentation Maintenance Senior Technician will be able to:**

1. Ensure that plant, equipment and system downtime is minimised by utilising trade knowledge by participating in fault diagnosis and repair of that system.
2. Carry out general maintenance across the refinery by providing service and repairs to HV and LV equipment, motor drives (soft start, VSD), PLC and Device Net systems, TDC-LCN and UCN process control, burner management systems (FSC), including ring associated field instrumentation, condition monitoring, lighting, power systems and inputting to formal planned maintenance programs.
3. Contribute to the optimisation of plant, equipment and systems by participating in quality activities and carrying out necessary modifications.
4. Carry out Environmental, Quality and Safety system maintenance as per site requirements, and document according to the standards required for each location (determined by SPA's).
5. Contribute to the overall plant maintenance program by participating in the complete range of maintenance planning activities and assisting in the development of maintenance strategies.
6. Plan own whole job, including the acquisition of parts and coordinating activities with other teams.

7. Contribute to the minimisation of maintenance costs by participating in various team activities and prioritising individual work schedules across the whole range of electrical maintenance activities.
8. Ensure the integrity of plant, equipment and systems by carrying out all maintenance activities in accordance with Statutory Regulations (includes Gas systems).
9. Ensure the development of technical skills and knowledge of Apprentices by providing a sound interpretation of the trade whilst ensuring safe working practices.
10. Contribute to the satisfactory introduction of new equipment by participating in the planning, modification, upgrading, installation and commissioning of that equipment.
11. Contribute to the optimisation of the plant maintenance program by participating in various condition monitoring activities.
12. Contribute to the minimisation of maintenance labour costs by carrying out a range of duties across all electrical installation and/or instrumentation.
13. Contribute to the skills enhancement of other Electrical and/or Instrument Tradespersons by participating in the development and delivery of training programs to Alcoa Electrical/Instrument maintenance personnel.
14. Keep abreast of technology by undertaking appropriate training in technical and inter personal skills relevant to the role.
15. Contribute to operating safety by writing, updating and inputting of procedures such as SWI's, JSA's Equipment Isolation sheets (Currently APSS).
16. Install various types of Electrical/Instrument equipment and fixed wiring, i.e. lighting, power and control circuitry.
17. Contribute to the commissioning of LCN, UCN and PLC systems as well as general Electrical and Instrument equipment in conjunction with contractors, engineering and process personnel.
18. Ensure practical, timely and economic solutions to equipment failures.
19. Train and cooperate with the instrumentation junior maintenance technician and instrumentation maintenance technician.
20. Adhere to company standard operating procedure.
21. Comply with safety and security procedure.





**OIL, GAS AND PETROCHEMICAL**

**LEVEL 4**

**INSTRUMENTATION MAINTENANCE SUPERVISOR**

AN INSTRUMENTATION MAINTENANCE SUPERVISOR IS DESIGNATED TO PLAN, ASSIGN AND CONTROL THE QUALITY AND PRODUCTIVITY OF JOBS ASSIGNED TO THE CREW MEMBERS AND PRODUCE AND MAINTAIN SPREADSHEETS OR OTHER REQUIRED DOCUMENTATION NEEDED TO DEMONSTRATE EFFICIENCY AND PRODUCTIVITY OF PLANNED AND UNPLANNED WORK ACTIVITIES.

**An Instrumentation Maintenance Supervisor will be able to:**

1. Plan, assign and control the quality and productivity of jobs assigned to the crew members.
2. Maintain accurate records of equipment performance history.
3. Continuously review and update equipment APL's for equipment performance improvements.
4. Produce and maintain spreadsheets or other required documentation needed to demonstrate efficiency and productivity of planned and unplanned work activities.
5. Organise and monitor the work for a team of maintainers.
6. Manage the department maintenance procedures and work flows.
7. Review and manage department maintenance costs.
8. Manage project to ensure the project will meet the business unit needs.
9. Interact with other supervisors and superintendent/managers concerning resource management and equipment standardisation.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.
12. Perform supervisory function.



**LEVEL 5**  
**INSTRUMENTATION MAINTENANCE SENIOR SUPERVISOR**

AN INSTRUMENTATION MAINTENANCE SENIOR SUPERVISOR IS DESIGNATED TO PLAN, ASSIGN AND CONTROL THE QUALITY AND PRODUCTIVITY OF JOBS ASSIGNED TO THE CREW MEMBERS AND PRODUCE AND MAINTAIN SPREADSHEETS OR OTHER REQUIRED DOCUMENTATION NEEDED TO DEMONSTRATE EFFICIENCY AND PRODUCTIVITY OF PLANNED AND UNPLANNED WORK ACTIVITIES.

**An Instrumentation Maintenance Senior Supervisor will be able to:**

1. Plan, assign and control the quality and productivity of jobs assigned to the crew members.
2. Maintain accurate records of equipment performance history.
3. Continuously review and update equipment APL's for equipment performance improvements.
4. Produce and maintain spreadsheets or other required documentation.
5. Requisition parts, maintenance of inspection sheets, and employee safety.
6. Maintain records in the current maintenance management system.
7. Comply with the safety, health and environmental standards and procedures.
8. Investigate near miss, equipment/property damage, and injury incidents.
9. Organise and monitor the work for a team of maintainers.
10. Improve the work of the team and a high level of safe work, consistency and quality in the role.
11. Manage the department maintenance procedures and work flows.
12. Review and manage department maintenance costs.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.





**OIL, GAS AND PETROCHEMICAL**

**LEVEL 6**

**INSTRUMENTATION MAINTENANCE MANAGER**

A SENIOR INSTRUMENTATION MAINTENANCE SUPERVISOR IS DESIGNATED TO PROVIDE INSTRUMENTATION MAINTENANCE SUPPORT AND WILL BE RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL TYPES OF PNEUMATIC, ELECTRONIC AND ELECTRICAL EQUIPMENT USED.

**An Instrumentation Maintenance Manager will be able to:**

1. Set up and calibrate, test, measure and repair all types of controls and instruments with pneumatic, electrical and electronic variables.
2. Repair, maintain and install electrical, pneumatic and or electronic equipment and machinery which is used in the chemical process.
3. Trouble shoots and repairs malfunction and documents failure analysis.
4. Collect equipment operation and history data to facilitate reliability improvements.
5. Actively participates in the implementation of the Global Maintenance Work Process for instrumentation and electrical work.
6. Help plant operators improve their instrument and electrical troubleshooting skills.
7. Monitor plant area backlog by craft and priority to satisfy timely work completion that will meet the plant needs.
8. Interaction with other supervisors and superintendent/managers concerning resource management and equipment standardisation.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.
11. Perform managerial duties.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 6**

**INSTRUMENTATION MAINTENANCE TECHNOLOGIST**

AN INSTRUMENTATION MAINTENANCE TECHNOLOGIST IS DESIGNATED TO PROVIDE INSTRUMENTATION MAINTENANCE SUPPORT AND WILL BE RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL TYPES OF PNEUMATIC, ELECTRONIC AND ELECTRICAL EQUIPMENT USED.

