STRUKTUR PEKERJAAN BAGI SEKTOR

INDUSTRI PENGELUARAN

(Occupational Job Structures for

Production Industry Sector)

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1. EXECUTIVE SUMMARY

In conducting the Occupational Analysis on the Production sector, information on the Malaysian Production industry was gathered through literature search and interviews with the industry players from the public and private sectors. A workshop was held in an attempt to get a better understanding of the organisational structure, job titles, hierarchy objectives and primary activities of the said organisation.

Production is an industry with great potential. Endowed with strong government support and a substantial human resource, this industry could expand more in the future.

Production and other related sectors will be developed further under the Third Industrial Master Plan (IMP3), 2006-2020, to transform them into a strategic enabler to support and contribute directly to the growth of the economy.

Lack of skilled workers is identified as one of the factors affecting the Production industry. Thus, efforts and necessary action need to be taken to rectify the situation. Efforts to conduct the Occupational Analysis in the Production industry followed by developing National Occupational Skills Standard and training manuals by the Department of Skills Development are timely.

Malaysia has a severe "*brain drain*" problem especially in Production technologies, as the more talented professionals look for a better technical education and more challenging work abroad. The labour force manning the assembly plants is not skilled enough to man the new industries that the Government wants to attract.

2. CONCEPT AND STRUCTURE OF MALAYSIAN SKILLS CERTIFICATION SYSTEM

2.1 NATIONAL OCCUPATIONAL SKILL STANDARD (NOSS)

NOSS is defined as a specification of the competencies expected of a skilled worker who is gainfully employed in Malaysia for an occupational area and Level and a path to acquire the competencies.

SKM LEVEL 1: (Operation and Production)	Competent in performing a range of varied work activities most of which are routine and predictable.
SKM LEVEL 2: (Operation & Production)	Competent in performing a significant range of varied work activities, performed in a variety of contexts. Some of the activities are non-routine and required individual responsibility and autonomy.
SKM LEVEL 3: (Supervisory)	Competent in performing a broad range of varied work activities, performed in a variety of contexts, most of which are complex and non-routine. There is considerable responsibility and autonomy and control or guidance of others is often required.
DKM LEVEL 4: (Executive)	Competent in performing a broad range of complex technical or professional work activities performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and allocation of resources is often present.
DLKM LEVEL 5: (Managerial)	Competent in applying a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources features strongly, as do personal accountabilities for analysis, diagnosis, planning, execution and evaluation.

***Source**: Department of Skills Development*

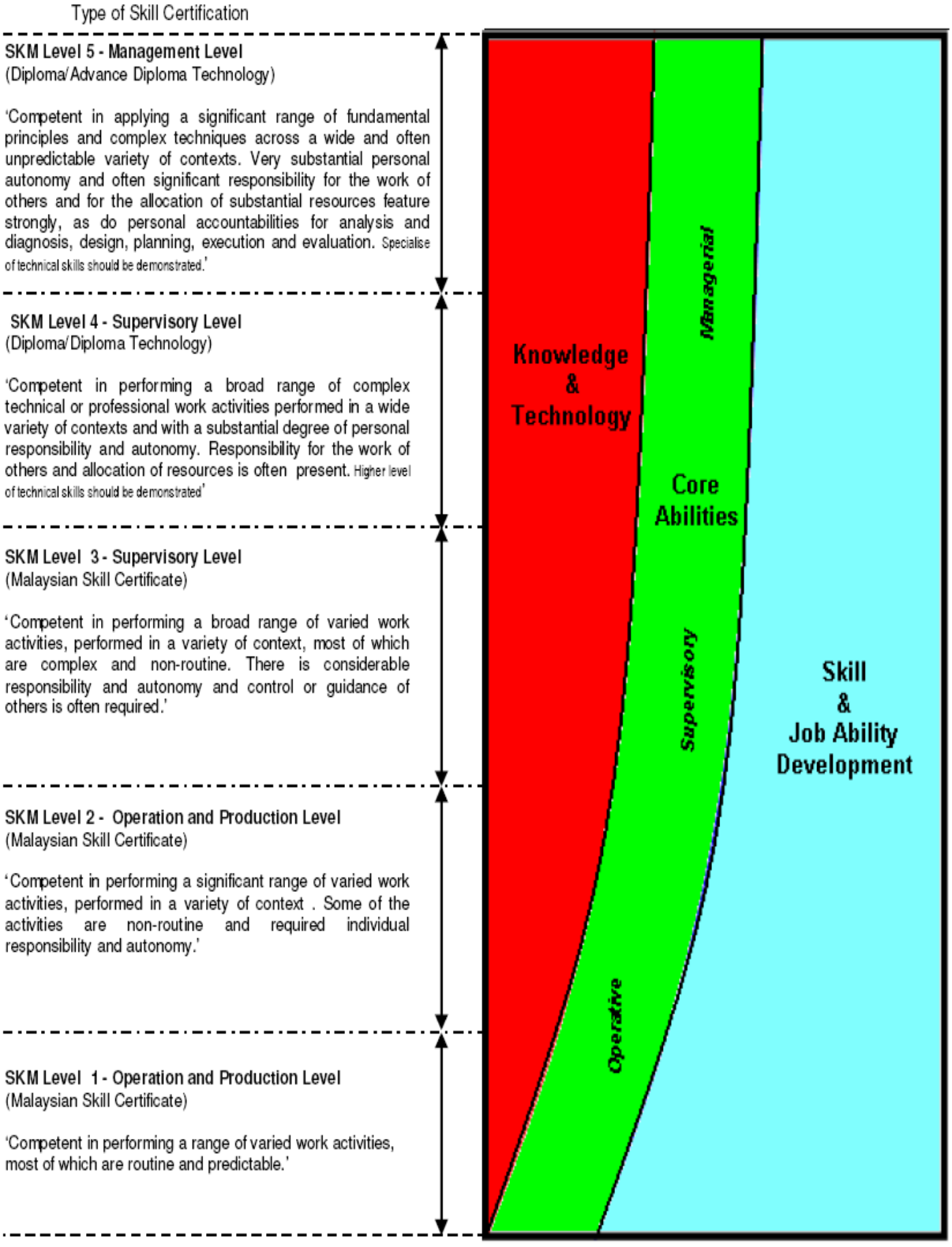

Figure 2.1: Skills Certification Structure

***Source**: Department of Skills Development*
***Reviewed:** 16 January 2009*

MALAYSIA OCCUPATIONAL SKILLS QUALIFICATION FRAMEWORK (MOSQF)

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

Level	Level Description
8	Achievement at this level reflects the **ability to develop original understanding** 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 2.3: Malaysia Occupational Skills Qualification Framework (MOSQF) Levels Description

***Source**: MOSQ Division, Department of Skills Development*

***Date Reviewed**: 2 April 2008*

3. PRODUCTION INDUSTRY IN MALAYSIA – BACKGROUND OF THE SECTOR

3.1 PREAMBLE

The Malaysian Government has developed national development plans such as the Ninth Malaysian Plan and the Third Industrial Master Plan that are targeted at positioning Malaysia's long-term competitiveness to meet the challenges of a fast changing global economic environment. Among the thrusts of these development plans are to sustain the manufacturing and services sector as a major source of growth, where Production is considered as one of the main key sectors.

The supply of competent workforce with the requisite skills in key sectors of Malaysia's economy, particularly in Production will be increased in line with industry demand. In addition, the intake into local skills training institutes and institutions of higher learning as well as the offering of emphasize courses will be expanded. Public-private sector collaboration for example the knowledge workers skills development programme will also be promoted in specific areas. University and industry collaboration and linkages will be enhanced to improve curriculum design to produce graduates with the relevant knowledge and skills required by industry.

3.2 DEFINITION OF PRODUCTION

In economics, production covers all those activities that have to do with the creation of commodities, by imparting to raw materials utility, added value, or the ability to satisfy human wants. The farmer who grows wheat, the miller who grinds the wheat into flour, and the baker who transforms flour into bread are examples of producers who, each in his own way, impart utility to a natural or partially processed material. Production was the major thrust of industry until at least the beginning of the 20th century, when sales and marketing began to be considered equally important in the transference of commodities from producers to consumers. Today, the prevailing mode of production is called mass production, with cottage

industry accounting for only a minor portion of the market in most areas of the world.

Many historians place the beginnings of mass production around 1800, with Eli Whitney's firearms factory approximating the labor process of modern industrial production. The mass production method, generally involving the piecing together of emphasize, interchangeable parts by a number of workers, reached its apex in the automobile manufacturing of the early 20th century. Increasing automation, with attendant increases in the division of labor, allowed manufacturers to hire unskilled or semiskilled labor, which would repeatedly perform small tasks in the ultimate production of a commodity. Hence, mass production often took the form of an assembly line, in which a continuous flow of products moves steadily forward toward completion.

For most kinds of production in modern society, large amounts of capital in the form of machinery are required. Equally essential are land and its natural resources, from which the raw materials are obtained, and labor, which, with the aid of capital, extracts and transforms the raw materials. To these three primary factors of production is sometimes added a fourth: the entrepreneur who emphasize the forces of production and assumes the risks. Since under capitalism production is for a market, an important function of the entrepreneur is to anticipate as accurately as possible the economic demands for goods and to produce the kind and quantity of goods that will meet that demand. In order to meet the great expenses of mass production, particularly the capital necessary in most industries, groups of speculators often take on the risks of production, and the individual entrepreneur has become less significant.

Another late 20th-century trend has been toward greater emphasization of the production process; increasingly, computers are not only being integrated into the machinery of production but are replacing much of the human labor as well. Computerisation has made assembly lines faster and more accurate and has given them more flexibility. Through emphasizes instructions, the design and manufacture of many mass-

produced products can easily be modified to suit the needs of the individual customer.

In microeconomics, Production is simply the conversion of inputs into outputs. It is an economic process that uses resources to create a commodity that is suitable for exchange. This can include manufacturing, storing, shipping, and packaging. Some economists define production broadly as all economic activity other than consumption. They see every commercial activity other than the final purchase as some form of production.

Production is a process, and as such it occurs through time and space. Because it is a flow concept, production is measured as a “rate of output per period of time”. There are three aspects to production processes:

- the quantity of the commodity produced,
- the form of the good created,
- the temporal and spatial distribution of the commodity produced.

A production process can be defined as any activity that increases the similarity between the pattern of demand for goods, and the quantity, form, and distribution of these goods available to the market place.

3.3 CURRENT ANALYSIS OF THE PRODUCTION SECTOR/SUB SECTORS

Malaysia is a country on the move. From a country dependent on agriculture and primary commodities in the sixties, Malaysia has today become an export-driven economy spurred on by high technology, knowledge-based and capital-intensive industries.

The structural transformation of Malaysia’s economy over the last 50 years has been spectacular. Often dubbed the “lucky country” because of its wealth of mineral resources and fertile soils, Malaysia did not rest on its laurels but took decisive steps to progress from an economy dependent on agriculture and primary commodities to a manufacturing-based, export-

driven economy spurred on by high technology, knowledge-based and capital-intensive industries.

Malaysia's pragmatic and flexible management approach has enabled the economy to raise its competitiveness and enhance its resilience in facing challenging circumstances. Deliberate measure has been taken to make the economy more diversified and broad based to ensure sustainable growth. Continuous efforts have been pursuit to enhance the services sector, accelerate value-added of the manufacturing sector as well as boost the agriculture and agro based sector as the third engine of growth. New sources of growth continue to be promoted and developed such as biotechnology, information and communications technology, *halal* products and Islamic finance. Indeed Malaysia is developing as a knowledge-based economy, driven by human capital, innovation and ideas.

The global environment remains challenging in 2008, as a result of a persistently high crude oil price, inflationary pressures and monetary tightening; this has resulted in higher interest rates. However, Malaysia remain confident in facing these challenges to achieve a healthy growth rate for 2008, given the nation more diverse economic structure and strengthened domestic fundamentals.

Malaysia's total trade in 2007 was valued at RM1.11 trillion, an increase of 3.7 per cent from RM1.07 trillion in 2006. Exports increased by 2.7 per cent to RM605.1 billion in 2007 from RM589 billion in 2006. Imports increased by 4.9 per cent to RM504.6 billion from RM480.8 billion in 2006. The growth in exports in 2007 had resulted in Malaysia recording trade surplus for the tenth consecutive years valued at RM100.5 billion*.The manufacturing sector accounted for 30.3% of Malaysia's GDP in 2007 while exports of manufactured goods make up 74.8% of the country's total exports*. From being the world's largest producer of rubber and tin, Malaysia is today one of the world's leading exporters of semiconductor devices, computer hard disks, audio and video products and room air-conditioners.

Malaysia's rapid emphasization was the result of the country opening itself relatively early in the 1960s to foreign direct investments (FDI). Today, its market-oriented economy, combined with an educated multilingual workforce and a well-developed infrastructure, has made Malaysia one of the largest recipients of FDI among developing countries.

Malaysia was ranked the fifth most competitive economy in Asia, after Singapore, Hong Kong, Taiwan, and China; and 19th worldwide based on the recently-released World Competitiveness Yearbook 2008, covering 55 economies.

Malaysia is a "natural choice" for offshore services in view of its low costs, particularly for infrastructure, the most attractive business environment among emerging markets, and high levels of global integration.

The last decade has seen a deepening and widening of Malaysia's industrial base as well as the further development of its services sector. As such, a strong foundation has been laid for the economy to move forward into the new globalised environment.

As the need for Production continues to expand, the term continues to become more and more common. Two things that have contributed to its growth are the shrinking global market and the need for reliable and cost-effective products. To be competitive, companies must develop new technologies to design and manufacture their products.

3.4 POLICIES, ASSOCIATIONS AND DEVELOPMENT PLAN FOR PRODUCTION

(i) Production and the Ninth Malaysia Plan

Malaysia launched the Ninth Malaysia Plan (2006-2010) on 31st March 2006. One of the objectives of the Plan is to position the country to achieve developed nation status by 2020. An allocation of RM200 billion (US$53.4 billion) for development expenditure has been provided under the Plan to sustain the economic development of the country. Within the period, the manufacturing sector is projected to expand by 6.7 per cent per annum. For the manufacturing sector, the Plan emphasizes on high technology, knowledge-based and skills-intensive activities in sectors such as:

- Electronics
- Biotechnology
- Petrochemicals
- Aerospace
- Machinery and equipment

(ii) The Third Industrial Malaysia Plan (IMP3)

Besides the Ninth Malaysia Plan, the Malaysian Government has also launched the Third Industrial Master Plan (IMP3) (2006-2020). IMP3 will be targeted at positioning Malaysia's long-term competitiveness to meet the challenges of a fast changing global economic environment.

