


Curriculum Document				
Curriculum Code	Curriculum Title			
714204-001-00-00-00	Plastics Manufacturing Machine Operator			
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SECTION 1: CURRICULUM SUMMARY

1. Occupational Information

1.1 Associated Occupation

714204: Plastics Production Machine Operator (General)

1.2 Occupation or Specialisation Addressed by this Curriculum.

714204-001-00-00: Plastics Manufacturing Machine Operator

1.3 Alternative Titles used by Industry.

- None

2. Curriculum Information

2.1 Relation of this Curriculum to the Occupation and Qualification Progression

- Learners entering this qualification will likely be new entrants from school and currently working in the Plastics Manufacturing industry.

2.2 Curriculum Structure

This qualification is made up of the following compulsory Knowledge and Practical Skill Modules:

List of Knowledge Modules

- 714204-001-00-00-KM-01, Workplace fundamentals, NQF Level 2, Credits 3.
- 714204-001-00-00-KM-02, Health and Safety within a manufacturing context, NQF Level 2, Credits 2.
- 714204-001-00-00-KM-03, Plastics Manufacturing related hand tools, power tools, measuring, lifting and stacking equipment, NQF level 2, Credits 5.
- 714204-001-00-00-KM-04, Plastics Fundamentals, NQF level 2, Credits 4.
- 714204-001-00-00-KM-05, Fundamentals of Plastics Conversion Processes, NQF Level 2, Credits 4.
- 714204-001-00-00-KM-06, Performing plastics manufacturing finishing and packaging operations, NQF Level 2, Credits 2.
- 714204-001-00-00-KM-07, Plastic Technology, NQF Level 3, Credits 6.
- 714204-001-00-00-KM-08, Plastic Technology as it applies to Plastic Manufacturing Processes, NQF Level 3, Credits 6.

Total number of credits for Knowledge Modules: 32

List of Practical Skills Modules:

- 714204-001-00-00-PM-01, Use, handle, care for and store hand and power tools, measuring instruments, lifting and stacking equipment, NQF Level 2, Credits 4.
- 714204-001-00-00-PM-02, Monitor the conversion process, NQF Level 2, Credits 4.
- 714204-001-00-00-PM-03, Perform finishing and packaging operations, NQF Level 2, Credits 4.
- 714204-001-00-00-PM-04, Perform basic maintenance on tooling and equipment, NQF Level 2, Credits 4.
- 714204-001-00-00-PM-05, Operate ancillary lifting equipment within the statutory requirements as well as organisations' policies, NQF Level 2, Credits 5.
- 714204-001-00-00-PM-06, Perform routine maintenance on manufacturing equipment, NQF Level 3, Credits 15.
- 714204-001-00-00-PM-07, Perform plastics manufacturing routine operations, NQF Level 3, Credits 15.
- 714204-001-00-00-PM-08, Perform tool, die and forming device changeover operations, NQF Level 3, Credits 15.

Total number of credits for Practical Skill Modules: 66

This qualification also requires the following compulsory Work Experience Modules:

List of Work Experience Module Specifications

- 714204-001-00-00-WM-01, Plastics manufacturing conversion processes, NQF Level 2, Credits 5.
- 714204-001-00-00-WM-02, Finishing and packaging operations, NQF Level 2, Credits 5.

- 714204-001-00-00-WM-03, Basic maintenance on tooling and equipment operations, NQF Level 2, Credits 5.
- 714204-001-00-00-WM-04, Processes related to the operation of ancillary lifting equipment within the statutory requirements as well as organisations' policies, NQF Level 2, Credits 2
- 714204-001-00-00-WM-05, Routine maintenance on manufacturing equipment, NQF Level 3, Credits 6.
- 714204-001-00-00-WM-06, Plastics manufacturing routine operations, NQF Level 3, Credits 15.
- 714204-001-00-00-WM-07, Tooling, die and forming device changeover operations, NQF Level 3, Credits 14.

Total number of credits for Work Experience Modules: 52

SECTION 2: OCCUPATIONAL PROFILE

1. Occupational Purpose

A Plastics Manufacturing Machine Operator performs routine operations and maintenance tasks on plastics manufacturing equipment.

2. Occupational Tasks

- Monitor the conversion process (NQF Level 2)
- Perform routine maintenance on manufacturing equipment (NQF Level 3)
- Perform routine operations (NQF Level 3)
- Perform tool, die and forming device changeover operations (NQF Level 3)
- Perform loading, lifting and safe handling of dies and overhead crane (NQF Level 3)

3 Occupational Task Details

3.1 Monitor the conversion process (NQF Level 2)

Unique Product or Service:

- Quality product that has met specifications.

Occupational Responsibilities:

- Monitor the conversion process.
- Perform finishing and packaging operations.

Occupational Contexts:

- Plastics manufacturing conversion processes
- Finishing and packaging operations

3.2 Perform routine maintenance on manufacturing equipment (NQF Level 3)

Unique Product or Service:

- Well-functioning equipment

Occupational Responsibilities:

- Perform basic maintenance on tooling and equipment.

- Perform routine maintenance on manufacturing equipment.
- Perform housekeeping activities.

Occupational Contexts:

- Basic maintenance on tooling and equipment operations
- Routine maintenance on manufacturing equipment

3.3. Perform routine operations (NQF Level 3)

Unique Product or Service:

- Quality product that has met specifications.

Occupational Responsibilities:

- Perform routine operations.

Occupational Contexts:

- Plastics manufacturing routine operations.

3.4. Perform tool, die and forming device changeover operations (NQF Level 3)

Unique Product or Service:

- Efficient changeover within the specified timeframe

Occupational Responsibilities:

- Perform tool, die and forming device changeover operations.
- Operate ancillary lifting equipment within the statutory requirements as well as organisations' policies.

Occupational Contexts:

- Tooling, die and forming device changeover operations.
- Processes related to the operation of ancillary lifting equipment within the statutory requirements as well as organisations' policies.