**An Instrumentation Maintenance Technologist will be able to:**

1. Repair, maintain and install electrical, pneumatic and or electronic equipment and machinery which is used in the chemical process.
2. Set up and calibrate, test, measure and repair all types of controls and instruments with pneumatic, electrical and electronic variables.
3. Trouble shoots and repair malfunction and documents failure analysis.
4. Monitor plant area backlog by craft and priority to satisfy timely work completion that will meet the plant needs.
5. Interaction with other supervisors and superintendent/managers concerning resource management and equipment standardisation.
6. Collect equipment operation and history data to facilitate reliability improvements.
7. Actively participates in the implementation of the Global Maintenance Work Process.
8. Help plant operators improve their instrument and electrical troubleshooting skills.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.
11. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **INSTRUMENTATION MAINTENANCE SPECIALIST**

AN INSTRUMENTATION MAINTENANCE SPECIALIST IS DESIGNATED TO PROVIDE SUPPORT IN INSTRUMENTATION AND CONTROL SYSTEM, REPAIR AND MAINTAIN ELECTRONIC AND PNEUMATIC INSTRUMENTATION AND PROVIDE ALL SUPPORT FOR SAFE AND FULL COMMISSIONING.

**An Instrumentation Maintenance Specialist will be able to:**

1. Provide support in Instrumentation and Control System, Erection and Commissioning.
2. Perform maintenance on Instrumentation and Control Systems.
3. Repair and maintain electronic and pneumatic instrumentation.
4. Provide all support for safe and successful commissioning.
5. Assist in preparing the checklists for Instruments, panels taking over, pre-commissioning and commissioning.
6. Perform preventive and predictive maintenance on Instrumentation and control system, including Instrumentation workshop, DCS/PLC.
7. Equipment research and development to improve equipment reliability and production outputs for increased revenues to the business.
8. Manage project so that the project will meet the business unit needs.
9. Solve problems and equipment optimisation using all available resources (reliability department, engineering department, manufactures and suppliers).
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

## **LEVEL 2**

### **ELECTRICAL MAINTENANCE TECHNICIAN**

AN ELECTRICAL MAINTENANCE TECHNICIAN IS DESIGNATED TO VERIFY THAT PLANT, EQUIPMENT AND SYSTEM DOWNTIME IS MINIMISED BY UTILISING TRADE KNOWLEDGE BY PARTICIPATING IN FAULT DIAGNOSIS AND REPAIR OF THE SYSTEM, CONTRIBUTE TO THE OPTIMISATION OF PLANT, EQUIPMENT AND SYSTEMS BY PARTICIPATING IN QUALITY ACTIVITIES AND CARRYING OUT NECESSARY MODIFICATIONS.

**An Electrical Maintenance Technician will be able to:**

1. Carry out general maintenance across the refinery by providing service and repairs to HV and LV equipment, motor drives (soft start, VSD), PLC and DeviceNet systems, TDC-LCN and UCN process control, burner management systems (FSC), including ring associated field instrumentation, condition monitoring, lighting, power systems and inputting to formal planned maintenance programs.
2. Carry out Environmental, Quality and Safety system maintenance as per site requirements, and document according to the standards required for each location (determined by SPA's).
3. Contribute to the overall plant maintenance program by participating in the complete range of maintenance planning activities and assisting in the development of maintenance strategies.
4. Contribute to the minimisation of maintenance labour costs by carrying out a range of duties across all electrical installation and/or instrumentation, including tagging to the full scope of E/I level 2 and Process tagging associated with side stream instrumentation and/or HV isolation and tagging (relevant to the respective trade).
5. Contribute to the skills enhancement of other Electrical and/or Instrument Tradespersons by participating in the development and delivery of training programs to Electrical/Instrument maintenance personnel.

6. Keeps abreast of technology by undertaking appropriate training in technical and inter personal skills relevant to the role.
7. Plan own whole job, including the acquisition of parts and coordinating activities with other teams.
8. Contribute to the minimisation of maintenance costs by participating in various team activities and prioritising individual work schedules across the whole range of electrical maintenance activities.
9. Contribute to the satisfactory introduction of new equipment by participating in the planning, modification, upgrading, installation and commissioning of that equipment.
10. Contribute to the optimisation of the plant maintenance program by participating in various condition monitoring activities.
11. Contribute to operating safety by writing, updating and inputting of procedures such as SWI's, JSA's Equipment Isolation sheets (Currently APSS).
12. Ensure practical, timely and economic solutions to equipment failures.
13. Train and cooperate with the instrumentation junior maintenance technician.
14. Adhere to company standard operating procedure.
15. Comply with safety and security procedure.





**LEVEL 3**  
**ELECTRICAL MAINTENANCE SENIOR TECHNICIAN**

AN ELECTRICAL MAINTENANCE SENIOR TECHNICIAN IS DESIGNATED TO VERIFY THAT PLANT, EQUIPMENT AND SYSTEM DOWNTIME IS MINIMISED BY UTILISING TRADE KNOWLEDGE BY PARTICIPATING IN FAULT DIAGNOSIS AND REPAIR OF THE SYSTEM, CONTRIBUTE TO THE OPTIMISATION OF PLANT, EQUIPMENT AND SYSTEMS BY PARTICIPATING IN QUALITY ACTIVITIES AND CARRYING OUT NECESSARY MODIFICATIONS.

**An Electrical Maintenance Senior Technician will be able to:**

1. Verify that plant, equipment and system downtime is minimised by utilising trade knowledge by participating in fault diagnosis and repair of that system.
2. Contributes to the optimisation of plant, equipment and systems by participating in quality activities and carrying out necessary modifications.
3. Carry out Environmental, Quality and Safety system maintenance as per site requirements, and document according to the standards required for each location.
4. Carry out general maintenance across the refinery by providing service and repairs to HV and LV equipment, motor drives (soft start, VSD), PLC and DeviceNet systems, TDC-LCN and UCN process control, burner management systems (FSC), including ring associated field instrumentation, condition monitoring, lighting, power systems and inputting to formal planned maintenance programs
5. Contributes to the overall plant maintenance program by participating in the complete range of maintenance planning activities and assisting in the development of maintenance strategies.
6. Verify the integrity of plant, equipment and systems by carrying out all maintenance activities in accordance with Statutory Regulations. (includes Gas systems)
7. Verify the development of technical skills and knowledge of Apprentices by providing a sound interpretation of the trade whilst ensuring safe working practices.



8. Plan own whole job, including the acquisition of parts and coordinating activities with other teams.
9. Contribute to the minimisation of maintenance costs by participating in various team activities and prioritising individual work schedules across the whole range of electrical maintenance activities.
10. Contribute to the satisfactory introduction of new equipment by participating in the planning, modification, upgrading, installation and commissioning of that equipment.
11. Contributes to the optimisation of the plant maintenance program by participating in various condition monitoring activities.
12. Contribute to the minimisation of maintenance labour costs by carrying out a range of duties across all electrical installation and/or instrumentation, including tagging to the full scope of E/I level 2 and process tagging associated with side stream instrumentation and/or HV isolation and tagging (relevant to the respective trade).
13. Ensure practical, timely and economic solutions to equipment failures.
14. Adhere to company standard operating procedure.
15. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 4**

**ELECTRICAL MAINTENANCE SUPERVISOR**

AN ELECTRICAL MAINTENANCE SUPERVISOR IS DESIGNATED TO PLAN, ASSIGN AND CONTROL THE QUALITY AND PRODUCTIVITY OF JOBS ASSIGNED TO THE CREW MEMBERS AND PRODUCE AND MAINTAIN SPREADSHEETS OR OTHER REQUIRED DOCUMENTATION NEEDED TO DEMONSTRATE EFFICIENCY AND PRODUCTIVITY OF PLANNED AND UNPLANNED WORK ACTIVITIES.