Among the thrusts of IMP3 are:

- sustaining the manufacturing and services sector as a major source of growth
- improving Malaysia's competitiveness and ensuring a conducive investment environment

The aim is to achieve long-term global competitiveness through transformation and innovation of the manufacturing and services

sectors.The scope covers the manufacturing sector, including agro-based industries and 12 industries in the manufacturing sector have been targeted for further development and promotion. Among them, six are non-resource based and the rest are resource based industries:

Non- resource based

- electrical and electronics;
- medical devices;
- textiles and apparel;
- machinery and equipment;
- metals; and
- transport equipment

Resource based

- petrochemicals;
- pharmaceuticals;
- wood-based;
- rubber-based;
- oil palm-based; and
- food processing

Targets of the IMP3 are as below:

Manufacturing Sector

- to grow at 5.6 per cent annually and contribute 28.5 per cent to gross domestic product (GDP) in 2020; and
- total investments of RM412.2 billion (RM27.5 billion annually)

External Trade

- exports to increase to RM1.4 trillion in 2020; and
- total trade to increase to RM2.8 trillion

Productivity

- total factor productivity (TFP) to grow at 2.6 per cent annually; and
- contribute 41.4 per cent to GDP during the IMP3 period

(iii) Malaysian Industrial Development Authority (MIDA)

The Malaysian Industrial Development Authority (MIDA) is the government's principal agency for the promotion of the manufacturing and services sectors in Malaysia. MIDA assists companies which intend to invest in the manufacturing and its related services sectors as well as facilitates the implementation and operation of their projects. The wide range of services provided by MIDA includes providing information on the opportunities for investment and facilitating companies which are looking for joint venture partners.

To further enhance MIDA's role in assisting investors, senior representatives from key government agencies are stationed at MIDA's headquarters in Kuala Lumpur to advise investors on government policies and procedures. These representatives include officials from the Ministry of Finance, Ministry of Human Resources, Immigration Department, Royal Malaysian Customs, Department of Environment, Department of Occupational Safety and Health, Tenaga Nasional Berhad and Telekom Malaysia Berhad.

MIDA also evaluates the following applications for projects in the manufacturing and its related services sectors:

- Manufacturing licenses
- Tax incentives
- Expatriate posts
- Duty exemptions on raw materials, components, machinery and equipment

Functions of MIDA

- to promote foreign and local investments in the manufacturing and services sectors;
- to facilitate cross border investments and assist Malaysian companies to identify markets and investment abroad;
- to undertake planning for industrial development in Malaysia
- to recommend policies and strategies on industrial promotion and development to the Minister of International Trade and Industry;
- to evaluate applications for manufacturing licenses and expatriate posts; tax incentives for manufacturing activities, tourism, R&D, training institutions and software development; and duty exemption on raw materials, components and machinery;
- to assist companies in the implementation and operation of their projects, and offer assistance through direct consultation and co-operation with the relevant authorities at both the federal and state levels;
- to facilitate the exchange of information and co-ordination among institutions engaged in or connected with industrial development;
- to further enhance MIDA's role of assisting investors, senior representatives from key agencies are stationed at MIDA's headquarters in Kuala Lumpur to advise investors on government policies and procedures. These representatives include officials from the Ministry of Finance, Ministry of Human Resources, Immigration Department, Royal Customs Malaysia, Department of Environment, Department of Occupational Safety and Health, Tenaga Nasional Berhad and Telekom Malaysia Berhad.

(iv) The Federation of Malaysian Manufacturers (FMM)

The Federation of Malaysian Manufacturers (FMM) is Malaysia's premier economic organisation. Since its establishment in 1968, the FMM has consistently led Malaysian manufacturers in spearheading the nation's growth and modernisation. Today, as the largest private sector economic organisation in Malaysia representing over 2,000 manufacturing and industrial service companies of varying sizes, the FMM is the officially recognised and acknowledged voice of the industry.

Services Offered by FMM and the Benefits of Membership

Since July 2, 1968, FMM has been working alongside the Malaysian manufacturing sector as its representative voice for over 36 years. Committed to quality and service excellence, FMM is an ISO9001:2000 certified company limited by guarantee. Led by captains of industry at Council, State Branches, issues-oriented Working Committees and Industry Groups, FMM represents the manufacturing sector at international, regional, national, state, local authorities and industry sub-sector levels. FMM offers a wide range of services and activities to facilitate business operations.

(v) Approach Employed by Malaysia to Develop the Production Sector

Through the IMP3, Malaysia is positioning itself as a major trading nation by intensifying exports of targeted growth areas, developing and promoting Malaysian brands; enhancing exports through compliance with international standards, nurturing domestic companies, including GLCs and SMEs, to become globally competitive. In the strategic thrusts of the IMP3, it plans to develop the production industry by:

(a) Generating investments in the targeted growth areas:

- promoting investments and exports of products and services with growth potential;
- facilitating capable domestic companies, including GLCs, to expand into potential growth areas;
- establishing fully equipped specialised high technology parks;
- encouraging multinational corporations (MNCs) to establish and expand operations in Malaysia; and
- providing a more conducive investment environment
- integrating Malaysian companies into regional and global networks
- encouraging industries to focus on core competencies and strengths within regional and global networks;
- undertaking outsourcing, off-shoring and other forms of business practices;
- developing Malaysia as a regional hub for selected products and services – *halal*, biotechnology and automotive

(b) Ensuring industrial growth contributes towards equitable distribution and more balanced regional development

- Equitable Distribution

Promoting Bumiputera Commercial and Industrial Community (BCIC) through new sources of growth in manufacturing and services sectors and outward investments; enhancing the development of Bumiputera human capital; and enhancing the growth and increasing ownership of BCIC through the development of SMEs.

- Balanced Regional Development

Promoting more balanced industrial development in lesser developed states; and encouraging integrated logistics industry.

(c) Sustaining the contribution of the manufacturing sector to growth:

- accelerating the shift towards higher value-added products and activities and high technology and capital-intensive activities;
- encouraging the development and promotion of twelve targeted industries; and
- facilitating the development of domestic and regional clusters

Apart from ten overall strategic thrusts, IMP3 contains strategic thrusts and policy measures for specific areas:

- External trade;
- Investments;
- Development of SMEs;
- Branding;
- Growth areas in the manufacturing sector;
- Growth areas in the services sector;
- Development of the halal industry;
- Enhancing domestic capabilities;
- Human resource requirements;
- ICT and other technology developments; and
- Logistics

3.5 SKILLED WORKER REQUIREMENT IN THE LOCAL INDUSTRY SECTOR

The next 10 years will see a greater emphasis on human resource enhancement as availability of skilled and knowledge workers are a major pre-requisite to transform Malaysia from a production-based into a knowledge-based economy.

Malaysia offers investors a young, educated and productive workforce at very competitive costs. Malaysia's literacy rates are high and school leavers entering the job market have at least 11 years of basic education. Malaysia has a young, educated and productive workforce.

Malaysia offers investors a young, educated and productive workforce at costs competitive with other countries in Asia. Backed by the government's continued support of human resource development in all sectors, the quality of Malaysia's workforce is one of the best in the region. Literacy levels are high at more than 94% and school leavers entering the job market have at least 11 years of basic education.

In addition Malaysia registered a significant 4.2% productivity growth in 2007, ranking third after China and India. The growth which was the highest since 2001, has translated to a rise in the productivity of the Malaysian economic. Education and training are accorded high priority in national development under Malaysia's five-year development plans.

To date, there are more than 17 public and 20 private universities and colleges, as well as various polytechnics and industrial training institutes that offer courses leading to certificate, diploma, degree and post-graduate degree qualifications. Total enrolment in public institutions of higher learning alone is projected to reach over 300,000 with more than half in the science and technical disciplines.

The private sector has also set up educational institutions to supplement the government's efforts to generate a larger pool of professionals and semi-professionals. Among these are institutions of higher learning set up by large corporations such as Telekom Malaysia Berhad, Tenaga Nasional Berhad and Petronas which provide degree-level courses. Various private colleges in Malaysia offer degree programmes on a twinning basis with overseas institutions of higher learning, while foreign universities have set up branch campuses in the country. Educational institutions in Malaysia generate a large pool of professionals with degree and post-graduate qualifications.

In 1993, the Human Resource Development Fund (HRDF) was launched by the government to encourage training, retraining and skills upgrading in the private sector. Employers, in the manufacturing and service sectors who contribute to this fund are eligible to apply for grants to defray or subsidies the costs incurred in training and retraining their workforce.

The Department of Skills Development (DSD) formerly known as the National Vocational Training Council under the Ministry of Human Resources coordinates the setting up of all public and private training institution, evaluates the demand for existing and future skills, identifies future vocational and industrial training needs and will continue to develop standard under the National Occupational Skills Standards (NOSS). To-date, there are more than 700 certified standards which covers certificate, diploma and advanced diploma qualifications.

Besides the increasing number of public training institutions such as technical schools, polytechnics, industrial training institutes and skills development centres to meet the growing requirements of the industrial sector, collaborative efforts between the Malaysian government, enterprises and foreign governments have resulted in the establishment of several advanced skills training institutes such as the German-Malaysian Institute, Malaysia France Institute, Japan Malaysia Technical Institute, British Malaysia Institute and Malaysian Spanish Institute.

The Government is fully aware of the concerns of supply of skilled manpower to sustain Malaysia's economic development. Under the 9th Malaysia Plan, a total of US$12.1 billion has been allocated for human capital development. Among the initiatives undertaken by the Malaysian Government for human capital development is through collaboration with the Japanese Government and private sector. The Malaysia-Japan University Centre, officially launched on 13 December 2005 by the Prime Ministers of both countries, has started its administrative operations. At this Centre, a consortium of 14 universities from Japan and 17 Malaysian Public Institutions of Higher Learning will offer courses and joint-programmes to Malaysian students. There are also several industrial

training institutes established through collaboration with foreign countries, one of which is the Japan-Malaysia Technical Institute. This Institute has been in operation since 1998 and offers courses in the fields of:

- computer engineering;
- electronics engineering;
- mechatronics engineering;
- manufacturing engineering.

3.6 INDUSTRIAL COMPETITION AT INTERNATIONAL LEVEL

The Government of Malaysia (GOM) encourages foreign direct investment (FDI) by providing a number of incentives, particularly in export-oriented high-tech industries and “back office” service operations. The GOM also hosts international trade shows and advertises broadly to attract FDI. Many foreign companies have operations in Malaysia, including Intel, Microsoft, Dell, GE, UPS, Mattel, and Motorola, just to name a few.

FDI inflows rebounded in 2006. In October, the UN Conference on Trade and Development (UNCTAD) reported that FDI to Malaysia increased by 52.8% after a 14.5% decrease in 2005. Inflows during 2006 restored total inward FDI stock to 1.6% above its 2000 level after having dropped off measurably by 2005. Malaysia retained its 2005 global rank of 62nd largest destination for FDI, keeping apace with a sharp global increase, but not close to its status a decade ago when it ranked sixth in 1995.

As a destination for FDI, Malaysia’s attractiveness is narrowing as the country becomes less competitive for lower-wage manufacturing. In response, the GOM seeks to move the economy “up the value chain” by promoting specific sectors. In its 2006-2020 Third Industrial Master Plan, the GOM identified specific higher-tech industries it wanted to attract and develop. In the manufacturing sector these included electrical & electronics; medical devices; textiles & apparel; machinery & equipment; metals; and transportation equipment. Also targeted for growth were a number of resource-based industries and some services sub-sectors;

however, the extent to which foreign investors are allowed to participate in these sectors is limited.

An in-depth study of the investment climate, conducted by the GOM in collaboration with the World Bank and published in 2005, identified Malaysia's top two economic constraints as 1) its regulatory burden, especially for services, and 2) its shortage of skilled labour. Two similar studies, one conducted by UBS and the other by the Institute of International Finance, reached similar conclusions.

MIDA screens all proposals for manufacturing and related projects in Malaysia, both foreign and domestic, to determine the extent to which they contribute to the government's goals and objectives. These as outlined in the Third Industrial Master Plan (2006-2020), the various regional initiatives (Iskandar Development Region, Northern Corridor Economic Region, and the Eastern Corridor Economic Region currently being developed) as well as other strategic economic and social development initiatives and policies. Project approval depends on many other factors as well.

Until recently, the U.S. consistently was the largest foreign investor in Malaysia, with significant presence in the oil and gas sector, manufacturing, and financial services. An American Chamber of Commerce 2005 survey puts cumulative U.S. interest in Malaysia at more than US $30.0 billion. According to the Malaysian Industrial Development Authority, the U.S. slipped to seventh place by September 2007 in terms of the value of new manufacturing investment project applications with approved projects valued at U.S. $330 million, down from third place with $519 million in September 2006. Major semiconductor manufacturers, including Freescale, Texas Instruments, Intel, StatsChipPac, National Semiconductor, and others have substantial operations in Malaysia, as do electronics manufacturers Western Digital, Komag and Dell Computers. Virtually all major Japanese consumer electronics firms (Sony, Fuji, Panasonic, Matsushita, Hitachi, etc.) have facilities in Malaysia.

Foreign Manufacturing Investment by Sector

(In U.S. Dollars Millions)

Sector	2003	2004	2005	2006
Chemicals	94	146	35	826
Petroleum Products	115	214	193	165
Electronics	955	1,796	2,979	2,344
Basic Metal	1,112	70	113	623
Textiles	20	97	38	41
Food Manufacturing	116	101	140	244
Paper, Print	27	358	33	25
Rubber Products	28	29	57	70
Non-Metal	86	100	157	262
Fabricated Metal	157	194	66	168
Transport	1050	67	133	59
Other	356	287	762	685
Total	**4,116**	**3,459**	**4,706**	**5,512**

Figure 3.1: Foreign Management Investment by Sector

***Source**: Investment Climate Statement - Malaysia. US Department of State.*

In 2006, the Malaysian economy grew by 5.9 per cent compared to 5.2 per cent in 2005. The growth was led by the expansion of the manufacturing and services sectors.

GDP growth of 5.3 per cent was recorded in the first quarter of 2007 where the manufacturing sector grew by 1.7 per cent during the same period. In 2006, approved foreign investments into Malaysia increased by 13.1 per cent to US$5.5 billion. This is the highest level of foreign investments approved in the manufacturing sector. It shows that Malaysia continues to attract foreign investments, despite today's increasingly competitive global investment environment.

4. METHODOLOGY OF OCCUPATIONAL ANALYSIS – PRODUCTION SECTOR

In conducting the Occupational Analysis, a kick off meeting was held primarily to strategise the Plan of Action in accordance with guidelines as presented by JPK in terms of scope of study, time frame and representation by panel of Production experts from both 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.

(i) Literature survey

As outlined by the guidelines, a literature survey on the Production sector 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 Production industry sector, skilled workers requirement in the local industry and the industrial competition at international level.

(ii) Identifying industry & public players

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

(iii) Establish contact with the Production sector players

A pool of Production experts from the industry and public sector were contacted. The experts will sit down and discuss further about this sector.

(iv) Information gathering

In the process of gathering the information, two methods were adopted, namely; brainstorming and the Developing a Core-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 to the occupational analysis of the said industry.