SECTION 3: CURRICULUM COMPONENT SPECIFICATIONS

SECTION 3A: KNOWLEDGE MODULE SPECIFICATIONS

List of Knowledge Modules

- 714204-001-00-00-KM-01, Workplace fundamentals, NQF Level 2, Credits 3
- 714204-001-00-00-KM-02, Health and Safety within a manufacturing context, NQF Level 2, Credits 2
- 714204-001-00-00-KM-03, Plastics Manufacturing related hand tools, power tools, measuring, lifting and stacking equipment, NQF level 2, Credits 5.
- 714204-001-00-00-KM-04, Plastics Fundamentals, NQF level 2, Credits 4.
- 714204-001-00-00-KM-05, Fundamentals of Plastics Conversion Processes, NQF Level 2, Credits 4.
- 714204-001-00-00-KM-06, Performing plastics manufacturing finishing and packaging operations NQF Level 2, Credits 2.
- 714204-001-00-00-KM-07, Plastic Technology, NQF Level 3, Credits 6
- 714204-001-00-00-KM-08, Plastic Technology as it applies to Plastic Manufacturing Processes, NQF Level 3, Credits 6

1. 714204-001-00-00-KM-01, Workplace fundamentals, NQF Level 2, Credits 3

1.1 Purpose of the Knowledge Modules

The main focus of the learning in this knowledge module is to build an understanding of basic concepts which underlie the workplace context, the regulatory environment and the explicit and tacit rules which govern the workplace.

The learning will enable learners to demonstrate an understanding of:

- KM-01-KT01: Employment (11%)
- KM-01-KT02: Organisation of work (11%)
- KM-01-KT03: Employer-Employee relationships (11%)
- KM-01-KT04: Concepts related to the performance of work (22%)
- KM-01-KT05: Types and structure of employer organisations and the impact of the external environment (22%)
- KM-01-KT06: Information and communication technology at work (11%)
- KM-01-KT07: Ethics at work (11%)
- KM-01-KT08: Current trends influencing work (12%)

1.2 Guidelines for Topics

1.2.1. KM-01-KT01: Employment (11%)

Topic elements to be covered include:

- KT0101 An employee's legal rights
- KT0102 Legislation which governs workplaces.
- KT0103 Employer role and responsibilities
- KT0104 Employee role and responsibilities
- KT0108 Employment relations in small and micro enterprises
- KT0109 Roles of the Department of Labour, the CCMA and the Labour Court

Internal Assessment Criteria and Weight

- IAC0101 Define and describe the concepts which underpin employment relationships and employment related legislation.
- IAC0102 Discuss the impact of these concepts on an employer and an employee.

- IAC0103 Describe the processes which govern employment, disputes and other labour relations issues.

(Weight 11%)

1.2.2. KM-01-KT02: Organisation of work (11%)

Topic elements to be covered include:

- KT0201 What work is, including products and services, paid and unpaid.
- KT0202 Work as sets of value-adding processes.
- KT0203 Customers in the value chain, internal and external
- KT0204 Work as collaboration - the role of teams in work processes
- KT0205 How teams function
- KT0206 Team organisation, team roles, meetings and information flow
- KT0207 Meeting protocols for a variety of meeting types, including formal meetings and informal "stand-up" meetings.
- KT0208 Organisational hierarchies in medium and large organisations

Internal Assessment Criteria and Weight

- IAC0201 Define and describe the concepts which underpin work, working and working relationships.
- IAC0202 Discuss the impact of these concepts on an employee and co-workers.
- IAC0203 Describe the processes which govern the work in the workplace.

(Weight 11%)

1.2.3. KM-01-KT03: Employer-Employee relationships (11%)

Topic elements to be covered include:

- KT0301 Employment contracts
- KT0302 Learning contracts, including learnerships, apprenticeships, internships, etc.
- KT0303 Mandates, vision, mission, policies and procedures.
- KT0304 Rules, codes of conduct and ethics.

- KT0305 Organisational values, common and specific.
- KT0306 Labour relations processes, including discipline, grievance, strikes, lock outs, negotiation, conciliation, mediation and arbitration.

Internal Assessment Criteria:

- IAC0301 Define and describe the concepts which define employer and employee relationships.
- IAC0302 Discuss the impact of these concepts on an employer and an employee.
- IAC0303 Describe processes which govern employer-employee relationships.

(Weight 11%)

1.2.4. KM-01-KT04: Concepts related to the performance of work (22%)

Topic elements to be covered include:

- KT0401 Planning, organising and control.
- KT0402 Workflow.
- KT0403 Cost waste
- KT0404 Productivity, efficiency
- KT0405 Housekeeping
- KT0406 Risk, health, safety, environment and related systems
- KT0407 Quality and quality systems
- KT0408 Continual improvement

Internal Assessment Criteria and Weight

- IAC0401 Define and describe the concepts related to the performance of work.
- IAC0402 Discuss the impact of these concepts on the individual employee.
- IAC0403 Describe the processes which govern the performance of work.

(Weight 22%)

1.2.5. KM-01-KT05: Types and structure of employer organisations and the impact of the external environment (22%)

Topic elements to be covered include:

- KT0501 Types of employer organisations, including public, private and non-profit entities.
- KT0502 Company as legal persona, stakeholders, responsibilities
- KT0503 Differences between micro, small, medium and large organisations
- KT0504 Organisational hierarchies
- KT0505 Organisational culture, structures and systems
- KT0506 Departments, services and inter-departmental relationships
- KT0507 Organisational strategies, business plans and related processes, including budgeting and reporting.
- KT0508 Typical organisational stakeholders
- KT0509 The economy, markets, customers, competition, service delivery
- KT0510 Resources, including materials, people, finance and technology.
- KT0511 Legislation, regulations and standards, including SANS.
- KT0512 Organisations and the natural environment
- KT0513 Global influences on local conditions and the economy

Internal Assessment Criteria and Weight

- IAC0501 Describe the various kinds of organisations which are employers and explain the differences between them.
- IAC0502 Describe, with the aid of sketches where relevant, how organisations are structured and explain the relationships between elements of the structure.
- IAC0503 Describe how organisations fulfil their mandate or mission.
- IAC0504 Describe typical stakeholders of various types of organisation.
- IAC0505 Discuss the impact of these factors on an employer and an employee.
- IAC0506 Describe the processes which employer organisations have to apply because of the external environment.