**An Electrical Maintenance Supervisor will be able to:**

1. Maintain accurate records of equipment performance history.
2. Continuously review and update equipment APL's for equipment performance improvements.
3. Plan, assign and control the quality and productivity of jobs assigned to the crew members.
4. Produce and maintain spreadsheets or other required documentation needed to demonstrate efficiency and productivity of planned and unplanned work activities.
5. Make requisition of parts, maintenance of inspection sheets, and employee safety.
6. Maintain records in the current maintenance management system and perform other duties as assigned.
7. Ensure compliance with the safety, health and environmental standards and procedures.
8. Investigate near miss, equipment/property damage, and injury incidents.
9. Organise and monitor the work for a team of maintainers.
10. Improve the work of the team and verify a high level of safe work, consistency and quality in the role.
11. Manage the department maintenance procedures and work flows.
12. Review and manage department maintenance costs.

13. Verify the project to meet the business unit needs.
14. Interact with other supervisors and superintendent/managers concerning resource management and equipment standardisation.
15. Direct relationship with the production supervisors concerning planning and scheduling of maintenance opportunities, production issues, short and long term goals and departmental costs.
16. Research and develop equipment to improve equipment reliability and production outputs to increase revenues to the business.
17. Solve problems using all available resources (reliability department, engineering department, manufactures and suppliers).
18. Monitor plant area backlog by craft and priority to satisfy timely work completion that will meet the plant needs.
19. Open, follow-up with and close all planned maintenance work orders to meet completion targets as stated on maintenance scorecards.
20. Provide maintenance performance reports (KPI's and KVD's).
21. Monitor work progress on individual work order.
22. Adhere to company standard operating procedure.
23. Comply with safety and security procedure.
24. Perform supervisory function.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 5**

#### **ELECTRICAL MAINTENANCE SENIOR SUPERVISOR**

AN ELECTRICAL MAINTENANCE SENIOR SUPERVISOR IS DESIGNATED TO PLAN, ASSIGN AND CONTROL THE QUALITY AND PRODUCTIVITY OF JOBS ASSIGNED TO THE CREW MEMBERS AND PRODUCE AND MAINTAIN SPREADSHEETS OR OTHER REQUIRED DOCUMENTATION NEEDED TO DEMONSTRATE EFFICIENCY AND PRODUCTIVITY OF PLANNED AND UNPLANNED WORK ACTIVITIES.

**An Electrical Maintenance Senior Supervisor will be able to:**

1. Verify compliance with the safety, health and environmental standards and procedures.
2. Investigate near miss, equipment/property damage, and injury incidents.
3. Organise and monitor the work for a team of maintainers. Improve the work of the team and ensure a high level of safe work, consistency and quality in the role.
4. Produce and maintain spreadsheets or other required documentation needed to demonstrate efficiency and productivity of planned and unplanned work activities.
5. Make requisition of parts, maintenance of inspection sheets, and employee safety.
6. Manage the department maintenance procedures and work flows.
7. Direct relationship with the production supervisors concerning planning and scheduling of maintenance opportunities, production issues, goals and departmental costs.
8. Research and develop equipment to improve equipment reliability and production outputs to increase revenues to the business.
9. Solve problems using all available resources (reliability department, engineering department, manufactures and suppliers).
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

## **LEVEL 6**

### **ELECTRICAL MAINTENANCE MANAGER**

AN ELECTRICAL MAINTENANCE MANAGER IS DESIGNATED TO MANAGE THE ELECTRICAL AND INSTRUMENTATION FUNCTION OF THE PLANT AND ENSURES THE ECONOMIC VIABILITY OF ALL PLANT ASSETS AND EFFECTIVE PROGRESS AND IMPROVEMENT PROGRAM THROUGH THE EFFORTS OF THE ELECTRICAL AND INSTRUMENTATION PERSONNEL.

**An Electrical Maintenance Manager will be able to:**

1. Provide leadership to electricians in the repair and installation of electrical and control system.
2. Oversee daily process problem solving and measurement activities to ensure the continuous operation of the plant.
3. Verify the operational viability of the plant by ensuring the proper functioning of all electrical and control systems.
4. Lead project studies that have been identified in the capital plan for enhancement, upgrade, or preventative purposes. Prepare pre-feasibility studies and propose technical solutions with their related investment and operational costs to support AFE preparation.
5. Design and manage investment projects in the area of electrical and automation engineering. Responsible for the project in terms of quality, cost and time to verify that specific plant needs are met and the project deliverables are achieved.
6. Verify electrical maintenance activities are in compliance with regulations and corporate policies to maximize safety and limit financial exposure.
7. Develop and control of the plant's electrical maintenance budget to provide the necessary resources to conduct preventive, predictive and corrective maintenance activities and to contribute to the cost-effective operation of the business.
8. Develop a long-term plan for the Electrical Maintenance Department that is consistent with the direction and goals of the plant and company.

9. Review the design of electrical/automation installations and manage overall electrical maintenance activities to provide for continuous plant operations.
10. Specify and select electrical and control equipment to meet plant production needs.
11. Review and approve the bid documents and the technical specifications to ensure that all commercial and technical components for the scope of work are met according to and plant guidelines.
12. Coordinate plant projects and shutdowns with overall large capital projects directed by personnel to ensure the timely and quality completion of the project and minimise downtime.
13. Adhere to company standard operating procedure.
14. Comply with safety and security procedure.
15. Perform managerial duties.





OIL, GAS AND PETROCHEMICAL

## LEVEL 6

### ELECTRICAL MAINTENANCE TECHNOLOGIST

AN ELECTRICAL MAINTENANCE SUPERVISOR IS DESIGNATED TO PROVIDE INSTRUMENTATION MAINTENANCE SUPPORT AND WILL BE RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL TYPES OF PNEUMATIC, ELECTRONIC AND ELECTRICAL EQUIPMENT USED.

**An Electrical Maintenance Technologist will be able to:**

1. Set up and calibrate, test, measure and repair all types of controls and instruments with pneumatic, electrical and electronic variables.
2. Repair, maintain and install electrical, pneumatic and or electronic equipment and machinery which is used in the chemical process.
3. Trouble shoot and repair malfunction and documents failure analysis.
4. Collect equipment operation and history data to facilitate reliability improvements.
5. Develop process control system and electrical power distribution system design packages to improve the operational viability of the plant.
6. Advise plant management in the field of electric and automation engineering for optimisation of plant operation.
7. Maintain records, updated technical documentation and drawings created by CAD systems.
8. Provide expertise in the troubleshooting and diagnosis of plant system problems.
9. Help plant operators improve their instrument and electrical troubleshooting skills.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.
12. Perform managerial duties.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 7**

**ELECTRICAL MAINTENANCE SPECIALIST**

AN ELECTRICAL MAINTENANCE SPECIALIST IS DESIGNATED TO PROVIDE SUPPORT IN INSTRUMENTATION AND CONTROL SYSTEM, REPAIR AND MAINTAIN ELECTRONIC AND PNEUMATIC INSTRUMENTATION AND PROVIDE ALL SUPPORT FOR SAFE AND FULL COMMISSIONING.

**An Electrical Maintenance Specialist will be able to:**

1. Provide support in Instrumentation and Control System, Erection and Commissioning. Erection, Calibration and testing of field instruments and loop checking of all field instruments.
2. Perform maintenance on Instrumentation and Control Systems.
3. Repair and maintain electronic and pneumatic instrumentation.
4. Provide all supports for safe and successful commissioning.
5. Assist in preparing the checklists for Instruments, panels taking over, pre-commissioning and commissioning.
6. Perform preventive and predictive maintenance on Instrumentation and control system, including Instrumentation workshop, DCS/PLC.
7. Provide ongoing electrical maintenance support to the plant for all shifts by managing the plant's on call electrical program.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 1**

#### **CIVIL AND STRUCTURE MAINTENANCE JUNIOR TECHNICIAN**

A CIVIL AND STRUCTURE MAINTENANCE JUNIOR TECHNICIAN IS DESIGNATED TO APPLY THEORY AND PRINCIPLES OF CIVIL ENGINEERING IN PLANNING, DESIGNING AND OVERSEEING CONSTRUCTION AND MAINTENANCE OF STRUCTURES. PERFORM ROUTINE INSPECTIONS, AND REPAIR WORKS.