(v) 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 Production sub sector in Malaysia were done using the following framework:

(a) Scope of the Production 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

(vi) Organise Workshop with expert panels

The first workshop has been conducted in the development of the Occupational Analysis of the Production sector. The details of the workshops are as below:

- Held on the 15th and 16th November, 2008 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
    - Validation of the findings

- Held on the 13th and 14th December 2008, at Lisbon Hotel, Melaka. The objectives of the workshop were:
    - Review and proofreading of findings
        - Job Titles
        - Career structure
        - Hierarchy structure (Level 1 – 8)
        - Occupational Definition
    - Occupational Analysis Session
    - Validation of the findings

5. FINDINGS

The findings from the research of the Production sector's Occupational Analysis can be divided into four categories, which are the existing job titles, proposed job titles, the mapping between the proposed job titles to the existing ones and the leveling and entry level justification.

5.1 EXISTING JOB TITLE AND HIERARCHY OF THE PRODUCTION SECTOR

Based on the existing job titles in DSD's NOSS Registry, the Production sector in Malaysia is divided into two major sub sectors namely Quality Assurance and Industrial Product. A total of eight job titles are present from Level 1 until Level 5. The entry level for this sector is at Level 1, as a Junior Quality Assurance Technician or Industrial Product Draughtsman. The Industrial Product sub sector is only until Level 3, as the Industrial Product Designer. The existing Job Titles and OA Matrix for the Production sub sector are included in Figure 5.1: Existing Production OA Matrix

5.2 NEWLY IDENTIFIED SUB SECTORS

The newly identified sub sectors for the Production sector were obtained through literature research and discussions with industry experts during the development workshop sessions. According to Malaysia's Industrial Plan (IMP3), The Ninth Malaysian Plan (RMK9) and other related national economical plans, the nation is targeted to propel itself towards improving the quality of life of Malaysians and at boosting Malaysia's global competitiveness.

During the development workshops, the panel members had identified two main industries that reflect the main category of production in Malaysia. The two production industries are listed as below:-

(a) Resource Based Industries
(b) Non-Resource Based Industries

The OA matrices for these two industries are included in this section. A total of 86 job titles exist in the proposed sub sectors. There are a total of 12 proposed sub sectors.

Compared to the existing job titles in the Production sector, the industry observes that if the next generation of workforce were more specialised in the different areas of production, this would save the employer's time and cost spent to train them. This is because each of the areas of production are rapidly changing and evolving; it would be more efficient for workers to update their knowledge and skills in their respective areas. Below are the descriptions of each of the different sub sectors.

(i) Resource Based Industries

The resource based industries consist of products that are based on natural resources or agriculture that can be obtained locally as listed below. This industry has great potential of development and will help to boost the economy due to Malaysia's vast resources, especially oil palm and rubber based products. This industry consists of five main sub sectors based on the type of resource:

(a) Pharmaceuticals (Natural/Traditional)
(b) Food Processing
(c) Rubber & Rubber-Based Product
(d) Oil Palm-Based Product
(e) Wood-Based Product

Under the Pharmaceuticals sub sector is further divided into areas that require different competencies as the job scopes vary. Each of these areas is important in ensuring the smooth operation of production, the quality standards are complied to and material is controlled. The areas are as below:

(a) Quality Control
(b) Production Process

Most of the areas above have job titles from Level 1 until Level 7. It starts at Level 1 as Production Operator and can go further till Level 7.

(ii) Non-Resource Based Industries

Non Resource based manufacturing activity isn't based on processing natural resources but they manufacture a wide variety of products such as the manufacture of construction material, textiles and apparel, equipment and machinery, to name just a few. High-technology industries such as those manufacturing electronics, chemicals, plastic and other goods in which a considerable amount of research and development has been invested are all part of the non-resource based manufacturing sector.

The following are the seven different sub sectors observed and proposed for the Non-Resource Based industries:

(a) Construction Material Industry
(b) Textiles & Apparel
(c) Plastic Industries
(d) Electrical & Electronic
(e) Machinery & Equipment
(f) Metal & Related Industries
(g) Chemical Industries

The textiles & apparel sub sector in Non Resource Based Industries is further divided into areas that require different competencies as the job scopes vary. The areas are as below:

(a) Textile

(b) Apparel

The Apparel Operator has a different pre requisite compared to the Production Operator of the other sub sectors, they must be competent at sewing. Most of the areas above have job titles from Level 1 until Level 7. It starts at Level 1 as Production Operator and can go further till Level 7.

It can be seen in the proposed Production sector that there is no job title at Level 8, this is because the Production sector does not require expertise at Level 8 as the personnel at this level are usually those recognised as leading experts or practitioners in a particular field and are involved in the development of new and creative approaches that extend or redefine existing knowledge or professional practice. This does not apply for the Production sector. However, as the Production sector is under the Manufacturing sector that may have personnel at Level 8, the Production sector can refer to those at Level 8 in the Manufacturing sector.

Mechanical – Production Sector

	Jaminan Kualiti **(Quality Assurance)**	**Produk Industri** **(Industrial Product)**
L5	H-301-5 Jurutera Jaminan Kualiti (Pembuatan) (Quality Assurance Engineer (Manufacturing)) (18-07-02)	Belum Ada (Not Available)
L4	H-301-4 Penolong Jurutera Jaminan Kualiti (Pembuatan) (Assistant Quality Assurance Engineer (Manufacturing)) (18-07-02)	
L3	H-301-3 Juruteknik Kanan Jaminan Kualiti (Senior Quality Assurance Technician) (19-07-01)	H-302-3 Pereka Produk Industri (Industrial Product Designer) (19-07-01)
L2	H-301-2 Juruteknik Jaminan Kualiti (Quality Assurance Technician) (19-07-01)	H-302-2 Pembantu Pereka Produk Industri (Assistant Industrial Product Designer) (19-07-01)
L1	H-301-1 Juruteknik Rendah Jaminan Kualiti (Junior Quality Assurance Technician) (19-07-01)	H-302-1 Pelukis Produk Industri (Industrial Product Draughtsman) (19-07-01)

Figure 5.1: Existing Production OA Matrix

SUB SECTOR	RESOURCE BASED INDUSTRIES					
AREA	**PHARMACEUTICALS (NATURAL/TRADITIONAL)**		**FOOD PROCESSING**	**RUBBER & RUBBER-BASED PRODUCT**	**OIL PALM-BASED PRODUCT**	**WOOD-BASED PRODUCT**
LEVEL 8	*- No Level -*		*- No Level -*	*- No Level -*	*- No Level -*	*- No Level -*
LEVEL 7	Pharmaceuticals Production Specialist*		Food Processing Specialist	Rubber & Rubber Based Production Specialist	Oil Palm Product Production Specialist	Wood Based Product Production Specialist
LEVEL 6	Pharmaceuticals Manager	Pharmaceuticals Quality Control Manager	Food Processing Production Manager	Rubber & Rubber Based Industries Production Manager	Oil Palm Product Industries Production Manager	Wood Based Product Industries Production Manager
LEVEL 5	Pharmaceuticals Senior Executive	Pharmaceuticals Quality Control Senior Executive	Food Processing Production Senior Executive	Rubber & Rubber Based Industries Production Executive	Oil Palm Product Industries Production Senior Executive	Wood Based Product Industries Production Senior Executive
LEVEL 4	Pharmaceuticals Process Executive	Pharmaceuticals Quality Control Executive	Food Processing Production Executive*	Rubber & Rubber Based Industries Production Superintendent	Oil Palm Based Product Industries Production Executive	Wood Based Product Industries Production Executive
LEVEL 3	Pharmaceuticals Production Supervisor	Pharmaceuticals Quality Control Supervisor	Food Processing Production Supervisor	Rubber & Rubber Based Industries Production Supervisor	Oil Palm Based Product Industries Production Supervisor	Wood Based Product Industries Production Supervisor
LEVEL 2	Pharmaceuticals Production Line Leader	Pharmaceuticals Quality Control Inspector	Food Processing Production Line Leader	Rubber & Rubber Based Industries Production Line Leader	Oil Palm Based Product Industries Production Line Leader	Wood Based Product Industries Production Line Leader
LEVEL 1	Production Operator					

* Critical job title

Figure 5.2: Resource Based Industries

SUB SECTOR	NON-RESOURCE BASED INDUSTRIES							
AREA	**CHEMICAL INDUSTRIES**	**METAL & RELATED INDUSTRIES**	**MACHINERY & EQUIPMENT**	**ELECTRICAL & ELECTRONIC**	**PLASTIC INDUSTRIES**	**CONSTRUCTION MATERIAL INDUSTRY**	**TEXTILES & APPAREL**	
LEVEL 8	*- No Level -*	*- No Level -*	*- No Level -*	*- No Level -*	*- No Level -*	*- No Level -*	*- No Level -*	
LEVEL 7	Chemicals Production Specialist	Metal & Related Production Specialist	Machinery & Equipment Production Specialist	Electrical & Electronic Production Senior Technologist	Plastic Production Specialist	Construction Material Production Specialist	Textile Production Specialist	Apparel Production Specialist
LEVEL 6	Chemicals Manager	Metal & Related Industries Production Manager*	Machinery & Equipment Industries Production Manager	Electrical & Electronic Process Technologist	Plastic Industries Production Manager	Construction Material Industries Production Manager	Textile Industries Production Manager	Apparel Industries Production Manager
LEVEL 5	Chemicals Senior Executive	Metal & Related Industries Production Senior Executive*	Machinery & Equipment Industries Production Senior Executive	Electrical & Electronic Assistant Technologist	Plastic Industries Production Senior Executive	Construction Material Industries Production Senior Executive	Textile Industries Production Senior Executive	Apparel Industries Production Senior Executive
LEVEL 4	Chemicals Process Executive	Metal & Related Industries Production Executive*	Machinery & Equipment Industries Production Executive	Electrical & Electronic Senior Technician	Plastic Industries Production Executive	Construction Material Industries Production Executive	Textile Industries Production Executive	Apparel Industries Production Executive
LEVEL 3	Chemicals Production Supervisor	Metal & Related Industries Production Supervisor*	Machinery & Equipment Industries Production Supervisor	Electrical & Electronic Production Technician	Plastic Industries Production Supervisor	Construction Material Industries Production Supervisor	Textile Industries Production Supervisor	Apparel Industries Production Supervisor
LEVEL 2	Chemicals Production Line Leader	Metal & Related Industries Production Line Leader	Machinery & Equipment Industries Production Line Leader	Electrical & Electronic Production Line Leader	Plastic Industries Production Line Leader	Construction Material Industries Production Line Leader	Textile Industries Production Line Leader	Apparel Industries Production Line Leader
LEVEL 1	Production Operator							Apparel Industries Operator

* Critical job title

Figure 5.3: Non-Resource Based Industries

5.3 MAPPING BETWEEN THE PROPOSED AREAS TO THE EXISTING SUB SECTORS

Due to the current development in the Production industry, the existing job titles in DSD's Registry of Job Titles for this sector have been reviewed and enhanced. The new proposed job titles reflect a more refined and specialised spectrum of job titles, while still maintaining the main framework of the Production sector of the existing job titles. The mapping between the proposed areas to the existing sub sectors is included in this section in an overall view of all the sub sectors. There are some issues regarding the mapping as described below:

(i) Leveling

In accordance with DSD's requirement to take into consideration job titles extended from the existing Level 5 up to Level 8, many of the existing leveling has been changed to a higher level than the existing one.

(ii) New existing Job Title, Area or Sub Sector

As there are newly defined job titles, areas and sub sectors, it is not possible to map all of them to existing NOSSes. However, mapping has been done between the proposed job titles to existing NOSSes according to the job scope that is felt relevant and can be used as reference.

(iii) Mapping

The existing sub sectors, Quality Assurance and Industrial Product can be mapped to the proposed areas, Quality Control and Production. All these areas are most similar to the present sub sectors, therefore the existing sub sectors are mapped to the areas.

EXISTING SUB SECTORS / PROPOSED AREAS	Quality Assurance H-301	Industrial Product H-302
QUALITY CONTROL		
PRODUCTION PROCESS		

Figure 5.4: Mapping between the Proposed Areas to the Existing Sub sectors

5.4 ENTRY POINTS/CAREER PATH

Sub Sector: Resource Based Industries, Non-Resource Based Industries

Resource Based Industries
No Level
Level 7
Level 6
Level 5
Level 4
Level 3
Level 2
Level 1

Non-Resource Based Industries
No Level
Level 7
Level 6
Level 5
Level 4
Level 3
Level 2
Level 1

The Resource Based Industries and Non-Resource Based Industries sub sectors begin at **Level 1,** because the work of the operator consists of routine work and operation of the production machines. The Production Operator also deals with routine work regarding production materials. The Apparel Operator must have sewing skills in order to carry out their duties.

5.5 OCCUPATIONAL DEFINITION

Under the Production sector, job titles have been identified and defined. Each of the job title is given a job definition as specified. The definitions for all job titles are included in Annex 2.

5.6 CRITICAL JOB TITLE

The critical job titles have been determined based on the analysis conducted with the panel experts. Below are the critical and non critical job titles identified.