(Weight 22%)

1.2.6. KM-01-KT06: Information and communication technology at work (11%)

Topic elements to be covered include:

- KT0601 Computers, software and systems
- KT0602 Telephones, internet and intranet
- KT0603 The use of ICT to support business processes.

Internal Assessment Criteria and Weight

- IAC0601 Define and describe the concepts, tools and equipment related to information and communication technology.
- IAC0602 Describe and explain, with the aid of sketches where relevant, how organisations use information and communications technology to support business processes.
- IAC0603 Discuss the impact of these concepts, tools and equipment on the workplace.

(Weight 11%)

1.2.7. KM-01-KT07: Ethics at work (11%)

Topic elements to be covered include:

- KT0701 Definition of ethical behaviour
- KT0702 Components of ethical behaviour, including integrity, honesty, fair dealing, respecting diversity.
- KT0703 Unwritten but expected behaviours, including reliability, accountability, time keeping, respect for others.
- KT0704 Lapses in ethical behaviour, including sexual harassment, racism, bullying, theft, abuse of company property, rules, time and sick leave.
- KT0705 Conflicts of interest, including primary and secondary interests, the impact on individuals and organisations, and the link to corruption.
- KT0706 The need for ethical behaviour and the impact or consequences of lapses in ethical behaviour

Internal Assessment Criteria:

- IAC0701 Define and describe the concepts, issues and examples of ethical and unethical conduct.
- IAC0702 Discuss the impact of these factors on an employer and an employee.

- IAC0703 Describe the impact of lapses in ethical behaviour on the organisation and individuals in the organisation.
- IAC0704 Describe the processes which employer organisations use to support ethical conduct in the workplace.

(Weight 11%)

1.2.8. KM-01-KT08: Current trends influencing work (12%)

Topic elements to be covered include:

- KT0801 Employment equity
- KT0802 Broad-Based Black Economic Empowerment
- KT0803 Sustainability
- KT0804 Diversity
- KT0805 Work-life balance
- KT0806 Working smart

Internal Assessment Criteria and Weight

- IAC0801 Describe and explain the current trends affecting organisations and employees.
- IAC0802 Discuss the impact of these factors on an employer and an employee.

(Weight 12%)

1.3 Provider Programme Accreditation Criteria

Physical Requirements:

- Standard facilities for classroom training, including access to computers and the internet.
- Relevant training materials, models, audio-visual resources, learner management systems.

Human Resource Requirements:

- Lecturer with relevant industry experience and a knowledge of the work of vehicle mechanics.
- Facilitator/learner ratio 1 to 24.

Legal Requirements:

- Compliant with relevant health and safety requirements

1.4 Exemptions

- None

2. 714204-001-00-00-KM-02, Health and Safety within a manufacturing context, NQF Level 2, Credits 2

2.1. Purpose of the Knowledge Subject

The main focus of the learning in this subject is to build understanding of Health, Safety and Environmental considerations and requirements within the plastics manufacturing industry.

The learning will enable learners to demonstrate an understanding of:

- KM-02-KT01: Health and Safety Acts (25%)
- KM-02-KT02: Handling of hazardous material (25%)
- KM-02-KT03: Hazards, accidents and incidents (25%)
- KM-02-KT04: Safety signs, symbols and Personal Protective Equipment (PPE) (25%)

2.2 Guidelines for Topics

2.2.1. KM-02-KT01: Health and Safety Acts (25%)

Topic Elements to be covered include:

- KT0101 Health, safety and environmental organizational compliance requirements
- KT0102 Workman's compensation
- KT0103 Responsibilities of an employee and the employer in relation to the OSH Act.

Internal Assessment Criteria:

- IAC0101 Discuss organizational compliance requirements.
- IAC0102 Describe workman's Compensation.
- IAC0103 Explain the employee and the employer responsibility in relation to the OSH Act.
- IAC0104 Access, identify, read and interpret relevant manufacturing documentation.

(Weight 25%)

2.2.2. KM-02-KT02: Handling of hazardous material (25%)

Topic Elements to be covered include:

- KT0201 Reading and interpretation of Material Safety Data Sheet
- KT0202 The procedure to correctly dispose of hazardous material.
- KT0203 Various hazardous materials likely to be found in the plastics industry.
- KT0204 The procedure to follow when handling hazardous materials including spillage.
- KT0205 Accessibility, identification, reading and interpreting relevant manufacturing documentation.

Internal Assessment Criteria:

- IAC0201 Read and interpret Material Safety Data Sheet
- IAC0202 Explain the procedure to correctly dispose of hazardous material.
- IAC0203 List the various hazardous materials likely to be found in the plastics industry
- IAC0204 Explain the procedure to follow when handling hazardous materials including spillage.
- IAC0205 Access, identify, read and interpret relevant manufacturing documentation.

(Weight 25%)

2.2.3. KM-02-KT03: Hazards, accidents and incidents (25%)

Topic Elements to be covered include:

- KT0301 Legal requirements for conducting hazard identification and risk assessments (HIRA).
- KT0302 HIRA processes for continuous and issue-based assessments.
- KT0303 Accidents and Incidents.
- KT0304 Types of corrective actions following the HIRA process.

Internal Assessment Criteria

- IAC0302 Describe the legal requirements for conducting hazard identification and risk assessments (HIRA)
- IAC0302 Describe the HIRA processes for continuous and issue-based assessments.
- IAC0303 Differentiate between accident and incident with examples.
- IAC0304 Describe the administrative processes and procedures related to HIRA.
- IAC0305 Describe the various types of corrective actions following HIRA processes.