**A Civil and Structure Maintenance Junior Technician will be able to:**

1. Repair and maintain machines, mechanical equipment, and buildings and work on plumbing, electrical, and air-conditioning and heating systems.
2. Build partitions, make plaster or drywall repairs.
3. Maintain and repair specialised equipment and machinery.
4. Fixes troubleshooting and faulty electrical switches and motors.
5. Use computer-controlled systems to make adjustments in building settings and monitor problems.
6. Inspect and diagnose problems and determine the best way to correct them.
7. Check blueprints, repair manuals and parts catalogs.
8. Obtain supplies and repair parts from distributors or storerooms.
9. Make adjustments to correct malfunctioning equipment and machines.
10. Perform routine preventive maintenance and ensure that machines run smoothly and building systems operate efficiently.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND MAINTENANCE**

### **LEVEL 2**

#### **CIVIL MAINTENANCE TECHNICIAN**

A CIVIL MAINTENANCE TECHNICIAN IS DESIGNATED TO APPLY THEORY AND PRINCIPLES OF CIVIL ENGINEERING IN PLANNING, DESIGNING AND OVERSEEING CONSTRUCTION AND MAINTENANCE OF STRUCTURES. PERFORM ROUTINE INSPECTIONS AND REPAIR WORKS.

**A Civil Maintenance Technician will be able to:**

1. Repair and maintain machines, mechanical equipment, and buildings and work on plumbing, electrical, and air-conditioning and heating systems.
2. Build partitions, make plaster or drywall repairs.
3. Maintain and repair specialised equipment and machinery.
4. Fix troubleshooting and faulty electrical switches and motors.
5. Use computer-controlled systems to make adjustments in building settings and monitor problems.
6. Inspect and diagnose problems and determine the best way to correct them.
7. Check blueprints, repair manuals and parts catalogs.
8. Obtain supplies and repair parts from distributors or storerooms.
9. Make adjustments to correct malfunctioning equipment and machines.
10. Perform routine preventive maintenance and ensure that machines run smoothly and building systems operate efficiently.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **CIVIL MAINTENANCE SENIOR TECHNICIAN**

A CIVIL MAINTENANCE SENIOR TECHNICIAN IS DESIGNATED TO APPLY THEORY AND PRINCIPLES OF CIVIL ENGINEERING IN PLANNING, DESIGNING AND OVERSEEING CONSTRUCTION AND MAINTENANCE OF STRUCTURES. THEY ALSO WILL SUPERVISE JUNIOR MAINTENANCE TECHNICIAN.

**A Civil Maintenance Senior Technician will be able to:**

1. Repair and maintain machines, mechanical equipment, and buildings and work on plumbing, electrical, and air-conditioning and heating systems.
2. Maintain and repair specialised equipment and machinery.
3. Fix troubleshooting and faulty electrical switches and motors.
4. Use computer-controlled systems to make adjustments in building settings and monitor problems.
5. Inspect and diagnose problems and determine the best way to correct them.
6. Check blueprints, repair manuals and parts catalogs.
7. Obtain supplies and repair parts from distributors or storerooms.
8. Make adjustments to correct malfunctioning equipment and machines.
9. Perform routine preventive maintenance and ensure that machines run smoothly and building systems operate efficiently.
10. Supervise and monitor the work of junior maintenance technician.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.





**OIL, GAS AND PETROCHEMICAL**

**LEVEL 4**

### **CIVIL MAINTENANCE SUPERVISOR**

A CIVIL MAINTENANCE SUPERVISOR IS DESIGNATED TO SUPERVISE AND COORDINATE ACTIVITIES OF WORKERS ENGAGED IN MAINTAINING BUILDING UTILITY SYSTEMS, SUCH AS ELECTRICAL WIRING AND CONTROL SYSTEMS, HEATING, VENTILATING, WATER SUPPLY, STEAM GENERATING, AND RELATED PIPE SYSTEMS. MAY SUPERVISE WORKERS ENGAGED IN MAINTAINING AND REPAIRING PROCESSING EQUIPMENT AND MACHINERY.

**A Civil Maintenance Supervisor will be able to:**

1. Oversee the activities that relate to keeping a building or group of buildings repaired and well maintained.
2. Purchase supplies and equipment needed to perform necessary maintenance while adhering to budgetary restrictions for maintenance and repair.
3. Distribute the day's workload to the maintenance and repair workers and make sure the work is completed on schedule.
4. Perform maintenance duties.
5. Assist in preparing and planning for the maintenance budget.
6. Verify replacement parts and tools are maintained at adequate levels and that garage or shop areas are neatly organised, clean and safe.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.
9. Perform supervisory function





**OIL, GAS AND PETROCHEMICAL**

**LEVEL 5**

**CIVIL MAINTENANCE SENIOR SUPERVISOR**

A CIVIL MAINTENANCE SENIOR SUPERVISOR IS DESIGNATED TO SUPERVISE AND COORDINATE ACTIVITIES OF WORKERS ENGAGED IN MAINTAINING BUILDING UTILITY SYSTEMS, SUCH AS ELECTRICAL WIRING AND CONTROL SYSTEMS, HEATING, VENTILATING, WATER SUPPLY, STEAM GENERATING, AND RELATED PIPE SYSTEMS. MAY SUPERVISE WORKERS ENGAGED IN MAINTAINING AND REPAIRING PROCESSING EQUIPMENT AND MACHINERY.

**A Civil Maintenance Senior Supervisor will be able to:**

1. Oversee the activities that relate to keeping a building or group of buildings repaired and well maintained.
2. Purchase supplies and equipment needed to perform necessary maintenance while adhering to budgetary restrictions for maintenance and repair.
3. Distribute the day's workload to the maintenance and repair workers and make sure the work is completed on schedule.
4. Assist in preparing and planning for the maintenance budget.
5. Verify replacement parts and tools are maintained at adequate levels and that garage or shop areas are neatly organised, clean and safe.
6. Adhere to company standard operating procedure.
7. Comply with safety and security procedure.
8. Verify for hiring, coaching, training scheduling, reviewing and disciplining maintenance workers to ensure there are enough workers available to complete necessary work and all work completed by the staff is of the highest quality.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 6**

**CIVIL MAINTENANCE TECHNOLOGIST**

A CIVIL MAINTENANCE TECHNOLOGIST IS DESIGNATED TO PERFORM ENGINEERING DUTIES IN PLANNING, DESIGNING AND OVERSEEING MAINTENANCE OF BUILDING STRUCTURES AND FACILITIES.

**A Civil Maintenance Technologist will be able to:**

1. Direct maintenance activities at project site.
2. Estimate quantities and cost of material, equipments, or labour to determine budget feasibility.
3. Inspect project sites to monitor progress and ensure conformance to design specifications and safety or sanitation standards.
4. Plan and design transportation or hydraulic systems and structures, following construction and government standards, using design software and drawing tools for maintenance purposes.
5. Analyse reports, blueprints, and other data to plan maintenance projects.
6. Conduct studies of traffic patterns or environmental conditions to identify engineering problems and assess the potential impact of projects.
7. Compute load and grade requirements, water flow rates, and material stress factors to determine design specifications for scheduling of maintenance.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.
10. Perform managerial duties.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 6**

**CIVIL MAINTENANCE MANAGER**

A CIVIL MAINTENANCE MANAGER IS DESIGNATED TO SUPERVISE, ORGANISE AND DIRECT THE STAFF FOR MAINTENANCE. THEY WILL ALSO COORDINATE ACQUISITION AND IMPLEMENTATION OF MAINTENANCE RELATED EQUIPMENTS.