(i) CRITICAL JOB TITLES

(a) SUB SECTOR: RESOURCE BASED INDUSTRIES

No.	Job Title	Level
1.	Pharmaceuticals Production Specialist	L7
2.	Food Processing Production Executive	L4

(b) SUB SECTOR: NON-RESOURCE BASED INDUSTRIES

No.	Job Title	Level
1.	Metal & Related Industries Production Manager	L6
2.	Metal & Related Industries Production Senior Executive	L5
3.	Metal & Related Industries Production Executive	L4
4.	Metal & Related Industries Production Supervisor	L3

(ii) NON CRITICAL JOB TITLES

(a) SUB SECTOR: RESOURCE BASED INDUSTRIES

No.	Job Title	Level
1.	Production Operator	L1
2.	Pharmaceuticals Production Line Leader	L2
3.	Pharmaceuticals Quality Control Inspector	L2
4.	Food Processing Production Line Leader	L2
5.	Rubber & Rubber Based Industries Production Line Leader	L2
6.	Oil Palm Based Product Industries Production Line Leader	L2
7.	Wood Based Product Industries Production Line Leader	L2
8.	Pharmaceuticals Production Supervisor	L3
9.	Pharmaceuticals Quality Control Supervisor	L3
10.	Food Processing Production Supervisor	L3
11.	Rubber & Rubber Based Industries Production Supervisor	L3
12.	Oil Palm Based Product Industries Production Supervisor	L3
13.	Wood Based Product Industries Production Supervisor	L3
14.	Pharmaceuticals Process Executive	L4
15.	Pharmaceuticals Quality Control Executive	L4
16.	Rubber & Rubber Based Industries Production Superintendent	L4
17.	Oil Palm Based Product Industries Production Executive	L4

18.	Wood Based Product Industries Production Executive	L4
19.	Pharmaceuticals Senior Executive	L5
20.	Pharmaceuticals Quality Control Senior Executive	L5
21.	Food Processing Production Senior Executive	L5
22.	Rubber & Rubber Based Industries Production Executive	L5
23.	Oil Palm Product Industries Production Senior Executive	L5
24.	Wood Based Product Industries Production Senior Executive	L5
25.	Pharmaceuticals Manager	L6
26.	Pharmaceuticals Quality Control Manger	L6
27.	Food Processing Production Manager	L6
28.	Rubber & Rubber Based Industries Production Manager	L6
29.	Oil Palm Product Industries Production Manager	L6
30.	Wood Based Product Industries Production Manager	L6
31.	Food Processing Specialist	L7
32.	Rubber & Rubber Based Production Specialist	L7
33.	Oil Palm Product Production Specialist	L7
34.	Wood Based Product Production Specialist	L7

(b) SUB SECTOR: NON-RESOURCE BASED INDUSTRIES

No.	Job Title	Level
1.	Production Operator	L1
2.	Apparel Industries Operator	L1
3.	Chemicals Production Line Leader	L2
4.	Metal & Related Industries Production Line Leader	L2
5.	Machinery & Equipment Industries Production Line Leader	L2
6.	Electrical & Electronic Production Line Leader	L2
7.	Plastic Industries Production Line Leader	L2
8.	Construction Material Industries Line Leader	L2
9.	Textile Industries Production Line Leader	L2
10.	Apparel Industries Production Line Leader	L2
11.	Chemicals Production Supervisor	L3
12.	Machinery & Equipment Industries Production Supervisor	L3
13.	Electrical & Electronic Production Technician	L3
14.	Plastic Industries Production Supervisor	L3
15.	Construction Material Industries Production Supervisor	L3
16.	Textile Industries Production Supervisor	L3
17.	Apparel Industries Production Supervisor	L3
18.	Chemicals Process Executive	L4
19.	Machinery & Equipment Industries Production Executive	L4

20.	Electrical & Electronic Senior Technician	L4
21.	Plastic Industries Production Executive	L4
22.	Construction Material Industries Production Executive	L4
23.	Textile Industries Production Executive	L4
24.	Apparel Industries Production Executive	L4
25.	Chemicals Senior Executive	L5
26.	Machinery & Equipment Industries Production Senior Executive	L5
27.	Electrical & Electronic Assistant Technologist	L5
28.	Plastic Industries Production Senior Executive	L5
29.	Construction Material Industries Production Senior Executive	L5
30.	Textile Industries Production Senior Executive	L5
31.	Apparel Industries Production Senior Executive	L5
32.	Chemical Manager	L6
33.	Machinery & Equipment Industries production Manager	L6
34.	Electrical & Electronic Process Technologist	L6
35.	Plastic Industries Production Manager	L6
36.	Construction Material Industries Production Manager	L6
37.	Textile Industries Production Manager	L6
38.	Apparel Industries Production Manager	L6
39.	Chemicals Production Specialist	L7
40.	Metal & Related Production Specialist	L7
41.	Machinery & Equipment Production Specialist	L7
42.	Electrical & Electronic Production Senior Technologist	L7
43.	Plastic Production Specialist	L7
44.	Construction Material Production Specialist	L7
45.	Textile Production Specialist	L7
46.	Apparel Production Specialist	L7

(iii) SUMMARY OF CRITICAL AND NON CRITICAL JOB TITLES

SUB SECTOR			LEVEL								Total
			NL	L1	L2	L3	L4	L5	L6	L7	L8	
1.	Pharmaceuticals (Natural/Traditional)	***Critical***	0	0	0	0	0	0	0	1	0	1
		Non-Critical	0	1	2	2	2	2	2	0	0	11
2.	Food Processing	***Critical***	0	0	0	0	1	0	0	0	0	1
		Non-Critical	0	0	1	1	0	1	1	1	0	5
3.	Rubber & Rubber-Based Product	***Critical***	0	0	0	0	0	0	0	0	0	0
		Non-Critical	0	0	1	1	1	1	1	1	0	6
4.	Oil Palm-Based Product	***Critical***	0	0	0	0	0	0	0	0	0	0
		Non-Critical	0	0	1	1	1	1	1	1	0	6
5.	Wood-Based Product	***Critical***	0	0	0	0	0	0	0	0	0	0
		Non-Critical	0	0	1	1	1	1	1	1	0	6
6.	Construction Material	***Critical***	0	0	0	0	0	0	0	0	0	0
		Non-Critical	0	0	1	1	1	1	1	1	0	6
7.	Machinery & Equipment	***Critical***	0	0	0	0	0	0	0	0	0	0
		Non-Critical	0	0	1	1	1	1	1	1	0	6
8.	Metal & Related Industries	***Critical***	0	0	0	1	1	1	1	0	0	4
		Non-Critical	0	0	1	0	0	0	0	1	0	2

9.	Textiles & Apparel	***Critical***	0	0	0	0	0	0	0	0	0	0
		Non-Critical	0	2	2	2	2	2	2	2	0	14
10.	Plastic Industries	***Critical***	0	0	0	0	0	0	0	0	0	0
		Non-Critical	0	0	1	1	1	1	1	1	0	6
11.	Electrical & Electronic	***Critical***	0	0	0	0	0	0	0	0	0	0
		Non-Critical	0	0	1	1	1	1	1	1	0	6
12.	Chemical Industries	***Critical***	0	0	0	0	0	0	0	0	0	0
		Non-Critical	0	0	1	1	1	1	1	1	0	6
			Critical									**6**
			Non-Critical									**80**
Total			0	2	14	14	14	14	14	14	0	**86**

Figure 5.5: Critical and Non Critical Schedule

Figure 5.5: Critical and Non Critical Schedule

6. CONCLUSION AND RECOMMENDATION

As a result of the Production Sector Occupational Analysis conducted together with expert panel members from various Production sub sectors and organisations, a total of 86 job titles and 12 main sub sectors have been identified.

Referring to Malaysia's economical plans and vision for the coming years, such as the IMP 3 and RMK 9, a framework of the Production workforce has been identified. It is hoped that the result of this Occupational Analysis will be able to fulfill the future plans by training Malaysians to be skilled workers in the production sector towards improving the quality of life of Malaysians and at boosting Malaysia's global competitiveness.

Malaysia has made significant strides to take advantage of advancements and incentives in the production industry to improve efficiency and productivity, thus contributing to the increased overall competitiveness of the economy. Additional measures must also be undertaken to enhance human resource development to provide adequate skilled and knowledgeable manpower to support the knowledge-based economy.

The production industry has great potential. Endowed with strong government support and a substantial human resource, this industry could expand by the tight corporation between government, production based, manufacturing companies and education centres.

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ANNEX 1: LIST OF PANEL EXPERTS AND FACILITATORS OF THE PRODUCTION OCCUPATIONAL ANALYSIS DEVELOPMENT

LIST OF PANEL EXPERTS OF THE PRODUCTION SECTOR OCCUPATIONAL ANALYSIS DEVELOPMENT

NO	NAME	POSITION	ORGANISATION	EXPERTISE
1	EN. SHAMIM BIN AKHTAR	HEAD OF DEPARTMENT	TONG YONG RUBBER SDN. BHD.	RUBBER BASED PRODUCTS
2	EN. RASHDAN BIN RAMLI	ENGINEER	APPLIED ELECTRONIC SDN. BHD.	ELECTRONICS
3	PUAN SUMERA BINTI MAZLAN	RA SENIOR EXECUTIVE	PHARMANIAGA MANUFACTURING BERHAD	PHARMACEUTICAL
4	EN. NORROID BIN IBRAHIM	OPERATION MANAGER	DYNAMIC PATTERN SDN. BHD	AUTOMOTIVE & ELECTRONIC
5	EN. ZALALUDIN BIN SLAMAT	SENIOR MANAGER	SAPURA INDUSTRIAL BERHAD	AUTOMOTIVE METAL BASE RELATED
6	EN. MOHD FAUZAN BIN ABDUL RAHIM	LINE MANAGER	NESTLE MANUFACTURING BERHAD	FOOD INDUSTRY
7	EN. BAHARUDIN MD. SOM	SENIOR MANAGER	SONY EMCS (M)	ELECTRONIC
8	EN. HAMEED ABDULLAH	ASSISTANT MANAGER	SAPURA INDUSTRIAL BERHAD	MECHANICAL ENGINEERING

BIL	NAMA	JAWATAN	ORGANISASI	BIDANG KEPAKARAN
9	EN. NIK AZMAN BIN HUSSIN	ASSISTANT MANAGER	SONY EMCS (M) SDN. BHD.	ELECTRONIC
10	EN. AZMANI BIN ABDUL GHAPAR	ASSISTANT DIVISION MANAGER	SONY EMCS (M) SDN. BHD.	ELECTRONIC
11	ENCIK ISMAIL BIN IBRAHIM	TECHNICAL CONSULTANT	DE INTELLECT SDN. BHD.	ELECTRO-MECHANICAL MANUFACTURING ENGINEERING CONSULTANT

LIST OF FACILITATORS OF THE PRODUCTION SECTOR OCCUPATIONAL ANALYSIS DEVELOPMENT

DR. AMIRON BIN ISMAIL

FACILITATOR

PRITEC ACADEMY

PN. EVARINA BT. AMIRON

FACILITATOR

PRITEC ACADEMY

EN. FAHISZAM BIN SAAD

FACILITATOR

PRITEC ACADEMY

MOHAMMAD FARID BIN SAMSUDIN

CO- FACILITATOR

PRITEC ACADEMY

CIK NOR ZURIANI BINTI MOHD ZAINI

SECRETARIAT

PRITEC ACADEMY

CIK ROZIAH BINTI ISMAIL

SECRETARIAT

PRITEC ACADEMY

ANNEX 2: OCCUPATIONAL DEFINITIONS IN PRODUCTION SECTOR

RESOURCE BASED INDUSTRIES

LEVEL 1

PRODUCTION OPERATOR

A PRODUCTION OPERATOR IS DESIGNATED TO CARRY OUT ROUTINE JOB FUNCTION IN PRODUCTION LINE, CARRY OUT PRODUCT ASSEMBLY, PACKAGING AND LABELING IN ACCORDANCE WITH PROCESS FLOW AND PERFORM INSPECTION ON PRODUCT AND SEGREGATE PRODUCTION WASTE.

In particular the person will:

1. Carry out production process in accordance with production procedure
2. Carry out production in accordance with process flow
3. Perform product inspection in accordance with production quality control specification
4. Determine non conformance product
5. Carry out packing, labeling and recording for production product
6. Segregate production waste in accordance with company policies and procedures

RESOURCE BASED INDUSTRIES

LEVEL 2

PHARMACEUTICALS PRODUCTION LINE LEADER

A PHARMACEUTICALS PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT PHARMACEUTICALS PRODUCTION PROCESS, RECORD PRODUCT QUANTITY, CONFIRMS NON CONFORMANCE PRODUCT AND QUANTIFY PHARMACEUTICALS PRODUCTION WASTE.

In particular the person will:

1. Carry out pharmaceuticals production process in accordance with pharmaceuticals production procedure
2. Follow pharmaceuticals production process flow in accordance with pharmaceuticals production procedure
3. Assist supervisor in controlling pharmaceuticals production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for pharmaceuticals production final product
6. Record product quantity in accordance with standard
7. Quantify pharmaceuticals production waste (schedule and non schedule) according to company policies and procedures

RESOURCE BASED INDUSTRIES

LEVEL 3

PHARMACEUTICALS PRODUCTION SUPERVISOR

A PHARMACEUTICALS PRODUCTION SUPERVISOR IS DESIGNATED TO SUPERVISE PHARMACEUTICALS PRODUCTION ACTIVITY, ASSIGN PRODUCT LOT NUMBER TO PHARMACEUTICALS PRODUCTION LINE, MANAGING PHARMACEUTICALS PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise pharmaceuticals production activity in accordance with pharmaceuticals production schedule
2. Ensure the availability of pharmaceuticals production material
3. Supervise the implementation of pharmaceuticals production process flow
4. Verify pharmaceuticals production quality control in accordance with product quality standard
5. Assign product lot number to pharmaceuticals production line for product packaging and labeling
6. Verify finished product quantity
7. Implement pharmaceuticals production policies and procedures
8. Manage pharmaceuticals production waste (schedule/non schedule) in accordance with pharmaceuticals production procedure
9. Report machine & equipment defect for pharmaceuticals production line
10. Perform supervisory function

RESOURCE BASED INDUSTRIES

LEVEL 4

PHARMACEUTICALS PROCESS EXECUTIVE

A PHARMACEUTICALS PRODUCTION SUPERINTENDENT IS DESIGNATED TO COORDINATE PHARMACEUTICALS PRODUCTION SCHEDULE, QUALITY CONTROL ACTIVITIES AND PHARMACEUTICALS PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND PERFORM SUPERVISORY ACTIVITIES.

In particular the personal will:

1. Coordinate pharmaceuticals production schedule
2. Coordinate pharmaceuticals production material according to pharmaceuticals production schedule
3. Implement pharmaceuticals production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to pharmaceuticals production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise pharmaceuticals production waste activities in accordance with company policies and procedure

RESOURCE BASED INDUSTRIES

LEVEL 5

PHARMACEUTICALS SENIOR EXECUTIVE

A PHARMACEUTICALS SENIOR EXECUTIVE IS DESIGNATED TO IMPLEMENT PHARMACEUTICALS PRODUCTION SCHEDULE, PREPARE PHARMACEUTICALS PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT AND PERFORM MANAGERIAL ACTIVITIES.

In particular the person will:

1. Implement pharmaceuticals production schedule
2. Inspect conformance for pharmaceuticals production material
3. Execute pharmaceuticals production process flow
4. Prepare manpower pharmaceuticals production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare pharmaceuticals production machine & equipment requirement
8. Prepare staff development program as per pharmaceuticals production requirement
9. Assist in performing R&D activities
10. Prepare pharmaceuticals production procedures
11. Prepare pharmaceuticals production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

RESOURCE BASED INDUSTRIES

LEVEL 6

PHARMACEUTICALS MANAGER

A PHARMACEUTICALS PRODUCTION MANAGER IS DESIGNATED TO ANALYSE PHARMACEUTICALS PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF PHARMACEUTICALS PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse pharmaceuticals production schedule
2. Verify material requirement for pharmaceuticals production
3. Enforce implementation of pharmaceuticals production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for pharmaceuticals production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify pharmaceuticals production procedures
10. Verify pharmaceuticals production waste (schedule and non schedule) disposal activities
11. Perform managerial function

RESOURCE BASED INDUSTRIES

LEVEL 7

PHARMACEUTICALS PRODUCTION SPECIALIST

A PHARMACEUTICALS PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT PHARMACEUTICALS PRODUCTION PROCESS FLOW DESIGNING, CONDUCT TRAINING FOR NEW PHARMACEUTICALS PRODUCTION TECHNOLOGY AND PERFORM R&D PLANNING.