(Weight 25%)

2.2.4. KM-02-KT04: Safety signs, symbols and Personal Protective Equipment (PPE) (25%)

Topic Elements to be covered include:

- KT0401 Mandatory, warning, information and prohibitive signs.
- KT0402 Colour coding of pipes.
- KT0403 The various types of PPE and their importance.
- KT0404 Access, identify, read and interpret relevant documentation.

Internal Assessment Criteria:

- IAC0401 Explain mandatory, warning, information and prohibitive signs.
- IAC0402 Interpret colour coding of pipes.
- IAC0403 List and explain the various types of PPE and their importance.
- IAC0404 Explain how to access, identify, read and interpret relevant documentation.

(Weight 25%)

2.3 Provider Programme Accreditation Criteria

Physical Requirements:

- Normal lecture environment with multi-media facilities, pictures and various examples of products

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

2.4 Exemptions

- None

3. 714204-001-00-00-KM-03, Plastics Manufacturing related hand tools, power tools, measuring, lifting and stacking equipment, NQF level 2, Credits 5

3.1. Purpose of the Knowledge Subject

The focus of the learning in this subject is on building knowledge and a level of understanding of concepts related to hand tools, power tools, measuring equipment and lifting and stacking equipment as used in the plastic manufacturing industry. In addition, learners will demonstrate an understanding of considerations to be considered when using hand tools, power tools, measuring equipment and lifting and stacking equipment that are used within the plastics manufacturing industry.

The learning will enable learners to demonstrate an understanding of:

- KM-03-KT01: Theory related to hand tools (25%)
- KM-03-KT02: Theory related to power tools (25%)
- KM-03-KT03: Theory related to measuring devices (25%)
- KM-03-KT04: Theory related to lifting and stacking equipment (25%)

3.2 Guidelines for Topics

3.2.1. KM-03-KT01: Theory related to hand tools (25%)

Topic Elements to be covered include:

- KT0101 Different types of hand tools.
- KT0102 Uses of hand tools.
- KT0103 Safety requirements.
- KT0104 Handling, transportation and storage of hand tools.
- KT0105 Basic maintenance of hand tools.

Internal Assessment Criteria:

- IAC0101 Identify different types of hand tools used within the plastics manufacturing industry (hand tools may include but are not limited to screw drivers, Allen Keys, Utility knife, clippers, hex saw, pipe cutter, spanners, ratchet, etc.).

- IAC0102 Explain the purpose of each hand tool, e.g., the purpose of a screwdriver is to tighten and untighten up screws.
- IAC0103 Explain the importance of using the correct/ relevant hand tool for a specific job.
- IAC0104 Demonstrate the use of each hand tool making use of practical examples.
- IAC0105 Explain health and safety requirements to be observed when using hand tools.
- IAC0106 Explain the risks associated with using blunt or damaged hand tools.
- IAC0107 Explain how you will care for hand tools (care for hand tools includes but is not limited to cleaning, lubrication, proper handling and storage).
- IAC0108 Explain the importance of visually inspecting hand tools before and after use.
- IAC0109 Identify the correct Personal Protective Equipment (PPE) to wear and use when working with hand tools.
- IAC0110 Explain the importance of using the correct PPE when performing plastics manufacturing related tasks.
- IAC0111 Explain consequences of not using PPE when carrying out plastics manufacturing tasks.

(Weight 25%)

3.2.2. KM-03-KT02: Theory related to power tools (25%)

Topic Elements to be covered include:

- KT0201 Different types of power tools.
- KT0202 Uses of power tools.
- KT0203 Safety requirements.
- KT0204 Handling, transportation and storage.
- KT0205 Basic maintenance of power tools.

Internal Assessment Criteria:

- IAC0201 Identify different types of power tools used within the plastics manufacturing industry (power tools may include but are not limited to drills, angle grinders, buffing machines, jig saw, cutters, punch, rivetters, etc.).
- IAC0202 Explain the purpose of each power tool.
- IAC0203 Explain the importance of using the correct/ relevant power tool for a specific job.
- IAC0204 Demonstrate the use of each power tool making use of practical examples.
- IAC0205 Identify replaceable parts or consumables for each power tool and explain the importance of visually inspecting parts, before and after use. (Consumables or replaceable parts include but are not limited to drill bits, blades, cutting disc, etc.).
- IAC0206 Explain consequences of using blunt or damaged or non-functional consumables (accessories) of power tools. (Using power tools with non-functional consumables can harm oneself or fellow colleagues).
- IAC0207 Outline the procedure to follow when replacing or changing consumables.
- IAC0208 Explain the danger of not switching off power or isolating power tools when replacing or changing consumables.
- IAC0209 Explain health and safety requirements to be observed when using power tools.
- IAC0210 Identify the correct PPE to use when working with power tools (PPE include but is not limited to goggles, gloves, overall, boots, face-shield, earplugs, etc.).
- IAC0211 Illustrate how to wear and use each PPE.
- IAC0112 Explain how to safely handle and store power tools.
- IAC0213 Explain the impact of environmental conditions on power tools. (environmental conditions related to coastal/ humid areas, etc.)
- IAC0214 Explain how you will care for power tools.
- IAC0215 Explain the importance of storing power tools in their respective carry cases as well as appropriate areas such as shaft, locked cabinet, etc.
- IAC0216 Explain how to maintain power tools, importance thereof and risks associated with using non-lubricated power tools.

(Weight 25%)

3.2.3. KM-03-KT03: Theory related to measuring instruments (25%)

Topic Elements to be covered include:

- KT0301 Types of measuring instruments.
- KT0302 Purpose of each.
- KT0303 Caring for and maintaining measuring equipment.
- KT0304 Consequences of using faulty measuring equipment.
- KT0305 Storage requirements and the implications of incorrect storage.