**A Civil Maintenance Manager will be able to:**

1. Manage and direct the scheduling and work activities of the maintenance staff.
2. Participate in the decision making regarding personnel issues.
3. Monitor staff adherence to company policies and regulations.
4. Counsel staff regarding work performance, and participate in the disciplinary process.
5. Design, implement and monitor programs and plan for preventive maintenance, equipment replacement, and energy management.
6. Develop and review the operating budget of the maintenance expenditures.
7. Inspect work sites periodically, and to recommend, initiate and monitor remedial action when required.
8. Develop budgets and tracks expenditures for compliance, and review and approve requisition and payments including billings for material, supplies and services.
9. Provide consultation and technical assistance to maintenance staff.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.
12. Perform managerial duties.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 7**

**CIVIL MAINTENANCE SPECIALIST**

A CIVIL MAINTENANCE SPECIALIST IS DESIGNATED TO CONDUCT RESEARCH, DEVELOPMENT, IMPLEMENTATION AND ANALYSIS OF CIVIL MAINTENANCE WORKS AND SYSTEMS.

**A Civil Maintenance Specialist will be able to:**

1. Perform structural and mechanical design review for maintenance purposes.
2. Perform engineering design checking and methodology evaluations.
3. Develop discipline for specialise maintenance jobs.
4. Document design works in project calculation books.
5. Supervise overall maintenance works.
6. Assist in the technical part for maintenance projects.
7. Provide technical consulting and technology development.
8. Verify work is executed in accordance with department procedures, project schedules and project budgets.
9. Write technical reports or prepare input for them.
10. Approve technical reports for maintenance.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



OIL, GAS AND PETROCHEMICAL

## LEVEL 2

### STRUCTURE MAINTENANCE TECHNICIAN

A STRUCTURE MAINTENANCE TECHNICIAN IS DESIGNATED TO CARRY OUT MECHANICAL AND PREVENTIVE MAINTENANCE REGIMES, EVALUATE REPAIRS AND BREAKDOWNS, REPORT TO SUPERVISOR ON VARIOUS STRUCTURE CONDITION, LEAD AND MENTOR JUNIOR STRUCTURE MAINTENANCE TECHNICIAN.

#### **A Structure Maintenance Technician will be able to:**

1. Verify that safe working practice is applied to all elements of the job and each task undertaken.
2. Carry out mechanical and preventive maintenance regimes/work programs.
3. Report on various structure conditions and fix troubleshoots.
4. Report the materials and tools for the repair of equipment.
5. Manage the use and return of equipment to storage or the return to the rental company when no longer required.
6. Verify continuous production improvement through mentoring and providing performance feedback direct report.
7. Build projects according the approved specifications.
8. Assign work and help junior structure maintenance technician with works.
9. Supervise and lead structure maintenance technician.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



OIL, GAS AND PETROCHEMICAL

### LEVEL 3

#### STRUCTURE MAINTAINANCE SENIOR TECHNICIAN

A STRUCTURE MAINTAINANCE SENIOR TECHNICIAN IS DESIGNATED TO SUPERVISE TECHNICIAN CARRY OUT MECHANICAL AND PREVENTIVE MAINTENANCE REGIMES, AND EVALUATE REPAIRS AND BREAKDOWNS DONE BY TECHNICIAN.

**A Structure Maintenance Senior Technician will be able to:**

1. Verify that safe working practice is applied to all elements of the job and each task undertaken.
2. Help technician carry out mechanical and preventive maintenance regimes/work programs.
3. Approve and get the materials and tools needed for the repair of equipment.
4. Supervise other mechanics or technicians.
5. Identify on various structure conditions and fix troubleshoot.
6. Verify the smooth start-up of project construction work by coordinating with EPC Contractor and project management team.
7. Keep close track of the Contractor's schedule and progress related to the Structural discipline and provide input and solutions to improvement.
8. Verify that projects are built according to approved specifications.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.





#### **LEVEL 4**

#### **STRUCTURE MAINTAINANCE SUPERVISOR**

A STRUCTURE MAINTAINANCE SUPERVISOR IS DESIGNATED TO SUPPORT COMPANY CORE VALUE OF SAFETY QUALITY, INTEGRITY, SUSTAINABILITY, AND SUCCESS, ENSURE EFFICIENCY IN LABOUR, MAINTAIN HIGH QUALITY STANDARD IN MATERIAL AND MATERIAL HANDLING.

**A Structure Maintenance Supervisor will be able to:**

1. Verify that projects are built according to approved specifications.
2. Assign and perform inspection activities in structure area.
3. Evaluate quality of work.
4. Verify continuous production improvement through mentoring and providing performance feedback direct report.
5. Verify that projects are built according to approved specifications.
6. Manage the use and return of equipment to storage or the return to the rental company when no longer required.
7. Provide high level engineering input within the Structural Engineering group, to ensure timely and efficient production of quality designs.
8. Verify that site safety measures meet or exceed the parameters set out by corporate safety manual, Worker's Compensation Board or any other applicable regulatory authorities.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.
11. Perform supervisory function.



OIL, GAS AND PETROCHEMICAL

## LEVEL 5

### STRUCTURE MAINTENANCE SENIOR SUPERVISOR

A STRUCTURE MAINTENANCE SENIOR SUPERVISOR IS DESIGNATED FOR REVIEW AND APPROVE CONTRACTOR EXPENDITURE, ENSURE THAT ALL FINAL PROJECT DOCUMENTATION IN STRUCTURAL AREA IS HANDED OVER TO COMPANY, AND TAKE FULL RESPONSIBILITY FOR THE ENGINEER DESIGN AND DRAFTING TEAM.

#### **A Structure Maintenance Senior Supervisor will be able to:**

1. Verify no injury incidents relating to any project construction activities.
2. Assist in early project execution strategy development and POB forecasting.
3. Report project progress, status and issues to the Topsides/EPC Interface Lead.
4. Provide input into resolution of project issues and steward process for implementation of resolutions.
5. Review, evaluation and ongoing monitoring of EPC's HS&E program.
6. Operate and maintain all company test equipment in the most efficient, effective, and responsible manner.
7. Record labour, materials, and associated costs in accordance with procedures.
8. Refurbish standard equipment, special purpose equipment, and system components.
9. Demonstrate resource management while understanding budgetary restraints and controlling costs.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 6  
STRUCTURE MAINTENANCE MANAGER**

A STRUCTURE MAINTENANCE MANAGER IS DESIGNATED TO PLAN, MANAGE, AND SUPERVISE THE ACTIVITIES INVOLVED IN THE INSPECTION, MAINTENANCE, REPAIR AND CONSTRUCTION ON THE AUTHORITY STRUCTURE AND OTHER MISCELLANEOUS STRUCTURE THROUGHOUT THE SYSTEM, AND COORDINATE WORK WITH OUTSIDE CONTRACTOR.

**A Structure Maintenance Manager will be able to:**

1. Engineer, plan, manage and monitor the design, fabrication, repair and replacement of structural components system.
2. Manage the development of plans, technical specifications and cost estimates for structure repairs and replacements system.
3. Conduct field inspections of construction and maintenance projects to review progress, work methods and compliance with safety regulations.
4. Assist the General Manager in the development and administration of programs, goals and objectives.
5. Plan and supervise the preparation of the areas budget and monitors budget compliance of various projects.
6. Coordinate structural maintenance and steel fabrication shop work.
7. Monitors the activities of outside contractors to assure that their work is completed in a timely fashion and according to the projects plans, specifications and budget.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.
10. Perform managerial duties.