In particular the person will:

1. Design pharmaceuticals production process flow according to pharmaceuticals production specification
2. Conduct training for new pharmaceuticals production technology
3. Plan R&D activities for pharmaceuticals production
4. Advise for developing pharmaceuticals production procedures

RESOURCE BASED INDUSTRIES

LEVEL 2

PHARMACEUTICALS QUALITY CONTROL INSPECTOR

A PHARMACEUTICALS QUALITY CONTROL INSPECTOR IS DESIGNATED TO CARRY OUT ANALYTICAL TESTING, RECORD THE RESULT IN WORKSHEET, CARRY OUT DAILY CALIBRATION, COLLECT AND SEGREGATE THE SCHEDULED WASTE & THE NON SCHEDULED WASTE, COMPLY TO 5'S , ISO 9000, ISO 18000, OHSA, ISO 17025 AND CONDUCT PACKAGING MATERIAL INSPECTION.

In particular the person will:

1. Carry out analytical testing for
   i) Raw material testing
   ii) Finished product
   iii) Semi finished product
   iv) Stability studies
2. Record the result in worksheet.
3. Carry out daily calibration e.g. weighing balance, pH meter
4. Collect and segregate the schedule waste which come out from analytical testing and record the weight e.g. organic compound, non organic compound, heavy metal etc before hand over to QA department for disposing to Kualiti Alam. Collect the discarded drug and record the weight for before hand over to QA department for disposing to Kualiti Alam
5. Collect the non schedule waste e.g. bottle, plastic etc and dispose thru recycler agent\
6. Comply to 5's , ISO 9000, ISO 18000, OHSA, ISO 17025
7. Conduct packaging material inspection and check against specification

RESOURCE BASED INDUSTRIES

LEVEL 3

PHARMACEUTICALS QUALITY CONTROL SUPERVISOR

A PHARMACEUTICALS QUALITY CONTROL SUPERVISOR IS DESIGNATED TO COORDINATE ANALYTICAL TESTING, CHECK THE RESULT IN WORKSHEET, DAILY CALIBRATION AND WASTE RECORD, COLLECT THE DISCARDED DRUG AND RECORD THE WEIGHT, PERFORM 5'S , ISO 9000, ISO 18000, OHSA, ISO 17025 AND CONDUCT TRAINING TO NEW QC INSPECTOR ON ANALYTICAL TESTING.

In particular the person will:

1. Coordinate analytical testing for:
   i. Raw material testing
   ii. Finished product
   iii. Semi finished product
   iv. Stability studies
2. Check the result in worksheet.
3. Check the daily calibration e.g. weighing balance, pH meter.
4. Check the waste record etc before hand over to QA department for disposing to Kualiti Alam.
5. Collect the discarded drug and record the weight for before hand over to QA department for disposing to Kualiti Alam.
6. Perform 5's , ISO 9000, ISO 18000, OSHA, ISO 17025
7. Conduct training to new QC inspector on analytical testing.

RESOURCE BASED INDUSTRIES

LEVEL 4

PHARMACEUTICALS QUALITY CONTROL EXECUTIVE

A PHARMACEUTICALS QUALITY CONTROL EXECUTIVE IS DESIGNATED TO PREPARE REPORTS, ANALYTICAL TESTING SCHEDULE/PLAN, EQUIPMENT CALIBRATION SCHEDULE, STANDARD TEST PROCEDURE (STP), STANDARD OPERATION PROCEDURE (SOP), CORE STANDARD PROCEDURE (CSP), PRODUCTION MACHINE & EQUIPMENT REQUIREMENT AND COORDINATE TRAINING TO NEW QC PERSONNEL ON HANDLING EQUIPMENT

In particular the person will:

1. To prepare the following reports
    i. Raw material - certificate of analysis of raw material
    ii. Finished product - certificate of analysis of finished product
    iii. Semi finished product - check result in Batch Manufacturing record (BMR)
    iv. Stability studies report and stability data
2. Prepare schedule/plan for analytical testing for finished products and raw material.
3. Prepare schedule/plan for finished product stability studies.
4. Prepare schedule for equipment calibration e.g. weighing balance, disintegration test, friability test, pH meter, HPLC etc.
5. Prepare standard test procedure (STP) e.g. raw material and finished product,
6. Prepare standard operation procedure (SOP) e.g. handling equipment such as HPLC, AA, GC
7. Prepare core standard procedure (CSP) e.g. out of specification or non conformance.
8. Prepare production machine & equipment requirement.
9. Coordinate training to new QC personnel on handling equipment e.g. HPLC

RESOURCE BASED INDUSTRIES

LEVEL 5

PHARMACEUTICALS QUALITY CONTROL SENIOR EXECUTIVE

A PHARMACEUTICALS QUALITY CONTROL SENIOR EXECUTIVE IS DESIGNATED TO REVIEW REPORTS, ANALYTICAL TESTING SCHEDULE/PLAN, EQUIPMENT CALIBRATION SCHEDULE, STABILITY STUDIES SCHEDULE, STANDARD TEST PROCEDURE (STP) , STANDARD OPERATION PROCEDURE (SOP), CORE STANDARD PROCEDURE (CSP), PRODUCTION MACHINE & EQUIPMENT REQUIREMENT AND CARRY OUT APPRAISAL - PERFORMANCE MEASURE SYSTEM (PMS)

In particular the person will:

1. Check/review the following reports
   i. Raw material - certificate of analysis of raw material
   ii. Finished product - certificate of analysis of finished product
   iii. Semi finished product - review result in Batch Manufacturing record (BMR)
   iv. Stability studies report and stability data
2. Check/review schedule/plan for analytical testing for finished products and raw materials.
3. Check/review schedule for stability studies.
4. Check/review schedule for equipment calibration e.g. weighing balance, disintegration test, friability test, pH meter, HPLC etc.
5. Review standard test procedure (STP) e.g. raw material and finished product,
6. Review standard operation procedure (SOP) e.g. handling equipment such as HPLC, AA, GC
7. Review core standard procedure (CSP) e.g. out of specification or non conformance.
8. Carry out appraisal - performance measure system (PMS)

RESOURCE BASED INDUSTRIES

LEVEL 6

PHARMACEUTICALS QUALITY CONTROL MANAGER

A PHARMACEUTICALS QUALITY CONTROL MANAGER IS DESIGNATED TO APPROVE REPORTS, SCHEDULE/PLAN FOR ANALYTICAL TESTING SCHEDULE/PLAN, EQUIPMENT CALIBRATION SCHEDULE, STABILITY STUDIES SCHEDULE, STANDARD TEST PROCEDURE (STP) , STANDARD OPERATION PROCEDURE (SOP), REVIEW CORE STANDARD PROCEDURE (CSP) AND CONDUCT MANAGERIAL DUTIES.

In particular the person will:

1. Approve the following reports
   i. Raw material - certificate of analysis of raw material
   ii. Finished product - certificate of analysis of finished product
   iii. Semi finished product - check result in Batch Manufacturing record (BMR)
   iv. Stability studies report and stability data
2. Approve schedule/plan for analytical testing for finished products and raw material.
3. Approve schedule for stability studies.
4. Approve schedule for equipment calibration e.g. weighing balance, disintegration test, friability test, pH meter, HPLC etc.
5. Approve standard test procedure (STP) e.g. raw material and finished product,
6. Approve standard operation procedure (SOP) e.g. handling equipment such as HPLC, AA, GC
7. Review core standard procedure (CSP) e.g. out of specification or non conformance.
8. Conduct monthly meeting
9. Carry out appraisal to subordinate - performance measure system (PMS) or KPI
10. Perform interview of new staff

RESOURCE BASED INDUSTRIES

LEVEL 2

FOOD PROCESSING PRODUCTION LINE LEADER

A FOOD PROCESSING PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT FOOD PROCESSING PRODUCTION PROCESS, RECORD PRODUCT QUANTITY, CONFIRMS NON CONFORMANCE PRODUCT AND QUANTIFY FOOD PROCESSING PRODUCTION WASTE.

In particular the person will:

1. Carry out food processing production process in accordance with food processing production procedure
2. Follow food processing production process flow in accordance with food processing production procedure
3. Assist supervisor in controlling food processing production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for food processing production final product
6. Record product quantity in accordance with standard
7. Quantify food processing production waste (schedule and non schedule) according to company policies and procedures

RESOURCE BASED INDUSTRIES

LEVEL 3

FOOD PROCESSING PRODUCTION SUPERVISOR

A FOOD PROCESSING PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF FOOD PROCESSING PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO FOOD PROCESSING PRODUCTION LINE, MANAGE FOOD PROCESSING PRODUCTION WASTE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise food processing production activity in accordance food processing production schedule
2. Ensure the availability of food processing production material
3. Supervise the implementation of food processing production process flow
4. Verify food processing production quality control in accordance product quality standard
5. Assign product lot number to food processing production line for product packaging and labeling
6. Verify finished product quantity
7. Implement food processing production policies and procedures
8. Manage food processing production waste (schedule/non schedule) in accordance with food processing production procedure
9. Report machine & equipment defect for food processing production line
10. Perform supervisory function

RESOURCE BASED INDUSTRIES

LEVEL 4

FOOD PROCESSING PRODUCTION EXECUTIVE

A FOOD PROCESSING PRODUCTION EXECUTIVE IS DESIGNATED TO COORDINATE FOOD PROCESSING PRODUCTION SCHEDULE AND FOOD PROCESSING PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES.

In particular the person will:

1. Coordinate food processing production schedule
2. Coordinate food processing production material according to food processing production schedule
3. Implement food processing production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to food processing production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise food processing production waste activities in accordance with company policies and procedure

RESOURCE BASED INDUSTRIES

LEVEL 5

FOOD PROCESSING PRODUCTION SENIOR EXECUTIVE

A FOOD PROCESSING PRODUCTION SENIOR EXECUTIVE IS DESIGNATED TO IMPLEMENT FOOD PROCESSING PRODUCTION SCHEDULE, PREPARE FOOD PROCESSING PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE FOOD PROCESSING PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement food processing production schedule
2. Inspect conformance for food processing production material
3. Execute food processing production process flow
4. Prepare manpower food processing production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare food processing production machine & equipment requirement
8. Prepare staff development program as per food processing production requirement
9. Assist in performing R &D activities
10. Prepare food processing production procedures
11. Prepare food processing production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

RESOURCE BASED INDUSTRIES

LEVEL 6

FOOD PROCESSING PRODUCTION MANAGER

A FOOD PROCESSING PRODUCTION MANAGER IS DESIGNATED TO ANALYSE FOOD PROCESSING PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF FOOD PROCESSING PRODUCTION PROCESS FLOW AND PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse food processing production schedule
2. Verify material requirement for food processing production
3. Enforce implementation of food processing production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for food processing production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify food processing production procedures
10. Verify food processing production waste (schedule and non schedule) disposal activities
11. Perform managerial function

RESOURCE BASED INDUSTRIES

LEVEL 7

FOOD PROCESSING SPECIALIST

A FOOD PROCESSING PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT FOOD PROCESSING PRODUCTION PROCESS FLOW DESIGNING, PERFORM R&D PLANNING AND IMPLEMENTATION FOR FOOD PROCESSING PRODUCTION.

In particular the person will:

1. Design food processing production process flow according to food processing production specification
2. Conduct training for new food processing production technology
3. Plan R&D activities for food processing production
4. Advise food processing production procedures development

RESOURCE BASED INDUSTRIES

LEVEL 2

RUBBER & RUBBER-BASED INDUSTRIES PRODUCTION LINE LEADER

A RUBBER & RUBBER-BASED INDUSTRIES PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT RUBBER & RUBBER-BASED INDUSTRIES PRODUCTION PROCESS, RECORD PRODUCT QUANTITY, CONFIRM NON CONFORMANCE PRODUCT AND QUANTIFY RUBBER & RUBBER-BASED PRODUCTION WASTE.

In particular the person will:

1. Carry out rubber & rubber-based industries production process in accordance with rubber & rubber-based production procedure
2. Follow rubber & rubber-based production process flow in accordance with rubber & rubber-based production procedure
3. Assist supervisor in controlling rubber & rubber-based production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for rubber & rubber-based production final product
6. Record product quantity in accordance with standard
7. Quantify rubber & rubber-based production waste (schedule and non schedule) according to company policies and procedures

RESOURCE BASED INDUSTRIES

LEVEL 3

RUBBER & RUBBER BASED INDUSTRIES PRODUCTION SUPERVISOR

A RUBBER & RUBBER-BASED PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF RUBBER & RUBBER-BASED PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO RUBBER & RUBBER-BASED PRODUCTION LINE, MANAGE RUBBER & RUBBER-BASED PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise rubber & rubber-based production activity in accordance rubber & rubber-based production schedule
2. Ensure the availability of rubber & rubber-based production material
3. Supervise the implementation of rubber & rubber-based production process flow
4. Verify rubber & rubber-based production quality control in accordance product quality standard
5. Assign product lot number to rubber & rubber-based production line for product packaging and labeling
6. Verify finished product quantity
7. Implement rubber & rubber-based production policies and procedures
8. Manage rubber & rubber-based production waste (schedule/non schedule) in accordance with rubber & rubber-based production procedure
9. Report machine & equipment defect for rubber & rubber-based production line
10. Perform supervisory function

RESOURCE BASED INDUSTRIES

LEVEL 4

RUBBER & RUBBER BASED INDUSTRIES PRODUCTION SUPERINTENDENT

A RUBBER & RUBBER-BASED INDUSTRIES PRODUCTION SUPERINTENDENT IS DESIGNATED TO COORDINATE RUBBER & RUBBER-BASED PRODUCTION SCHEDULE AND RUBBER & RUBBER-BASED PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES.

In particular the person will:

1. Coordinate rubber & rubber-based production schedule
2. Coordinate rubber & rubber-based production material according to rubber & rubber-based production schedule
3. Implement rubber & rubber-based production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to rubber & rubber-based production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise rubber & rubber-based production waste activities in accordance with company policies and procedure

RESOURCE BASED INDUSTRIES

LEVEL 5

RUBBER & RUBBER BASED INDUSTRIES PRODUCTION EXECUTIVE

A RUBBER & RUBBER-BASED PRODUCTION EXECUTIVE IS DESIGNATED TO IMPLEMENT RUBBER & RUBBER-BASED PRODUCTION SCHEDULE, PREPARE RUBBER & RUBBER-BASED PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE RUBBER & RUBBER-BASED PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement rubber & rubber-based production schedule
2. Inspect conformance for rubber & rubber-based production material
3. Execute rubber & rubber-based production process flow
4. Prepare manpower rubber & rubber-based production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare rubber & rubber-based production machine & equipment requirement
8. Prepare staff development program as per rubber & rubber-based production requirement
9. Assist in performing R&D activities
10. Prepare rubber & rubber-based production procedures
11. Prepare rubber & rubber-based production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

RESOURCE BASED INDUSTRIES

LEVEL 6

RUBBER & RUBBER BASED INDUSTRIES PRODUCTION MANAGER

A RUBBER & RUBBER-BASED INDUSTRIES PRODUCTION MANAGER IS DESIGNATED TO ANALYSE RUBBER & RUBBER-BASED PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF RUBBER & RUBBER-BASED PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse rubber & rubber-based production schedule
2. Verify material requirement for rubber & rubber-based production
3. Enforce implementation of rubber & rubber-based production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for rubber & rubber-based production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify rubber & rubber-based production procedures.
10. Verify rubber & rubber-based production waste (schedule and non schedule) disposal activities
11. Perform managerial function

RESOURCE BASED INDUSTRIES

LEVEL 7

RUBBER & RUBBER BASED PRODUCTION SPECIALIST

A RUBBER & RUBBER-BASED PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT RUBBER & RUBBER-BASED PRODUCTION PROCESS FLOW DESIGNING , PERFORM R&D PLANNING AND IMPLEMENTATION FOR RUBBER & RUBBER-BASED PRODUCTION.