Internal Assessment Criteria

- IAC0301 Identify and explain the use and application of measuring equipment (tape measure, ruler, vernier, micro metres; height gauge, measuring devices such as go-no-go gauges, scales, pyrometer, torque wrench etc pi-tape, etc).
- IAC0302 Explain the purpose of each, for example micrometer is used to make precise measurements the rules for selecting and vernier-used to make accurate measurements.
- IAC0303 Explain safety requirements to be considered when using measuring instruments made of metal.
- IAC0304 Explain safety requirements to be considered when using vernier.
- IAC0305 Identify and explain damages to measuring instruments if dropped or exposed to direct sunlight (Vernier- scale will peel off and affect the accuracy of the instrument, some measuring instruments can become dented or lose calibration if dropped).
- IAC0306 Explain consequences of mishandling measuring instruments.
- IAC0307 Explain the consequences of using faulty measuring equipment (some of the consequences may include but are not limited to inaccurate measurements).
- IAC0308 Explain storage requirements for measuring instruments and the implications of incorrect storage (Application of lubricants for storage of measuring instruments to minimise drying up or corrosion/ rust)
- IAC0309 Explain how to care for measuring instruments (lubrication, cleaning, etc).

- IAC0310 Explain reasons for regularly cleaning measuring instruments. (Reasons may include but are not limited to avoiding accumulation of dirt which may lead to loss of calibration).
- IAC0311 Explain units of measure and the conversation process.
- IAC0312 Explain the importance of calibration in measuring instruments.

(Weight 25%)

3.2.4. KM-03-K04: Lifting and stacking equipment (25%)

Topic Elements to be covered include:

- KT0401 Types of lifting and stacking equipment (forklift, pneumatic and electric hoist, or manual hoist, hydraulic jack, pallet jack/ truck, mini-stacker, engine crane, slings, eyebolts, chains, spreader beam, etc).
- KT0402 Purpose and uses of each.
- KT0403 Safety requirements.
- KT0404 Statutory requirements.

Internal Assessment Criteria:

- IAC0401 Identify types of lifting and stacking equipment (lifting and stacking equipment include but are not limited to forklift, pneumatic and electric hoist, or manual hoist, hydraulic jack, pallet jack/ truck, mini-stacker, engine crane, etc.).
- IAC0402 Identify accessories to use when using lifting and stacking equipment (slings, eyebolts, chains, spreader beam, etc.)
- IAC0403 Explain purpose of each lifting and staking equipment (for example, a mini stacker moves small items such as small moulds around, engine crane lifts machine components and moulds out of the machines, sling is used to attach an item to the hoist, forklift lifts light heavy loads and move them around for specific heights, pneumatic hoist lifts items where there is no power, hydraulic jack and pallet jack are used to move items in area where a forklift is not permitted etc.).
- IAC0404 Explain purpose of each accessory (for example, eyebolts are used to secure loads when moving them around, chains are used to lift items and are economical to use, spreader beam is used to secure and balance the load when moving items around, etc.).

- IAC0405 Explain statutory safety requirements to be observed when using lifting and staking equipment such as forklift, electric and pneumatic hoisting.
- IAC0406 Explain statutory safety requirements to be observed when using accessories to lifting and staking equipment.
- IAC0407 Explain the importance of warning fellow colleagues about the job at hand when working with lifting and stacking equipment.
- IAC0408 Explain how the work area can be secured when using lifting and staking equipment (securing the work area can be through barricading work area)

(Weight 25%)

3.3 Provider Programme Accreditation Criteria

Physical Requirements:

- Normal lecture environment with multi-media facilities, pictures and various examples of products

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

3.4 Exemptions

- None

4. 714204-001-00-00-KM-04, Plastics Fundamentals, NQF level 2, Credits 4

4.1 Purpose of the Knowledge Modules

The main focus of the learning in this knowledge module is to build a level of understanding regarding fundamentals of input material with respect to properties, characteristics, preparations, handling and storage requirements.

The learning will enable learners to demonstrate an understanding of:

- KM-04-KT01: Basic knowledge and understanding of input material (35%)
- KM-04-KT02: Preparation of input material (40%)
- KM-04-KT03: Receipt and storage of input material (25%)

4.2 Guidelines for Topics

4.2.1. KM-04-KT01: Basic knowledge and understanding of input material (35%)

Topic elements to be covered include:

- KT0101 Characteristics and properties of plastics input material such as physical and chemical properties.
- KT0102 Different types of plastics material such as thermoplastics, thermoset and elastomers.
- KT0103 Identification of input material according to grade numbers, batch numbers and knowledge about suppliers
- KT0104 Knowledge about additives

Internal Assessment Criteria:

- IAC0101 Differentiate between physical and chemical properties of plastics materials.
- IAC0102 Identify and discuss different types of plastics materials (plastics materials include but are not limited to thermoplastics, thermoset, elastomers).
- IAC0103 Explain how you will identify input materials (input materials can be identified through grade numbers, batch numbers, knowledge about suppliers, etc).
- IAC0104 Define additives and explain their purpose in input material.

- IAC0105 Identify additives according to code (grade) numbers, batch numbers and knowledge about suppliers.

(Weight 35%)

4.2.2. KM-04-KT02: Preparation of input material (40%)

Topic elements to be covered include:

- KT0201 Identification of input material according to grade numbers, batch numbers and knowledge about suppliers.
- KT0202 Material safety datasheet.
- KT0203 Fundamentals of handling input material.