OIL, GAS AND PETROCHEMICAL

## LEVEL 6

### STRUCTURE MAINTENANCE TECHNOLOGIST

A STRUCTURE MAINTENANCE TECHNOLOGIST IS DESIGNATED FOR THE MAINTENANCE OF THE STRUCTURE AND ITS SYSTEM, PERFORM ANALYTICAL INSPECTION, REPAIR AND MODIFICATION OF PRIMARY AND SECONDARY STRUCTURE.

**A Structure Maintenance Technologist will be able to:**

1. Perform repair or inspection of structure, frames or both.
2. Perform analytical inspections, repairs and modifications of primary and secondary structural.
3. Perform routing servicing, repair and associated tasks under minimum supervision and within established schedules.
4. Identify problem areas in projects, and propose techno-commercially viable solutions.
5. Propose technical recommendations and solutions on specific problems.
6. Provide technical guidance, direction and training to new and experienced materials engineers, specialists, and technicians.
7. Prepare and approve factory acceptance test procedures, operational and Maintenance procedures and inspection/test reports.
8. Review plan, blue print, section, detail and schematic drawings.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.
11. Perform managerial duties.



OIL, GAS AND PETROCHEMICAL

## LEVEL 7

### STRUCTURE INTEGRITY SPECIALIST

A STRUCTURE INTEGRITY SPECIALIST IS DESIGNATED TO PROVIDE A FOCAL POINT FOR ALL DELEGATED MATTER RELATED ON QUALITY OF STRUCTURE AND SYSTEM, ENSURE COMPLIANCE WITH CONTRACT QUALITY PLAN, ACT AS OVERALL QUALITY EXPERT ENSURING THAT QUALITY AND INTEGRITY AND INSPECTION STRATEGIES ARE COMPLIANT WITH RELEVANT LEGISLATION.

#### **A Structure Integrity Specialist will be able to:**

1. Manage process of weld procedure qualification and mechanical testing for onshore, offshore and hyperbaric applications as well as provide accurate input for material procurement.
2. Develop and oversee the implementation of standards across the plant, including static and rotating equipment, electrical, civil and instrumentation.
3. Interface within the wider company and appropriate organisations on materials selection, design control, metallurgy, welding.
4. Supply technical advice on welding, NDE, materials and fabrication issues to project and tendering teams.
5. Establish the critical analyses of the equipment of an industrial installation.
6. Determine a preventive maintenance plan for equipments.
7. Review material certification and liaise with customer's inspectors.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.





**OIL, GAS AND PETROCHEMICAL**

## **LEVEL 1**

### **MECHANICAL AND PIPELINE MAINTENANCE JUNIOR TECHNICIAN**

A MECHANICAL AND PIPELINE MAINTENANCE JUNIOR TECHNICIAN IS DESIGNATED TO CARRY OUT MECHANICAL AND PREVENTIVE MAINTENANCE PROCESS, EVALUATE REPAIRS AND BREAKDOWNS, INCLUSIVE OF VIBRATION DATA RECORDING, ABLE TO COMPLETE TASKS USING OWN INITIATIVE AND SCHEDULE PLAN, REPORT ON VARIOUS MACHINERY CONDITION, AND MAINTAIN HISTORICAL RECORDS OF ALL PLANT AND EQUIPMENT.

**A Mechanical and Pipeline Maintenance Junior Technician will be able to:**

1. Verify that safe working practice is applied to all elements of the job and each task undertaken.
2. Carry out mechanical and preventive maintenance regimes/work programs.
3. Evaluate repairs and breakdowns, inclusive of vibration data recording.
4. Complete tasks using own initiative and schedule plan for the upcoming work.
5. Reports on various machinery condition and troubleshoot all types of mechanical equipment consistent with the offshore oil and gas industry.
6. Maintains historical records of all plant and equipment using out MP2 – CMMS system.
7. Refurbish valves and actuators.
8. Carry out overhauls of rotating machinery such as diesel engines and pumps and compressors.
9. Maintain all hand and power tools.
10. Request materials and tools for the repair of equipment.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.





**OIL, GAS AND PETROCHEMICAL**

## **LEVEL 2**

### **MECHANICAL MAINTENANCE TECHNICIAN**

A MECHANICAL MAINTENANCE TECHNICIAN IS DESIGNATED TO CARRY OUT MECHANICAL AND PREVENTIVE MAINTENANCE PROCESS, EVALUATE REPAIRS AND BREAKDOWNS, INCLUSIVE OF VIBRATION DATA RECORDING, ABLE TO COMPLETE TASKS USING OWN INITIATIVE AND SCHEDULE PLAN, REPORT ON VARIOUS MACHINERY CONDITION, AND MAINTAIN HISTORICAL RECORDS OF ALL PLANT AND EQUIPMENT.

**A Mechanical Maintenance Technician will be able to:**

1. Verify that safe working practice is applied to all elements of the job and each task undertaken.
2. Carry out mechanical and preventive maintenance regimes/work programs.
3. Evaluate repairs and breakdowns, inclusive of vibration data recording.
4. Complete tasks using own initiative and schedule plan for the upcoming work.
5. Report on machinery condition and troubleshoot all types of mechanical equipment consistent with the offshore oil and gas industry.
6. Maintains historical records of all plant and equipment using out MP2 – CMMS system.
7. Refurbish valves and actuators.
8. Carry out overhauls of rotating machinery such as diesel engines and pumps and compressors.
9. Maintain all hand and power tools.
10. Request materials and tools for the repair of equipment.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 3**

**MECHANICAL MAINTENANCE SENIOR TECHNICIAN**

A MECHANICAL MAINTENANCE SENIOR TECHNICIAN IS DESIGNATED TO WORK WITH THE MECHANICAL MAINTENANCE SYSTEMS, ASSIST WITH THE DEVELOPMENT OF A MAINTENANCE PLAN, ENSURE THAT THE INVENTORY IS AVAILABLE, TRACK WORK ORDERS, REQUESTS AND FOLLOW UP ON REPAIRS; SUPERVISE AND COORDINATE SEVERAL DIFFERENT TRADES CONTRACTORS.

**A Mechanical Maintenance Senior Technician will be able to:**

1. Work with the mechanical maintenance systems to support business needs.
2. Assist with the development of a maintenance plan that will contribute to a successful turnaround and shutdown.
3. Verify awareness and attitude that supports a safe workplace.
4. Look for and work towards continuous improvements in the maintenance activities of your work group.
5. Verify that the inventory is available at all times.
6. Track work orders, requests and follow up on repairs.
7. Supervise and coordinate several different trade contractors.
8. Report various machinery conditions and troubleshoot all types of mechanical equipment consistent with the offshore oil and gas industry.
9. Maintain historical records of all plant and equipment using out MP2 – CMMS system.
10. Refurbish valves and actuators.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.



**LEVEL 4**  
**MECHANICAL MAINTENANCE SUPERVISOR**

A MECHANICAL MAINTENANCE SUPERVISOR IS DESIGNATED TO SERVE AS PRINCIPAL MAINTENANCE IN MAINTENANCE DEPARTMENT, PROVIDE TACTICAL AND TECHNICAL GUIDANCE TO SUBORDINATES AND PROFESSIONAL SUPPORT, PLAN, COORDINATE, AND SUPERVISE ACTIVITIES PERTAINING TO ORGANISATION AND TRAINING.