In particular the person will:

1. Design rubber & rubber-based production process flow according to rubber & rubber-based production specification
2. Conduct training for new rubber & rubber-based production technology
3. Plan R&D activities for rubber & rubber-based production
4. Advise rubber & rubber-based production procedures development

RESOURCE BASED INDUSTRIES

LEVEL 2

OIL PALM BASED PRODUCT INDUSTRIES PRODUCTION

LINE LEADER

AN OIL PALM BASED PRODUCT INDUSTRIES PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT OIL PALM BASED PRODUCT INDUSTRIES PRODUCTION PROCESS ACCORDING TO PROCEDURE, RECORD PRODUCT QUANTITY, CONFIRM NON CONFORMANCE PRODUCT AND QUANTIFY OIL PALM-BASED PRODUCTION WASTE.

In particular the person will:

1. Carry out oil palm based product industries production process in accordance with oil palm-based product production procedure
2. Follow oil palm-based product production process flow in accordance with oil palm-based product production procedure
3. Assist supervisor in controlling oil palm-based product production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for oil palm-based product production final product
6. Record product quantity in accordance with standard
7. Quantify oil palm-based product production waste (schedule and non schedule) according to company policies and procedures

RESOURCE BASED INDUSTRIES

LEVEL 3

OIL PALM BASED PRODUCT INDUSTRIES PRODUCTION SUPERVISOR

AN OIL PALM-BASED PRODUCT INDUSTRIES PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF OIL PALM-BASED PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO OIL PALM-BASED PRODUCTION LINE, MANAGE OIL PALM-BASED PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise oil palm-based production activity in accordance with oil palm-based production schedule
2. Ensure the availability of oil palm-based production material
3. Supervise the implementation of oil palm-based production process flow
4. Verify oil palm-based production quality control in accordance with product quality standard
5. Assign product lot number to oil palm-based production line for product packaging and labeling
6. Verify finished product quantity
7. Implement oil palm-based production policies and procedures
8. Manage oil palm-based production waste (schedule/non schedule) in accordance with oil palm-based production procedure
9. Report machine & equipment defect for oil palm-based production line
10. Perform supervisory function

RESOURCE BASED INDUSTRIES

LEVEL 4

OIL PALM BASED PRODUCT INDUSTRIES PRODUCTION EXECUTIVE

AN OIL PALM BASED PRODUCT INDUSTRIES PRODUCTION SUPERINTENDANT IS DESIGNATED TO COORDINATE OIL PALM-BASED PRODUCTION SCHEDULE AND OIL PALM-BASED PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES.

In particular the person will:

1. Coordinate oil palm-based production schedule
2. Coordinate oil palm-based production material according to oil palm-based production schedule
3. Implement oil palm-based production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to oil palm-based production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise oil palm-based production waste activities in accordance with company policies and procedure

RESOURCE BASED INDUSTRIES

LEVEL 5

OIL PALM PRODUCT INDUSTRIES PRODUCTION SENIOR EXECUTIVE

AN OIL PALM PRODUCT INDUSTRIES PRODUCTION EXECUTIVE IS DESIGNATED TO IMPLEMENT OIL PALM-BASED PRODUCTION SCHEDULE, PREPARE OIL PALM-BASED PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE OIL PALM-BASED PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement oil palm-based production schedule
2. Inspect conformance for oil palm-based production material
3. Execute oil palm-based production process flow
4. Prepare manpower oil palm-based production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare oil palm-based production machine & equipment requirement
8. Prepare staff development program as per oil palm-based production requirement
9. Assist in performing R&D activities
10. Prepare oil palm-based production procedures
11. Prepare oil palm-based production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

RESOURCE BASED INDUSTRIES

LEVEL 6

OIL PALM PRODUCT INDUSTRIES PRODUCTION MANAGER

AN OIL PALM PRODUCT INDUSTRIES PRODUCTION MANAGER IS DESIGNATED TO ANALYSE OIL PALM-BASED PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF OIL PALM-BASED PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse oil palm-based production schedule
2. Verify material requirement for oil palm-based production
3. Enforce implementation of oil palm-based production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for oil palm-based production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify oil palm-based production procedures
10. Verify oil palm-based production waste (schedule and non schedule) disposal activities
11. Perform managerial function

RESOURCE BASED INDUSTRIES

LEVEL 7

OIL PALM PRODUCT PRODUCTION SPECIALIST

AN OIL PALM PRODUCT PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT OIL PALM-BASED PRODUCTION PROCESS FLOW DESIGNING, R&D PLANNING AND IMPLEMENTATION FOR OIL PALM-BASED PRODUCTION.

In particular the person will:

1. Design oil palm-based production process flow according to oil palm-based production specification
2. Conduct training for new oil palm-based production technology
3. Plan R&D activities for oil palm-based production
4. Advice for developing oil palm-based production procedures

RESOURCE BASED INDUSTRIES

LEVEL 2

WOOD BASED PRODUCT INDUSTRIES PRODUCTION LINE LEADER

A WOOD BASED PRODUCT INDUSTRIES PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT WOOD BASED PRODUCT INDUSTRIES PRODUCTION PROCESS, RECORD PRODUCT QUANTITY, CONFIRMS NON CONFORMANCE PRODUCT AND QUANTIFY WOOD BASED PRODUCTION WASTE.

In particular the person will:

1. Carry out wood based product industries production process in accordance with wood based production procedure
2. Follow wood based production process flow in accordance with wood based production procedure
3. Assist supervisor in controlling wood based production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for wood based production final product
6. Record product quantity in accordance with standard
7. Quantify wood based production waste (schedule and non schedule) according to company policies and procedures

RESOURCE BASED INDUSTRIES

LEVEL 3

WOOD BASED PRODUCT INDUSTRIES PRODUCTION SUPERVISOR

A WOOD BASED PRODUCT INDUSTRIES PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF WOOD BASED PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO WOOD BASED PRODUCTION LINE, MANAGE WOOD BASED PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise wood based production activity in accordance with wood based production schedule
2. Ensure the availability of wood based production material
3. Supervise the implementation of wood based production process flow
4. Verify wood based production quality control in accordance product quality standard
5. Assign product lot number to wood based production line for product packaging and labeling
6. Verify finished product quantity
7. Implement wood based production policies and procedures
8. Manage wood based production waste (schedule/non schedule) in accordance with wood based production procedure
9. Report machine & equipment defect for wood based production line
10. Perform supervisory function

RESOURCE BASED INDUSTRIES

LEVEL 4

WOOD BASED PRODUCT INDUSTRIES PRODUCTION EXECUTIVE

A WOOD BASED PRODUCTION SUPERINTENDENT IS DESIGNATED TO COORDINATE WOOD BASED PRODUCTION SCHEDULE AND WOOD BASED PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES.

In particular the person will:

1. Coordinate wood based production schedule
2. Coordinate wood based production material according to wood based production schedule
3. Implement wood based production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to wood based production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise wood based production waste activities in accordance with company policies and procedure

RESOURCE BASED INDUSTRIES

LEVEL 5

WOOD BASED PRODUCT INDUSTRIES PRODUCTION

SENIOR EXECUTIVE

A WOOD BASED PRODUCT INDUSTRIES PRODUCTION EXECUTIVE IS DESIGNATED TO IMPLEMENT WOOD BASED PRODUCTION SCHEDULE, PREPARE WOOD BASED PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE WOOD BASED PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement wood based production schedule
2. Inspect conformance for wood based production material
3. Execute wood based production process flow
4. Prepare manpower wood based production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare wood based production machine & equipment requirement
8. Prepare staff development program as per wood based production requirement
9. Assist in performing R&D activities
10. Prepare wood based production procedures
11. Prepare wood based production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

RESOURCE BASED INDUSTRIES

LEVEL 6

WOOD BASED PRODUCT INDUSTRIES PRODUCTION MANAGER

A WOOD BASED PRODUCT INDUSTRIES PRODUCTION MANAGER IS DESIGNATED TO ANALYSE WOOD BASED PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF WOOD BASED PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse wood based production schedule
2. Verify material requirement for wood based production
3. Enforce implementation of wood based production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for wood based production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify wood based production procedures
10. Verify wood based production waste (schedule and non schedule) disposal activities
11. Perform managerial function

RESOURCE BASED INDUSTRIES

LEVEL 7

WOOD BASED PRODUCT PRODUCTION SPECIALIST

A WOOD BASED PRODUCT PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT WOOD BASED PRODUCTION PROCESS FLOW DESIGNING, PERFORM R&D PLANNING AND IMPLEMENTATION FOR WOOD BASED PRODUCTION.

In particular the person will:

1. Design wood based production process flow according to wood based production specification
2. Conduct training for new wood based production technology
3. Plan R&D activities for wood based production
4. Advice for developing wood based production procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 1

PRODUCTION OPERATOR

A PRODUCTION OPERATOR IS DESIGNATED TO CARRY OUT ROUTINE JOB FUNCTION IN PRODUCTION LINE, CARRY OUT PRODUCT ASSEMBLY, PACKAGING AND LABELING IN ACCORDANCE WITH PROCESS FLOW AND PERFORM INSPECTION ON PRODUCT AND SEGREGATE PRODUCTION WASTE.

In particular the person will:

1. Carry out production process in accordance with production procedure
2. Carry out production in accordance with process flow
3. Perform product inspection in accordance with production quality control specification
4. Determine non conformance product
5. Carry out packing, labeling and recording for production product
6. Segregate production waste in accordance with company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 2

CHEMICALS PRODUCTION LINE LEADER

A CHEMICALS PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT PRODUCTION PROCESS, RECORD PRODUCT QUANTITY, CONFIRM NON CONFORMANCE PRODUCT AND QUANTIFY CHEMICAL INDUSTRIES PRODUCTION WASTE.

In particular the person will:

1. Carry out chemicals production process in accordance with chemical industries production procedure
2. Follow chemical industries production process flow in accordance with chemical industries production procedure
3. Assist supervisor in controlling chemical industries production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for chemical industries production final product
6. Record product quantity in accordance with standard
7. Quantify chemical industries production waste (schedule and non schedule) according to company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 3

CHEMICALS PRODUCTION SUPERVISOR

A CHEMICALS PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF CHEMICAL INDUSTRIES PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO CHEMICAL INDUSTRIES PRODUCTION LINE, MANAGE CHEMICAL INDUSTRIES PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise chemical industries production activity in accordance chemical industries production schedule
2. Ensure the availability of chemical industries production material
3. Supervise the implementation of chemical industries production process flow
4. Verify chemical industries production quality control in accordance product quality standard
5. Assign product lot number to chemical industries production line for product packaging and labeling
6. Verify finished product quantity
7. Implement chemical industries production policies and procedures
8. Manage chemical industries production waste (schedule/non schedule) in accordance with chemical industries production procedure
9. Report machine & equipment defect for chemical industries production line
10. Perform supervisory function

NON-RESOURCE BASED INDUSTRIES

LEVEL 4

CHEMICALS PROCESS EXECUTIVE

A CHEMICALS PROCESS EXECUTIVE IS DESIGNATED TO COORDINATE CHEMICAL INDUSTRIES PRODUCTION SCHEDULE AND CHEMICAL INDUSTRIES PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES.

In particular the person will:

1. Coordinate chemical industries production schedule
2. Coordinate chemical industries production material according to chemical industries production schedule
3. Implement chemical industries production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to chemical industries production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise chemical industries production waste activities in accordance with company policies and procedure

NON-RESOURCE BASED INDUSTRIES

LEVEL 5

CHEMICALS SENIOR EXECUTIVE

A CHEMICALS SENIOR EXECUTIVE IS DESIGNATED TO IMPLEMENT CHEMICAL INDUSTRIES PRODUCTION SCHEDULE, PREPARE CHEMICAL INDUSTRIES PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE CHEMICAL INDUSTRIES PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement chemical industries production schedule
2. Inspect conformance for chemical industries production material
3. Execute chemical industries production process flow
4. Prepare manpower chemical industries production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare chemical industries production machine & equipment requirement
8. Prepare staff development program as per chemical industries production requirement
9. Assist in performing R&D activities
10. Prepare chemical industries production procedures
11. Prepare chemical industries production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 6

CHEMICALS MANAGER

A CHEMICALS MANAGER IS DESIGNATED TO ANALYSE CHEMICAL INDUSTRIES PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF CHEMICAL INDUSTRIES PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse chemical industries production schedule
2. Verify material requirement for chemical industries production
3. Enforce implementation of chemical industries production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for chemical industries production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify chemical industries production procedures
10. Verify chemical industries production waste (schedule and non schedule) disposal activities
11. Perform managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 7

CHEMICALS PRODUCTION SPECIALIST

A CHEMICAL PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT CHEMICAL INDUSTRIES PRODUCTION PROCESS FLOW DESIGNING, CONDUCT TRAINING FOR NEW CHEMICAL INDUSTRIES PRODUCTION TECHNOLOGY , PERFORM R&D PLANNING AND IMPLEMENT CHEMICAL INDUSTRIES PRODUCTION.

In particular the person will:

1. Design chemical industries production process flow according to chemical industries production specification
2. Conduct training for new chemical industries production technology
3. Plan R&D activities for chemical industries production
4. Advise chemical industries production procedures development

NON-RESOURCE BASED INDUSTRIES

LEVEL 2

METAL & RELATED INDUSTRIES PRODUCTION LINE LEADER

A METAL & RELATED INDUSTRIES PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT MATERIAL PRODUCTION PROCESS ACCORDING TO PROCEDURE, RECORD PRODUCT QUANTITY, CONFIRM NON CONFORMANCE PRODUCT AND QUANTIFY METAL & RELATED INDUSTRIES PRODUCTION WASTE.