Internal Assessment Criteria:

- IAC0201 Explain the importance of safe handling input material accordingly, prior usage. (Reasons may include but are not limited to the fact that some input materials are toxic, therefore, should be handled with care, some input materials are not compatible which may lead to a volatile reaction, some materials when packed next to each other may lead to cross contamination).
- IAC0202 Explain reasons for drying up input material before processing. (Reasons may include but are not limited to possible negative impact on the end product (output), some material absorb moisture (on the pallet) and adsorb moisture (on the surface), this results in properties of materials being negatively affected).
- IAC0203 Explain implications of moisture, dust, heat, storage conditions, packing and stacking, on input materials. (Implications may include but are not limited to: moisture leads to defects such as streak, this results in the output being a reject, output will be affected; special packaging such as aluminium in some input materials, if input material is not used, the packaging must be resealed before putting back to storage, the implication is that additional cost might be incurred to recycle input material.).
- IAC0204 Explain ways in which input materials can be prepared (preparation includes the following: mixing, blending, drying, cut to size, etc.)
- IAC0205 Explain and differentiate between different input preparation processes such as mixing, blending, drying and cutting to size.
- IAC0206 Explain the importance of handling spillage (reasons may include but are not limited to safety being compromised, etc.).

- IAC0207 Explain how spillage can be handled taking into consideration the form in which the input material is presented. (input material can be in the form of powder, pellets, resins, etc.).
- IAC0208 Explain the consequences of selecting and processing wrong input material. (One of the reasons might be that input materials are processed at different temperatures; therefore, wrong selected input material might be processed through incorrect temperature).

(Weight 40%)

4.2.3. KM-04-KT03: Receipt and storage of input material (25%)

Topic elements to be covered include:

- KT0301 Impact of adverse conditions on input materials
- KT0302 Factors to consider with respect to receiving and storage of input materials.

Internal Assessment Criteria:

- IAC0301 Explain factors to consider when receiving input material (factors may include but are not limited to separating input material according grade and type to prevent cross contamination)
- IAC0302 Identify adverse conditions that might have a negative impact on input materials (adverse conditions include but are not limited to sunlight, dust, rain, etc.).
- IAC0303 Explain the impact of each of these adverse conditions on input materials.
- IAC0304 Explain how contaminants such as dust and foreign matters impact negatively on output (these may cause defects such as gel, black spots, etc. which will lead to rejects) ~~(material attract dust in storage and get contaminated).~~
- IAC0305 Explain the importance of weighing input material, that was taken out of storage, before been taken back to storage (re-storing)
- IAC0306 Explain reasons for putting a new reading on the package after re-weighing
- IAC0307 Explain reasons for resealing input material with special packaging such as aluminium with before putting back to storage.

(Weight 25%)

4.3 Provider Programme Accreditation Criteria

Physical Requirements:

- Normal lecture environment with multi-media facilities, pictures and various examples of products

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

4.4 Exemptions

- None

5. 714204-001-00-00-KM-05, Fundamentals of Plastics Conversion Processes, NQF Level 2, Credits 4.

5.1. Purpose of the Knowledge Modules

The main focus of the learning in this subject is to build understanding of concepts and theories related to fundamentals of plastics conversion processes.

The learning will enable learners to demonstrate an understanding of:

- KM-05-KT01: Components of plastics manufacturing machine (20%)
- KM-05-KT02: Safety aspects with respect to machine operation (start switch, emergency stop switch, how to resolve the problem (40%)
- KM-05-KT03: Conversion process (20%)
- KM-05-KT04: Handling scrap and waste (20%)

5.2 Guidelines for Topics

5.2.1. KM-05-KT01: Components of plastics manufacturing machine (20%)

Topic elements to be covered include:

- KT0101 Identification and explanation of parts and functions of the plastics manufacturing machine.
- KT0102 Identification and description of names, functions and purpose of parts of machinery or down-stream equipment, up –stream equipment, auxilliary equipment (robotics, pre-treatments, post-treatment, packaging and printing etc).
- KT0103 Manual control of machinery or down-stream equipment, up-stream equipment, auxilliary equipment (robotics, pre-treatments, post-treatment, packaging and printing etc).
- KT0104 The importance of the services supplied or delivered to the machine (compressed air, electricity, water etc).
- KT0105 Names, functions and purpose of parts of gravimetric and volumetric feeders/blenders.

Internal Assessment Criteria:

- IAC0101 Identify and name parts and functions of plastics manufacturing machine.
- IAC0102 Explain the purpose of gauges and / or displays on plastics manufacturing machine.
- IAC0103 Explain the importance of reading and understand readings on displays and reporting these to appropriate personnel.
- IAC0104 List and describe manual control of machinery (robotics, pre-treatment, packaging and printing etc).
- IAC0105 Explain the importance of the services supplied or delivered to the machine (services include but are not limited to compressed air, electricity, water etc).
- IAC0106 List names, functions and purpose of parts of gravimetric and volumetric feeders or blenders.

(Weight 20%)

5.2.2. KM-05-KT02: Safety aspects with respect to machine operation (start switch, emergency stop switch, how to resolve the problem (40%))

Topic elements to be covered include:

- KT0201 Safety aspect in relation to machine operation (safety aspects with respect to start switch, emergency stop switch, how to resolve problems emanating from these).
- KT0202 Visual inspections before operations (pre-start up checks).
- KT0203 Health and safety aspects to consider when operating the machine.
- KT0204 Factors to consider before operating the machine (factors include but are not limited to machine is empty, clean and ready to receive input material)
- KT0205 The importance of emergency stop switch and the role it plays in the process.

Internal Assessment Criteria:

- IAC0201 Explain the importance of conducting pre-start up checks (visual inspections) before operations.
- IAC0202 Identify and explain warning signs in relation to machine malfunctioning or faulty operation (signs may include but are not limited to sounds from machine, smell, touch, etc.).