**A Mechanical Maintenance Supervisor will be able to:**

1. Serve as principal maintenance or operations NCO in maintenance or higher level organisation.
2. Coordinate implementation of operations, training programs, and communications activities.
3. Provide tactical and technical guidance to subordinates and professional support to both subordinates and superiors in accomplishment of their duties.
4. Plan, coordinate, and supervise activities pertaining to organisation and training.
5. Edit and prepare tactical plans and training material.
6. Adhere to company standard operating procedure.
7. Comply with safety and security procedure.
8. Perform supervisory function.



**LEVEL 5**  
**MECHANICAL MAINTENANCE SENIOR SUPERVISOR**

A MECHANICAL MAINTENANCE SENIOR SUPERVISOR IS DESIGNATED TO SERVE AS PRINCIPAL MAINTENANCE IN MAINTENANCE DEPARTMENT, PROVIDE TACTICAL AND TECHNICAL GUIDANCE TO SUBORDINATES AND PROFESSIONAL SUPPORT, PLAN, COORDINATE, AND SUPERVISE ACTIVITIES PERTAINING TO ORGANISATION AND TRAINING.

**A Mechanical Maintenance Senior Supervisor will be able to:**

1. Provide tactical and technical guidance to subordinates and professional support to both subordinates and superiors in accomplishment of their duties.
2. Plan, coordinate, and supervise activities pertaining to organisation and training.
3. Edit and prepare tactical plans and training material.
4. Coordinate implementation of operations, training programs, and communications activities.
5. Report various machinery conditions and possess the ability to troubleshoot on all types of mechanical equipment consistent with the offshore oil and gas industry.
6. Maintain historical records of all plant and equipment using out MP2 – CMMS system.
7. Refurbish valves and actuators.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 6**

**MECHANICAL MAINTENANCE MANAGER**

A MECHANICAL MAINTENANCE MANAGER IS DESIGNATED TO VERIFY EFFICIENT AND COST-EFFECTIVE DELIVERY OF MECHANICAL MAINTENANCE AND ENGINEERING SERVICES, PLAN AND COORDINATE THE ACTIVITIES AND RESOURCES OF THE MECHANICAL MAINTENANCE UNIT, PARTICIPATE IN PREPARATION OF CAPITAL AND OPERATING BUDGETS, MONITOR AND OVERSEE THE IMPLEMENTATION OF PREVENTIVE AND CORRECTIVE MAINTENANCE PROGRAMS, AND PLANNED SHUTDOWNS.

**A Mechanical Maintenance Manager will be able to:**

1. Verify efficient and cost-effective delivery of mechanical maintenance and engineering services for plant including all offshore and onshore plants and facilities, offsite and utilities.
2. Plan and coordinate the activities and resources of the Mechanical Maintenance Unit to ensure effective maintenance of plant's mechanical equipments.
3. Participate in preparation of Capital and Operating budgets.
4. Monitor and reconcile capital and operating expenditure against planned budget for Mechanical Maintenance and Engineering Unit.
5. Investigate and readdress any variances to ensure effective cost control and review performance.
6. Monitor and oversee the implementation of preventive and corrective maintenance programs, and planned shutdowns.
7. Liaise closely with Operations and Technical Services to plan and coordinate major shutdowns and turn-around activities.
8. Review any mechanical engineering project plans and drawings.
9. Provide technical advice and assistance, and make recommendations based upon field observation and maintenance needs.

10. Conduct engineering studies to determine the feasibility of introducing modification to increase reliability and efficiency of plant.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.
13. Perform managerial duties.





## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **MECHANICAL MAINTENANCE TECHNOLOGIST**

A MECHANICAL MAINTENANCE TECHNOLOGIST IS DESIGNATED TO DEFINE MAINTENANCE SYSTEM BOUNDARIES ON PROJECT DOCUMENTATION, MAINTENANCE ANALYSIS OF PLATFORM EQUIPMENT AND SYSTEMS, ANALYSIS OF MAINTENANCE WORK CONTENT, AND PERFORMANCE OF MAINTENANCE WORK ORDER.

**A Mechanical Maintenance Technologist will be able to:**

1. Perform maintenance work order and task list scheduling and alignment.
2. Provide instruction to maintenance analyst and technical assistants.
3. Perform data and procedural quality checks.
4. Define maintenance system boundaries on project documentation, and assign into a functional asset hierarchy.
5. Perform maintenance analysis of platform equipment and systems.
6. Retrieve equipment data and recording in various registers and computer systems.
7. Analyse maintenance work content and development of work order documentation.
8. Review and discuss maintenance and engineering work progress, performance and related issues with supervisors.
9. Evaluate work methods and procedures used in maintenance repair and engineering.
10. Identify opportunities for improvements and recommends changes/upgrades to maximise production yields, output and profitability.
11. Adhere to company standard operating procedure.
12. Comply with safety and security procedure.
13. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **MECHANICAL MAINTENANCE SPECIALIST**

A MECHANICAL MAINTENANCE SPECIALIST IS DESIGNATED TO PROVIDE TECHNICAL KNOWLEDGE AND EXPERTISE AND SUPERVISION, PROVIDE TECHNICAL INPUTS, CONTRIBUTE TO THE PREPARATION OF ANNUAL OPERATING MAINTENANCE BUDGETS, AND SPARE PARTS ALLOCATION AND PRIORITISATION.

**A Mechanical Maintenance Specialist will be able to:**

1. Provide technical knowledge and expertise and supervision for the following facets of maintenance.
2. Provide technical inputs with regards to mechanical equipments repairs.
3. Develop Procedural Development and Implementation work.
4. Manage spare parts allocation and prioritisation.
5. Contribute to the preparation of annual operating maintenance budgets.
6. Verify that all maintenance budgets are within the allowable limits.
7. Participate in the planning of major maintenance and main shutdowns.
8. Highlight specific items of equipment which require Maintenance Support Services involvement, assessing resources, material and logistic requirements.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 2**

**PIPELINE MAINTENANCE TECHNICIAN**

A PIPELINE MAINTENANCE TECHNICIAN IS DESIGNATED TO MAINTAIN ALL PIPELINE FACILITIES, MAINTAIN INVENTORY CONTROLS FOR COST EFFECTIVE OPERATION, ASSIST IN MONITORING ALL WORK BEING PERFORMED BY OUTSIDE CONTRACTORS, RESPONSIBLE FOR ALERTING PROPERTY MANAGER ON ANY UNUSUAL OCCURRENCE OR DAMAGE THAT HAVE TAKEN PLACE OR THAT MAY OCCUR.

**A Pipeline Maintenance Technician will be able to:**

1. Maintain all pipeline facilities including valves, piping, pigging activities, right-of-way, and inspection of third party activities, meter stations and regulator stations.
2. Maintain inventory controls for cost effective operations.
3. Assist in monitoring all work being performed by outside contractors.
4. Verify safety standards are used which comply with International Standard.
5. Schedule and complete the "Preventative Maintenance Program".
6. Responsible for alerting the Property Manager of any unusual occurrence or damage that have taken place or that may occur.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 3**

#### **PIPELINE MAINTENANCE SENIOR TECHNICIAN**

**A PIPELINE MAINTENANCE SENIOR TECHNICIAN IS DESIGNATED TO BE RESPONSIBLE FOR THE COMPLETION OF ALL MAINTENANCE SERVICE REQUESTS AS ASSIGNED; WORK WITHIN EXPENSE LIMITS ESTABLISHED; MAINTAIN ALL PIPELINE FACILITIES; MAINTAIN INVENTORY CONTROLS FOR COST EFFECTIVE OPERATION; ASSIST IN MONITORING ALL WORK BEING PERFORMED BY OUTSIDE CONTRACTORS; RESPONSIBLE FOR ALERTING PROPERTY MANAGER ON ANY UNUSUAL OCCURRENCE OR DAMAGE THAT HAVE TAKEN PLACE OR MAY OCCUR.**