In particular the person will:

1. Carry out metal & related industries production process in accordance with metal & related industries production procedure
2. Follow metal & related industries production process flow in accordance with metal & related industries production procedure
3. Assist supervisor in controlling metal & related industries production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for metal & related industries production final product
6. Record product quantity in accordance with standard
7. Quantify metal & related industries production waste (schedule and non schedule) according to company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 3

METAL & RELATED INDUSTRIES PRODUCTION SUPERVISOR

A METAL & RELATED INDUSTRIES PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF METAL & RELATED INDUSTRIES PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO METAL & RELATED INDUSTRIES PRODUCTION LINE, MANAGE METAL & RELATED INDUSTRIES PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise metal & related industries production activity in accordance metal & related industries production schedule
2. Ensure the availability of metal & related industries production material
3. Supervise the implementation of metal & related industries production process flow
4. Verify metal & related industries production quality control in accordance product quality standard
5. Assign product lot number to metal & related industries production line for product packaging and labeling
6. Verify finished product quantity
7. Implement metal & related industries production policies and procedures
8. Manage metal & related industries production waste (schedule/non schedule) in accordance with metal & related industries production procedure
9. Report machine & equipment defect for metal & related industries production line
10. Perform supervisory function

NON-RESOURCE BASED INDUSTRIES

LEVEL 4

METAL & RELATED INDUSTRIES PRODUCTION EXECUTIVE

A METAL & RELATED INDUSTRIES PRODUCTION SUPERINTENDENT IS DESIGNATED TO COORDINATE METAL & RELATED INDUSTRIES PRODUCTION SCHEDULE AND METAL & RELATED INDUSTRIES PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES.

In particular the person will:

1. Coordinate metal & related industries production schedule
2. Coordinate metal & related industries production material according to metal & related industries production schedule
3. Implement metal & related industries production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to metal & related industries production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise metal & related industries production waste activities in accordance with company policies and procedure

NON-RESOURCE BASED INDUSTRIES

LEVEL 5

METAL & RELATED INDUSTRIES PRODUCTION SENIOR EXECUTIVE

A METAL & RELATED INDUSTRIES PRODUCTION EXECUTIVE IS DESIGNATED TO IMPLEMENT METAL & RELATED INDUSTRIES PRODUCTION SCHEDULE, PREPARE METAL & RELATED INDUSTRIES PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE METAL & RELATED INDUSTRIES PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement metal & related industries production schedule
2. Inspect conformance for metal & related industries production material
3. Execute metal & related industries production process flow
4. Prepare manpower metal & related industries production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare metal & related industries production machine & equipment requirement
8. Prepare staff development program as per metal & related industries production requirement
9. Assist in performing R&D activities
10. Prepare metal & related industries production procedures
11. Prepare metal & related industries production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 6

METAL & RELATED INDUSTRIES PRODUCTION MANAGER

A METAL & RELATED INDUSTRIES PRODUCTION MANAGER IS DESIGNATED TO ANALYSE METAL & RELATED INDUSTRIES PRODUCTION SCHEDULE, PROGRAM MATERIAL REQUIREMENT FOR METAL & RELATED, ENFORCE IMPLEMENTATION OF METAL & RELATED INDUSTRIES PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse metal & related industries production schedule
2. Verify material requirement for metal & related industries production
3. Enforce implementation of metal & related industries production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for metal & related industries production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify metal & related industries production procedures
10. Verify metal & related industries production waste (schedule and non schedule) disposal activities
11. Perform managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 7

METAL & RELATED PRODUCTION SPECIALIST

A METAL & RELATED INDUSTRIES PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT METAL & RELATED INDUSTRIES PRODUCTION PROCESS FLOW DESIGNING, CONDUCT TRAINING FOR NEW METAL & RELATED INDUSTRIES PRODUCTION TECHNOLOGY, PERFORM R&D PLANNING AND IMPLEMENT METAL & RELATED INDUSTRIES PRODUCTION.

In particular the person will:

1. Design metal & related industries production process flow according to metal & related industries production specification
2. Conduct training for new metal & related industries production technology
3. Plan R&D activities for metal & related industries production
4. Advise metal & related industries production procedures development

NON-RESOURCE BASED INDUSTRIES

LEVEL 2

MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION LINE LEADER

A MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION PROCESS, RECORD PRODUCT QUANTITY, CONFIRM NON CONFORMANCE PRODUCT AND QUANTIFY MACHINERY & EQUIPMENT PRODUCTION WASTE.

In particular the person will:

1. Carry out machinery & equipment industries production process in accordance with machinery & equipment production procedure
2. Follow machinery & equipment production process flow in accordance with machinery & equipment production procedure
3. Assist supervisor in controlling machinery & equipment production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for machinery & equipment production final product
6. Record product quantity in accordance with standard
7. Quantify machinery & equipment production waste (schedule and non schedule) according to company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 3

MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION SUPERVISOR

A MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF MACHINERY & EQUIPMENT PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO MACHINERY & EQUIPMENT PRODUCTION LINE, MANAGE MACHINERY & EQUIPMENT PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise machinery & equipment production activity in accordance machinery & equipment production schedule
2. Ensure the availability of machinery & equipment production material
3. Supervise the implementation of machinery & equipment production process flow
4. Verify machinery & equipment production quality control in accordance product quality standard
5. Assign product lot number to machinery & equipment production line for product packaging and labeling
6. Verify finished product quantity
7. Implement machinery & equipment production policies and procedures
8. Manage machinery & equipment production waste (schedule/non schedule) in accordance with machinery & equipment production procedure
9. Report machine & equipment defect for machinery & equipment production line
10. Perform supervisory function

NON-RESOURCE BASED INDUSTRIES

LEVEL 4

MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION EXECUTIVE

A MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION SUPERINTENDENT IS DESIGNATED TO COORDINATE MACHINERY & EQUIPMENT PRODUCTION SCHEDULE AND MACHINERY & EQUIPMENT PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL.

In particular the person will:

1. Coordinate machinery & equipment production schedule
2. Coordinate machinery & equipment production material according to machinery & equipment production schedule
3. Implement machinery & equipment production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to machinery & equipment production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise machinery & equipment production waste activities in accordance with company policies and procedure

NON-RESOURCE BASED INDUSTRIES

LEVEL 5

MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION SENIOR EXECUTIVE

A MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION EXECUTIVE IS DESIGNATED TO IMPLEMENT MACHINERY & EQUIPMENT PRODUCTION SCHEDULE , IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE MACHINERY & EQUIPMENT PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement machinery & equipment production schedule
2. Inspect conformance for machinery & equipment production material
3. Execute machinery & equipment production process flow
4. Prepare manpower machinery & equipment production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare machinery & equipment production machine & equipment requirement
8. Prepare staff development program as per machinery & equipment production requirement
9. Assist in performing R&D activities
10. Prepare machinery & equipment production procedures
11. Prepare machinery & equipment production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 6

MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION MANAGER

A MACHINERY & EQUIPMENT INDUSTRIES PRODUCTION MANAGER IS DESIGNATED TO ANALYSE MACHINERY & EQUIPMENT PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF MACHINERY & EQUIPMENT PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse machinery & equipment production schedule
2. Verify material requirement for machinery & equipment production
3. Enforce implementation of machinery & equipment production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for machinery & equipment production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify machinery & equipment production procedures
10. Verify machinery & equipment production waste (schedule and non schedule) disposal activities
11. Perform managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 7

MACHINERY & EQUIPMENT PRODUCTION SPECIALIST

A MACHINERY & EQUIPMENT PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT MACHINERY & EQUIPMENT PRODUCTION PROCESS FLOW DESIGN, CONDUCT TRAINING FOR NEW MACHINERY & EQUIPMENT PRODUCTION TECHNOLOGY , PERFORM R&D PLANNING AND IMPLEMENT MACHINERY & EQUIPMENT PRODUCTION.

In particular the person will:

1. Design machinery & equipment production process flow according to machinery & equipment production specification
2. Conduct training for new machinery & equipment production technology
3. Plan R&D activities for machinery & equipment production
4. Advise machinery & equipment production procedures development

NON-RESOURCE BASED INDUSTRIES

LEVEL 2

ELECTRICAL & ELECTRONIC PRODUCTION LINE LEADER

AN ELECTRICAL & ELECTRONIC PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT ELECTRICAL & ELECTRONIC PRODUCTION PROCESS ACCORDING TO PROCEDURE, RECORD PRODUCT QUANTITY, CONFIRM NON CONFORMANCE PRODUCT AND QUANTIFY ELECTRICAL & ELECTRONIC PRODUCTION WASTE.

In particular the person will:

1. Carry out electrical & electronic production process in accordance with electrical & electronic production procedure
2. Follow electrical & electronic production process flow in accordance with electrical & electronic production procedure
3. Assist supervisor in controlling electrical & electronic production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for electrical & electronic production final product
6. Record product quantity in accordance with standard
7. Quantify electrical & electronic production waste (schedule and non schedule) according to company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 3

ELECTRICAL & ELECTRONIC PRODUCTION TECHNICIAN

AN ELECTRICAL & ELECTRONIC PRODUCTION TECHNICIAN IS DESIGNATED TO ENSURE THE AVAILABILITY OF ELECTRICAL & ELECTRONIC PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO ELECTRICAL & ELECTRONIC PRODUCTION LINE, MANAGE ELECTRICAL & ELECTRONIC PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise electrical & electronic production activity in accordance electrical & electronic production schedule
2. Ensure the availability of electrical & electronic production material
3. Supervise the implementation of electrical & electronic production process flow
4. Verify electrical & electronic production quality control in accordance product quality standard
5. Assign product lot number to electrical & electronic production line for product packaging and labeling
6. Verify finished product quantity
7. Implement electrical & electronic production policies and procedures
8. Manage electrical & electronic production waste (schedule/non schedule) in accordance with electrical & electronic production procedure
9. Report machine & equipment defect for electrical & electronic production line
10. Perform supervisory function

NON-RESOURCE BASED INDUSTRIES

LEVEL 4

ELECTRICAL & ELECTRONIC SENIOR TECHNICIAN

AN ELECTRICAL & ELECTRONIC SENIOR TECHNICIAN IS DESIGNATED TO COORDINATE ELECTRICAL & ELECTRONIC PRODUCTION SCHEDULE AND ELECTRICAL & ELECTRONIC PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES.

In particular the person will:

1. Coordinate electrical & electronic production schedule
2. Coordinate electrical & electronic production material according to electrical & electronic production schedule
3. Implement electrical & electronic production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to electrical & electronic production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise electrical & electronic production waste activities in accordance with company policies and procedure

NON-RESOURCE BASED INDUSTRIES

LEVEL 5

ELECTRICAL & ELECTRONIC ASSISTANT TECHNOLOGIST

AN ELECTRICAL & ELECTRONIC ASSISTANT TECHNOLOGIST IS DESIGNATED TO IMPLEMENT ELECTRICAL & ELECTRONIC PRODUCTION SCHEDULE, PREPARE ELECTRICAL & ELECTRONIC PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE ELECTRICAL & ELECTRONIC PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement electrical & electronic production schedule
2. Inspect conformance for electrical & electronic production material
3. Execute electrical & electronic production process flow
4. Prepare manpower electrical & electronic production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare electrical & electronic production machine & equipment requirement
8. Prepare staff development program as per electrical & electronic production requirement
9. Assist in performing R&D activities
10. Prepare electrical & electronic production procedures
11. Prepare electrical & electronic production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 6

ELECTRICAL & ELECTRONIC PROCESS TECHNOLOGIST

AN ELECTRICAL & ELECTRONIC PROCESS TECHNOLOGIST IS DESIGNATED TO ANALYSE ELECTRICAL & ELECTRONIC PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF ELECTRICAL & ELECTRONIC PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse electrical & electronic production schedule
2. Verify material requirement for electrical & electronic production
3. Enforce implementation of electrical & electronic production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for electrical & electronic production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify electrical & electronic production procedures
10. Verify electrical & electronic production waste (schedule and non schedule) disposal activities
11. Perform managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 7

ELECTRICAL & ELECTRONIC PRODUCTION SENIOR TECHNOLOGIST

AN ELECTRICAL & ELECTRONIC PRODUCTION SENIOR TECHNOLOGIST IS DESIGNATED TO CARRY OUT ELECTRICAL & ELECTRONIC PRODUCTION PROCESS FLOW DESIGN , CONDUCT TRAINING FOR NEW ELECTRICAL & ELECTRONIC PRODUCTION TECHNOLOGY , PERFORM R&D PLANNING AND IMPLEMENT ELECTRICAL & ELECTRONIC PRODUCTION.

In particular the person will:

1. Design electrical & electronic production process flow according to electrical & electronic production specification
2. Conduct training for new electrical & electronic production technology
3. Plan R&D activities for electrical & electronic production
4. Advise electrical & electronic production procedures development

NON-RESOURCE BASED INDUSTRIES

LEVEL 2

PLASTIC INDUSTRIES PRODUCTION LINE LEADER

A PLASTIC INDUSTRIES PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT PLASTIC INDUSTRIES PRODUCTION PROCESS, CONFIRMS NON CONFORMANCE PRODUCT AND QUANTIFY PLASTIC INDUSTRIES PRODUCTION WASTE.

In particular the person will:

1. Carry out plastic industries production process in accordance with plastic industries production procedure
2. Follow plastic industries production process flow in accordance with plastic industries production procedure
3. Assist supervisor in controlling plastic industries production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for plastic industries production final product
6. Record product quantity in accordance with standard
7. Quantify plastic industries production waste (schedule and non schedule) according to company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 3

PLASTIC INDUSTRIES PRODUCTION SUPERVISOR

A PLASTIC INDUSTRIES PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF PLASTIC INDUSTRIES PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO PLASTIC INDUSTRIES PRODUCTION LINE, MANAGE PLASTIC INDUSTRIES PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise plastic industries production activity in accordance plastic industries production schedule
2. Ensure the availability of plastic industries production material
3. Supervise the implementation of plastic industries production process flow
4. Verify plastic industries production quality control in accordance product quality standard
5. Assign product lot number to plastic industries production line for product packaging and labeling
6. Verify finished product quantity
7. Implement plastic industries production policies and procedures
8. Manage plastic industries production waste (schedule/non schedule) in accordance with plastic industries production procedure
9. Report machine & equipment defect for plastic industries production line
10. Perform supervisory function

NON-RESOURCE BASED INDUSTRIES

LEVEL 4

PLASTIC INDUSTRIES PRODUCTION EXECUTIVE

A PLASTIC INDUSTRIES PRODUCTION SUPERINTENDENT IS DESIGNATED TO COORDINATE PLASTIC INDUSTRIES PRODUCTION SCHEDULE AND PLASTIC INDUSTRIES PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES.