**A Pipeline Maintenance Senior Technician will be able to:**

- 1. Responsible for the completion of all maintenance service requests as assigned.**
- 2. Work within expense limits established.**
- 3. Verify compliance of all work related activities in a fair, ethical, and consistent manner.**
- 4. Maintain all pipeline facilities including valves, piping, pigging activities, right-of-way, and inspection of third party activities, meter stations and regulator stations.**
- 5. Maintain inventory controls for cost effective operations.**
- 6. Assist in monitoring all work being performed by outside contractors.**
- 7. Verify safety standards are used which comply with international standard.**
- 8. Schedule and complete the "Preventative Maintenance Program".**
- 9. Alert the Property Manager of any unusual occurrence or damage that have taken place or that may occur.**
- 10. Adhere to company standard operating procedure.**
- 11. Comply with safety and security procedure.**



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 4**

#### **PIPELINE MAINTENANCE SUPERVISOR**

A PIPELINE MAINTENANCE SUPERVISOR IS DESIGNATED TO PROVIDE OVERSIGHT, SCHEDULING AND PROJECT CONTROLS SERVICES, DEVELOP SCHEDULES AND WORK PLANS, HELP IN PROVIDING TECHNICAL DIRECTION ON PROJECTS, DEVELOP, MAINTAIN AND ANALYZE CRITICAL PATHPLANS AND RELATED SCHEDULE, MONITOR JOB PROGRESS, COORDINATE WITH MATERIAL EXPEDITERS ON CRITICAL ITEM OF SUPPLY, PARTICIPATE IN EXPENDITURE FORECAST, AND PERFORM SCHEDULE ANALYSIS.

**A Pipeline Maintenance Supervisor will be able to:**

1. Provide oversight, scheduling and project controls services to the project and reports to the Area Manager.
2. Develop schedules and work plans.
3. Facilitate agreement with multiple departments on milestone dates.
4. Help in providing technical direction on projects, formulating and developing advance scheduling and planning concepts.
5. Develop, maintain, and analyses critical path plans and related schedules.
6. Monitors job progress in relation to schedules.
7. Coordinate with material expeditors concerning critical items of supply.
8. Participate in expenditure forecasts.
9. Perform schedule analysis.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure.
12. Perform supervisory function.



**OIL, GAS AND PETROCHEMICAL**

**LEVEL 5**

**PIPELINE MAINTENANCE SENIOR SUPERVISOR**

A PIPELINE MAINTENANCE SENIOR SUPERVISOR IS DESIGNATED TO PROVIDE OVERSIGHT, SCHEDULING AND PROJECT CONTROLS SERVICES, DEVELOP DETAILED SCHEDULES AND WORK PLANS, PROVIDE TECHNICAL DIRECTION ON PROJECTS, DEVELOP, MAINTAIN AND ANALYSE CRITICAL PATHPLANS AND RELATED SCHEDULE; MONITOR JOB PROGRESS, AND COORDINATE WITH MATERIAL EXPEDITERS ON CRITICAL ITEM OF SUPPLY.

**A Pipeline Maintenance Senior Supervisor will be able to:**

1. Provide oversight, scheduling and project controls services to the project and reports to the Area Manager.
2. Develop detailed schedules and work plans.
3. Facilitate agreement with multiple departments on milestone dates.
4. Provide technical direction on projects, formulating and developing advance scheduling and planning concepts.
5. Develop, maintain, and analyses critical path plans and related schedules.
6. Monitors job progress in relation to schedules.
7. Coordinate with material expeditors concerning critical items of supply.
8. Participate in expenditure forecasts.
9. Perform schedule analysis.
10. Adhere to company standard operating procedure.
11. Comply with safety and security procedure





**OIL, GAS AND PETROCHEMICAL**

**LEVEL 6**

**PIPELINE MAINTENANCE TECHNOLOGIST**

A PIPELINE MAINTENANCE TECHNOLOGIST IS DESIGNATED TO PROVIDE TECHNICAL EXPERTISE, POLICIES, PROCEDURES, STANDARDS, AND TECHNICAL REVIEW CAPABILITIES IN THE AREA OF PIPELINE ENGINEERING AND MAINTENANCE.

**A Pipeline Maintenance Technologist will be able to:**

1. Provide technical expertise, policies, procedures, standards, and technical review capabilities in the area of pipeline engineering and maintenance and repairs.
2. Participate in HAZOP's and design reviews of consultant and contractor generated designs, specifications and interfaces pertaining to pipeline maintenance/repairs.
3. Verify that the entire maintenance and inspection of the pipelines are carried out by the new contractor as per plan specification and as per HSE and QA/QC requirements.
4. Verify materials selected for repairs or replacements of pipes are in line compatible with international standards.
5. Generate and stimulate cost saving improve effectiveness of routine and non routine maintenance activities, without compromising HSE, technical integrity and quality.
6. Support the new maintenance contractor in making sure the right resources.
7. Adhere to company standard operating procedure.
8. Comply with safety and security procedure.
9. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 6**

#### **PIPELINE MAINTENANCE MANAGER**

A PIPELINE MAINTENANCE MANAGER IS DESIGNATED TO COORDINATE AND INSPECT THE REPAIR AND MAINTENANCE OF PIPELINE SYSTEM, DEVELOP AND MONITOR SECTION BUDGET, PREPARE AND REVIEW REPORTS, ASSIGN JOB DUTIES AND MONITOR TASK COMPLETION, DEVELOP AND REVISE STANDARD OPERATING PROCEDURE.

**A Pipeline Maintenance Manager will be able to:**

1. Coordinate and inspect the repair and maintenance of pipeline systems, construction rehabilitation or other facets of pipeline maintenance.
2. Develop and monitor division/section budget and recommend major purchases and expenditures.
3. Prepare and review reports as part of the process of monitoring and communicating division/section performance results.
4. Review and approve personnel actions recommended by supervisors, or when appropriate make recommendations for approval by higher management.
5. Plan, organise, direct, and control division/section activities and coordinate activities with outside contractors.
6. Assign job duties and monitor task completion.
7. Develop and revise standard operating procedures.
8. Provide technical advice and assistance to field personnel and contractors.
9. Adhere to company standard operating procedure.
10. Comply with safety and security procedure.
11. Perform managerial duties.



## **OIL, GAS AND PETROCHEMICAL**

### **LEVEL 7**

#### **PIPELINE MAINTENANCE SPECIALIST**

A PIPELINE MAINTENANCE SPECIALIST IS DESIGNATED TO ENSURE CONSISTENCY IN MAINTENANCE PRACTICES, PERFORM ADMINISTRATIVE TASKS, ACTING AS A COMPANY REPRESENTATIVE WHEN INTERACTING WITH CONTRACTORS AND VENDORS, ABLE TO READ AND INTERPRET BLUEPRINT FOR PIPELINE AND PLANTS, HAVE KNOWLEDGE OF BOTH OSHA AND DOT PIPELINE REGULATIONS.

**A Pipeline Maintenance Specialist will be able to:**

1. Verify consistency in maintenance practices.
2. Perform valve maintenance and leak survey's using flame ionisation equipment.
3. Conduct pigging operations.
4. Utilise pipe cleaning equipment both internal and external.
5. Perform administrative tasks such as ordering and receiving parts and material, personal timesheets and expense accounts.
6. Act as a company representative when interacting with contractors and vendors.
7. Read and interpret blueprints for both pipeline and plants.
8. Adhere to company standard operating procedure.
9. Comply with safety and security procedure.

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