In particular the person will:

1. Coordinate plastic industries production schedule
2. Coordinate plastic industries production material according to plastic industries production schedule
3. Implement plastic industries production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to plastic industries production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise plastic industries production waste activities in accordance with company policies and procedure

NON-RESOURCE BASED INDUSTRIES

LEVEL 5

PLASTIC INDUSTRIES PRODUCTION SENIOR EXECUITVE

A PLASTIC INDUSTRIES PRODUCTION EXECUTIVE IS DESIGNATED TO IMPLEMENT PLASTIC INDUSTRIES PRODUCTION SCHEDULE, PREPARE PLASTIC INDUSTRIES PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE PLASTIC INDUSTRIES PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement plastic industries production schedule
2. Inspect conformance for plastic industries production material
3. Execute plastic industries production process flow
4. Prepare manpower plastic industries production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare plastic industries production machine & equipment requirement
8. Prepare staff development program as per plastic industries production requirement
9. Assist in performing R&D activities
10. Prepare plastic industries production procedures
11. Prepare plastic industries production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 6

PLASTIC INDUSTRIES PRODUCTION MANAGER

A PLASTIC INDUSTRIES PRODUCTION MANAGER IS DESIGNATED TO ANALYSE PLASTIC INDUSTRIES PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF PLASTIC INDUSTRIES PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse plastic industries production schedule
2. Verify material requirement for plastic industries production
3. Enforce implementation of plastic industries production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for plastic industries production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify plastic industries production procedures
10. Verify plastic industries production waste (schedule and non schedule) disposal activities
11. Perform managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 7

PLASTIC PRODUCTION SPECIALIST

A PLASTIC PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT PLASTIC INDUSTRIES PRODUCTION PROCESS FLOW DESIGN , CONDUCT TRAINING FOR NEW PLASTIC INDUSTRIES PRODUCTION TECHNOLOGY, PERFORM R&D PLANNING AND IMPLEMENT PLASTIC INDUSTRIES PRODUCTION.

In particular the person will:

1. Design plastic industries production process flow according to plastic industries production specification
2. Conduct training for new plastic industries production technology
3. Plan R&D activities for plastic industries production
4. Advise plastic industries production procedures development

NON-RESOURCE BASED INDUSTRIES

LEVEL 2

CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION

LINE LEADER

A CONSTRUCTION MATERIAL LINE LEADER IS DESIGNATED TO CARRY OUT CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION PROCESS, RECORD PRODUCT QUANTITY, CONFIRMS NON CONFORMANCE PRODUCT AND QUANTIFY CONSTRUCTION MATERIAL PRODUCTION WASTE.

In particular the person will:

1. Carry out construction material industries production process in accordance with construction material production procedure
2. Follow construction material production process flow in accordance with construction material production procedure
3. Assist supervisor in controlling construction material production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for construction material production final product
6. Record product quantity in accordance with standard
7. Quantify construction material production waste (schedule and non schedule) according to company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 3

CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION SUPERVISOR

A CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF CONSTRUCTION MATERIAL PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO CONSTRUCTION MATERIAL PRODUCTION LINE, MANAGE CONSTRUCTION MATERIAL PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise construction material production activity in accordance construction material production schedule
2. Ensure the availability of construction material production material
3. Supervise the implementation of construction material production process flow
4. Verify construction material production quality control in accordance product quality standard
5. Assign product lot number to construction material production line for product packaging and labeling
6. Verify finished product quantity
7. Implement construction material production policies and procedures
8. Manage construction material production waste (schedule/non schedule) in accordance with construction material production procedure
9. Report machine & equipment defect for construction material production line
10. Perform supervisory function

NON-RESOURCE BASED INDUSTRIES

LEVEL 4

CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION EXECUTIVE

A CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION SUPERINTENDENT IS DESIGNATED TO COORDINATE CONSTRUCTION MATERIAL PRODUCTION SCHEDULE AND CONSTRUCTION MATERIAL PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES

In particular the person will:

1. Coordinate construction material production schedule
2. Coordinate construction material production material according to construction material production schedule
3. Implement construction material production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to construction material production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise construction material production waste activities in accordance with company policies and procedure

NON-RESOURCE BASED INDUSTRIES

LEVEL 5

CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION

SENIOR EXECUTIVE

A CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION EXECUTIVE IS DESIGNATED TO IMPLEMENT CONSTRUCTION MATERIAL PRODUCTION SCHEDULE , PREPARE CONSTRUCTION MATERIAL PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE CONSTRUCTION MATERIAL PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement construction material production schedule
2. Inspect conformance for construction material production material
3. Execute construction material production process flow
4. Prepare manpower construction material production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare construction material production machine & equipment requirement
8. Prepare staff development program as per construction material production requirement
9. Assist in performing R&D activities
10. Prepare construction material production procedures
11. Prepare construction material production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 6

CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION MANAGER

A CONSTRUCTION MATERIAL INDUSTRIES PRODUCTION MANAGER IS DESIGNATED TO ANALYSE CONSTRUCTION MATERIAL PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF CONSTRUCTION MATERIAL PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse construction material production schedule
2. Verify material requirement for construction material production
3. Enforce implementation of construction material production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for construction material production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify construction material production procedures
10. Verify construction material production waste (schedule and non schedule) disposal activities
11. Perform managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 7

CONSTRUCTION MATERIAL PRODUCTION SPECIALIST

A CONSTRUCTION MATERIAL PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT CONSTRUCTION MATERIAL PRODUCTION PROCESS FLOW DESIGN, CONDUCT TRAINING FOR NEW CONSTRUCTION MATERIAL PRODUCTION TECHNOLOGY, PERFORM R&D PLANNING AND IMPLEMENT CONSTRUCTION MATERIAL PRODUCTION.

In particular the person will:

1. Design construction material production process flow according to construction material production specification
2. Conduct training for new construction material production technology
3. Plan R&D activities for construction material production
4. Advise construction material production procedures development

NON-RESOURCE BASED INDUSTRIES

LEVEL 2

TEXTILES INDUSTRIES PRODUCTION LINE LEADER

A TEXTILE INDUSTRIES PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT TEXTILES INDUSTRIES PRODUCTION PROCESS, RECORD PRODUCT QUANTITY, CONFIRMS NON CONFORMANCE PRODUCT AND QUANTIFY TEXTILES PRODUCTION WASTE.

In particular the person will:

1. Carry out textiles industries production process in accordance with textiles production procedure
2. Follow textiles production process flow in accordance with textiles production procedure
3. Assist supervisor in controlling textiles production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for textiles production final product
6. Record product quantity in accordance with standard
7. Quantify textiles production waste (schedule and non schedule) according to company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 3

TEXTILES INDUSTRIES PRODUCTION SUPERVISOR

A TEXTILES INDUSTRIES PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF TEXTILES PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO TEXTILES PRODUCTION LINE, MANAGE TEXTILES PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise textiles production activity in accordance textiles production schedule
2. Ensure the availability of textiles production material
3. Supervise the implementation of textiles production process flow
4. Verify textiles production quality control in accordance product quality standard
5. Assign product lot number to textiles production line for product packaging and labeling
6. Verify finished product quantity
7. Implement textiles production policies and procedures
8. Manage textiles production waste (schedule/non schedule) in accordance with textiles production procedure
9. Report machine & equipment defect for textiles production line
10. Perform supervisory function

NON-RESOURCE BASED INDUSTRIES

LEVEL 4

TEXTILES INDUSTRIES PRODUCTION EXECUTIVE

A TEXTILES INDUSTRIES PRODUCTION SUPERINTENDENT IS DESIGNATED TO COORDINATE TEXTILES PRODUCTION SCHEDULE AND TEXTILES PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES

In particular the personal will:

1. Coordinate textiles production schedule
2. Coordinate textiles production material according to textiles production schedule
3. Implement textiles production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to textiles production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise textiles production waste activities in accordance with company policies and procedure

NON-RESOURCE BASED INDUSTRIES

LEVEL 5

TEXTILES INDUSTRIES PRODUCTION SENIOR EXECUTIVE

A TEXTILES PRODUCTION EXECUTIVE IS DESIGNATED TO IMPLEMENT TEXTILES PRODUCTION SCHEDULE, PREPARE TEXTILES PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE TEXTILES PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement textiles production schedule
2. Inspect conformance for textiles production material
3. Execute textiles production process flow
4. Prepare manpower textiles production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare textiles production machine & equipment requirement
8. Prepare staff development program as per textiles production requirement
9. Assist in performing R&D activities
10. Prepare textiles production procedures
11. Prepare textiles production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 6

TEXTILES INDUSTRIES PRODUCTION MANAGER

A TEXTILES PRODUCTION MANAGER IS DESIGNATED TO ANALYSE TEXTILES PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF TEXTILES PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse textiles production schedule
2. Verify material requirement for textiles production
3. Enforce implementation of textiles production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for textiles production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify textiles production procedures
10. Verify textiles production waste (schedule and non schedule) disposal activities
11. Perform managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 7

TEXTILES PRODUCTION SPECIALIST

A TEXTILES PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT TEXTILES PRODUCTION PROCESS FLOW DESIGN , CONDUCT TRAINING FOR NEW TEXTILES PRODUCTION TECHNOLOGY, PERFORM R&D PLANNING AND IMPLEMENT TEXTILES PRODUCTION.

In particular the person will:

1. Design textiles production process flow according to textiles production specification
2. Conduct training for new textiles production technology
3. Plan R&D activities for textiles production
4. Advise textiles production procedures development

NON-RESOURCE BASED INDUSTRIES

LEVEL 1

APPAREL INDUSTRIES OPERATOR

AN APPAREL OPERATOR IS DESIGNATED TO CARRY OUT ROUTINE JOB FUNCTION IN PRODUCTION LINE, CARRY OUT PRODUCT ASSEMBLY, PACKAGING AND LABELING, PERFORM INSPECTION ON PRODUCT AND SEGREGATE PRODUCTION WASTE.

In particular the person will:

1. Perform sewing function
2. Carry out material handling in accordance with production procedure
3. Carry out production in accordance with process flow
4. Perform product inspection in accordance with production quality control specification
5. Determine non conformance product
6. Carry out packing, labeling and recording for production product
7. Segregate production waste in accordance with company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 2

APPAREL INDUSTRIES PRODUCTION LINE LEADER

AN APPAREL INDUSTRIES PRODUCTION LINE LEADER IS DESIGNATED TO CARRY OUT APPAREL INDUSTRIES PRODUCTION PROCESS ACCORDING TO PROCEDURE, RECORD PRODUCT QUANTITY, CONFIRM NON CONFORMANCE PRODUCT AND QUANTIFY APPAREL PRODUCTION WASTE.

In particular the person will:

1. Carry out apparel industries production process in accordance with apparel production procedure
2. Follow apparel production process flow in accordance with apparel production procedure
3. Assist supervisor in controlling apparel production operator
4. Carry out confirmation for non conformance product
5. Coordinate lot number for apparel production final product
6. Record product quantity in accordance with standard
7. Quantify apparel production waste (schedule and non schedule) according to company policies and procedures

NON-RESOURCE BASED INDUSTRIES

LEVEL 3

APPAREL INDUSTRIES PRODUCTION SUPERVISOR

AN APPAREL INDUSTRIES PRODUCTION SUPERVISOR IS DESIGNATED TO ENSURE THE AVAILABILITY OF APPAREL PRODUCTION MATERIAL, ASSIGN PRODUCT LOT NUMBER TO APPAREL PRODUCTION LINE, MANAGE APPAREL PRODUCTION WASTE FOR SCHEDULE AND NON SCHEDULE AND PERFORM SUPERVISORY FUNCTION.

In particular the person will:

1. Supervise apparel production activity in accordance apparel production schedule
2. Ensure the availability of apparel production material
3. Supervise the implementation of apparel production process flow
4. Verify apparel production quality control in accordance product quality standard
5. Assign product lot number to apparel production line for product packaging and labeling
6. Verify finished product quantity
7. Implement apparel production policies and procedures
8. Manage apparel production waste (schedule/non schedule) in accordance with apparel production procedure
9. Report machine & equipment defect for apparel production line
10. Perform supervisory function

NON-RESOURCE BASED INDUSTRIES

LEVEL 4

APPAREL INDUSTRIES PRODUCTION EXECUTIVE

AN APPAREL INDUSTRIES PRODUCTION SUPERINTENDENT IS DESIGNATED TO COORDINATE APPAREL PRODUCTION SCHEDULE AND APPAREL PRODUCTION MATERIAL, INVESTIGATE NON CONFORMANCE PRODUCT AND COORDINATE QUALITY CONTROL ACTIVITIES

In particular the person will:

1. Coordinate apparel production schedule
2. Coordinate apparel production material according to apparel production schedule
3. Implement apparel production process flow in accordance with company policies and procedures
4. Arrange manpower deployment according to apparel production need
5. Coordinate quality control activities according to product quality standard
6. Investigate non conformance product
7. Perform final product handover
8. Supervise apparel production waste activities in accordance with company policies and procedure

NON-RESOURCE BASED INDUSTRIES

LEVEL 5

APPAREL INDUSTRIES PRODUCTION SENIOR EXECUTIVE

AN APPAREL PRODUCTION EXECUTIVE IS DESIGNATED TO IMPLEMENT APPAREL PRODUCTION SCHEDULE, PREPARE APPAREL PRODUCTION MACHINE & EQUIPMENT REQUIREMENT, IMPLEMENT QUALITY CONTROL PROCEDURES, PREPARE APPAREL PRODUCTION WASTE DISPOSAL REPORT AND CORRECTIVE ACTION PLAN FOR NON CONFORMANCE PRODUCT.

In particular the person will:

1. Implement apparel production schedule
2. Inspect conformance for apparel production material
3. Execute apparel production process flow
4. Prepare manpower apparel production plan
5. Implement quality control procedure
6. Prepare corrective action plan for non conformance product
7. Prepare apparel production machine & equipment requirement
8. Prepare staff development program as per apparel production requirement
9. Assist in performing R&D activities
10. Prepare apparel production procedures
11. Prepare apparel production waste (schedule and non schedule) disposal report
12. Assist in performing managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 6

APPAREL INDUSTRIES PRODUCTION MANAGER

AN APPAREL PRODUCTION MANAGER IS DESIGNATED TO ANALYSE APPAREL PRODUCTION SCHEDULE, ENFORCE IMPLEMENTATION OF APPAREL PRODUCTION PROCESS FLOW, PERFORM R&D ACTIVITIES AND MANAGERIAL FUNCTION.

In particular the person will:

1. Analyse apparel production schedule
2. Verify material requirement for apparel production
3. Enforce implementation of apparel production process flow
4. Verify manpower requirement plan
5. Verify corrective action plan for non conformance product
6. Prepare planning for apparel production machine and equipment
7. Verify staff training program
8. Perform R&D activities
9. Verify apparel production procedures
10. Verify apparel production waste (schedule and non schedule) disposal activities
11. Perform managerial function

NON-RESOURCE BASED INDUSTRIES

LEVEL 7

APPAREL PRODUCTION SPECIALIST

AN APPAREL PRODUCTION SPECIALIST IS DESIGNATED TO CARRY OUT APPAREL PRODUCTION PROCESS FLOW DESIGN, CONDUCT TRAINING FOR NEW APPAREL PRODUCTION TECHNOLOGY PERFORM R&D PLANNING AND IMPLEMENTATION FOR APPAREL PRODUCTION.

In particular the person will:

1. Design apparel production process flow according to apparel production specification
2. Conduct training for new apparel production technology
3. Plan R&D activities for apparel production
4. Advise apparel production procedures development