- IAC0203 Explain health and safety aspects to consider when operating the machine (safety aspects may include but are not limited to oil leaks, water leaks, air leaks and electrical faults, mechanical faults, etc.).
- IAC0204 Explain the importance of wearing the correct PPE when operating the machine.
- IAC0205 Explain factors should be considered before starting the machine (factors may include but are not limited to verifying that the machine is empty, clean and ready to receive input material).
- IAC0206 Explain the importance of emergency stop switch and the role it plays in the process.
- IAC0207 Identify issues that may lead to machine stoppage and ways in which these can be resolved (issues may include but are not limited to electrical problem, fitting problem, or process problem)

(Weight 40%)

5.2.3. KM-05-KT03: Conversion process (20%)

Topic elements to be covered include:

- KT0301 The various plastic conversion processes and the application thereof.
- KT0302 Conversion process common defects (defects may include but are not limited to rejects, short shot, dry, gloss prominence, etc.).
- KT0303 Monitoring material flow and responding to changes.

Internal Assessment Criteria:

- IAC0301 Identify conversion process common defects (defects may include but are not limited to rejects, short shot, dry, gloss prominence, etc.).
- IAC0302 Explain factors that determine when to re-order input material (factors to consider include but are not limited to number bags, red line, two bin, etc.).
- IAC0303 Explain actions to take when input material runs low (action may include but is not limited to replenishing or reporting to the relevant personnel).

(Weight 20%)

5.2.4. KM-05-KT04: Handling scrap and waste (20%)

Topic elements to be covered include:

- KT0401 Purpose of in-plant recycling.
- KT0402 The impact of plastic waste on the environment.
- KT0403 Recycling methods.
- KT0404 Identification of re-usable materials or scrap.
- KT0405 Fundamentals of handling scrap and waste.
- KT0406 Key features of materials in terms of their properties and characteristics including safe handling, storage, preparation, processing, post treatment and finishing.
- KT0407 Procedure used to protect materials or products from moisture and Ultraviolet (UV).
- KT0408 The importance of recording, labelling, packaging, and stacking products as per instructions (traceability)
- KT0409 Requirements for moving containers of recyclables or scrap.
- KT0410 Requirements for moving materials or products to appropriate locations.
- KT0411 Procedure to follow when setting up grinders or granulators for different recyclables.
- KT0412 Requirements for blending recycled material.
- KT0413 Procedure to follow when handling defective material.
- KT0414 Procedure to follow when operating grinding or granulating equipment.

Internal Assessment Criteria:

- IAC0401 Describe the purpose of in-plant recycling.
- IAC0402 Explain the impact of plastic waste on the environment.
- IAC0403 Differentiate between scrap and waste.
- IAC0404 Identify and explain factors to consider when handling scrap and waste.
- IAC0405 Identify and explain areas where scrap can be stored or taken to.
- IAC0406 Explain ways in which re-usable materials or scrap can be identified.
- IAC0407 Explain ways in which scrap can be recycled.

- IAC0408 Explain the importance of weighing, clearly marking, recording and reporting scrap that is to be recycled.
- IAC0409 Explain the importance of monitoring and recording the amount of waste.
- IAC0410 Explain consequences of using contaminated scrap material.
- IAC0411 Explain consequences of using regrind or recycle material.

(Weight 20%)

5.3 Provider Programme Accreditation Criteria

Physical Requirements:

- Normal lecture environment with multi-media facilities, pictures and various examples of products

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements

5.4 Exemptions

- None

6. 714204-001-00-00-KM-06, Performing plastics manufacturing finishing and packaging operations, NQF Level 2, Credits 2.

6.1. Purpose of the Knowledge Subject

The main focus of the learning in this subject is to build understanding of theories related to fundamentals of plastics manufacturing finishing and packaging operations.

The learning will enable learners to demonstrate an understanding of:

- KM-06-KT01: Packaging and finishing requirements (100%)

6.2. Guidelines for Topics

6.2.1. KM-06-KT01: Packaging and finishing requirements (100%)

Topic elements to be covered include:

- KT0101 Concepts related to Bill of Material.
- KT0102 Reading and interpretation of the production schedule/ job card/ works order/ production sheet with respect to packaging and finishing requirements.
- KT0103 Packaging requirements.
- KT0104 Preparing work area.
- KT0105 Quality requirements (Sampling with respect to visual inspections).
- KT0106 Characteristics of defective plastic products.
- KT0107 Procedure to follow in dealing with defective plastic products.
- KT0108 Documentation for recording, tracking, reporting and/or communicating.
- KT0109 Process related to preparing products for the next phase.

Internal Assessment Criteria:

- IAC0101 Identify and explain information provided in the Bill of Material.
- IAC0102 Explain the importance of reading and correct interpretation of the production schedule/ job card/ works order/ production sheet with respect to packaging and finishing requirements.

- IAC0103 Explain the role of the production schedule/ job card/ works order/ production sheet in plastics manufacturing packaging and finishing processes.
- IAC0104 Explain how the work area with respect to plastics manufacturing packaging and finishing processes can be prepared and the importance thereof.
- IAC0105 Identify and explain plastics manufacturing finishing operations and related tools to use in the operation of such.
- IAC0106 Explain quality requirements to be applied when performing packaging and finishing operations.
- IAC0107 Identify and explain simple quality checks to conduct when performing packaging and finishing operations (quality checks include but are not limited to visual inspections to identify right quality output, using standard jigs and/or gauges to determine dimensions/ fit and weight, etc.).
- IAC0108 List and explain characteristics of defective plastic products.
- IAC0109 Explain the procedure to follow in dealing with defective plastic products.
- IAC0110 Explain the importance of reading and interpreting Standard Operating Procedures (SOP), work instruction or production schedule to determine processes related to preparing products for the next phase.
- IAC0111 Identify and explain process related to preparing products for the next phase (processes may include but are not limited to flame treatment/ corona, leak testing, trimming requirements, drilling, chamfering, etc.)
- IAC0112 Explain the importance of recording, tracking, reporting and communicating activities performed with respect to packaging and finishing operations.

(Weight 100%)

6.3 Provider Programme Accreditation Criteria

Physical Requirements:

- Normal lecture environment with multi-media facilities, pictures and various examples of products

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.

- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements

6.4 Exemptions

- None

7. 714204-001-00-00-KM-07, Plastic Technology, NQF Level 3, Credits 6

7.1. Purpose of the Knowledge Subject

The main focus of the learning in this subject is to build understanding of the effect of mould, die and forming device design variations on operation parameters.

The learning will enable learners to demonstrate an understanding of:

- KM-07-KT01: Principles of mould, die and forming device construction (100%)

7.2 Guidelines for Topics

7.2.1. KM-07-KT01: Principles of mould, die and forming device construction (100%)

Topic elements to be covered include:

- KT0101 The effect of mould, die and forming device design variations on operating parameters.
- KT0102 The operation of the cooling system.

Internal Assessment Criteria:

- IAC0101 Explain how mould, die and forming device design variations affect operating parameters.
- IAC0102 Explain the operation of the cooling system.

(Weight 100%)

7.3 Provider Programme Accreditation Criteria

Physical Requirements:

- Normal lecture environment with multi-media facilities, pictures and various examples of products

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level

- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements

7.4 Exemptions

- None

8. 714204-001-00-00-KM-08, Plastic Technology as it applies to Plastic Manufacturing Processes, NQF Level 3, Credits 6

8.1. Purpose of the Knowledge Subject

The main focus of the learning in this subject is to build knowledge and understanding of the construction of and the various designs of mould, die and forming device; handling and transportation requirements; maintenance requirements and correct operational procedures during plastics manufacturing processes.

The learning will enable learners to demonstrate an understanding of:

- KM-08-KT01: Plastic Manufacturing Process (100%)

8.2. Guidelines for Topics

8.2.1. KM-08-KT01: Plastic Manufacturing Process (100%)

Topic Elements to be covered include:

- KT0101 Procedure to follow in safely caring for and maintaining mould, die and forming device.
- KT0102 Procedure to safely care for and maintain machinery or down-stream equipment, up-stream equipment, auxilliary equipment (robotics, pre-treatments, post-treatment, packaging and printing etc.)
- KT0103 Procedure to safely operate machinery/down-stream equipment, up-stream equipment, auxilliary equipment (robotics, pre-treatments, post-treatment, packaging and printing etc.)
- KT0104 Start-up and shut-down procedure for machinery/down -stream equipment, up-stream equipment, auxilliary equipment (robotics, pre-treatments, post-treatment, packaging and printing etc.)
- KT0105 The importance and impact of cycle times.
- KT0106 Various stages of a cycle time and how each stage can be adjusted.
- KT0107 Procedure to follow when using /adding regrind material to the production process.
- KT0108 Accessibility, identification of, reading and interpretation of relevant documentation.

Internal Assessment Criteria:

- IAC0101 Explain the procedure to follow in safely caring for and maintaining mould, die and forming device.
- IAC0102 Explain the procedure to safely care for and maintain machinery or down-stream equipment, up-stream equipment, auxilliary equipment (robotics, pre-treatments, post-treatment, packaging and printing etc.)
- IAC0103 Explain the procedure to safely operate machinery or down-stream equipment, up-stream equipment, auxilliary equipment (robotics, pre-treatments, post-treatment, packaging and printing etc)
- IAC0104 Describe start up and shut down procedure for machinery or down-stream equipment, up-stream equipment, auxilliary equipment (robotics, pre-treatments, post-treatment, packaging and printing etc)
- IAC0105 Describe the importance and impact of cycle times.
- IAC0106 Describe the various stages of a cycle time and how each stage can be adjusted.
- IAC0107 Describe the procedure to follow when using or adding regrind material to the production process.
- IAC0108 Explain how to access, identity, read and interpret relevant documentation.

(Weight 100%)**8.3 Provider Programme Accreditation Criteria*****Physical Requirements:***

- Normal lecture environment with multi-media facilities, pictures and various examples of products

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements

8.4 Exemptions

- None

SECTION 3B: PRACTICAL SKILL MODULE SPECIFICATIONS

List of Practical Skill Module Specifications

- 714204-001-00-00-PM-01, Use, handle, care for and store hand and power tools, measuring instruments, lifting and stacking equipment, NQF Level 2, Credits 4.
- 714204-001-00-00-PM-02, Monitor the conversion process, NQF Level 2, Credits 4.
- 714204-001-00-00-PM-03, Perform finishing and packaging operations, NQF Level 2, Credits 4.
- 714204-001-00-00-PM-04, Perform basic maintenance on tooling and equipment, NQF Level 2, Credits 4.
- 714204-001-00-00-PM-05, Operate ancillary lifting equipment within the statutory requirements as well as organisations' policies, NQF Level 2, Credits 5.
- 714204-001-00-00-PM-06, Perform routine maintenance on manufacturing equipment, NQF Level 3, Credits 15.
- 714204-001-00-00-PM-07, Perform plastics manufacturing routine operations, NQF Level 3, Credits 15.
- 714204-001-00-00-PM-08, Perform tool, die and forming device changeover operations, NQF Level 3, Credits 15.

Total number of credits and training hours for these Practical Skill Modules: 66

1. 714204-001-00-00-PM-01, Use, handle, care for and store hand and power tools, measuring instruments, lifting and stacking equipment, NQF Level 2, Credits 4.

1.1 Purpose of the Practical Skill Modules

The focus of the learning in this module is on providing the learner an opportunity to identify, use, care for and store hand and power tools, measuring instruments, lifting and stacking equipment.

The learner will be required to:

- PM-01-PS01: Identify, use and care for basic hand and power tools.
- PM-01-PS02: Identify, use and care for measuring equipment.
- PM-01-PS03: Identify, use and care for lifting and stacking equipment.
- PM-01-PS04: Perform basic computer operations.

1.2 Guidelines for Practical Skills

1.2.1. PM-01-PS01: Identify, use and care for basic hand and power tools.

Given a variety of hand and power tools, working instruction, Standard Operating Procedures and the correct PPE, the learner must be able to:

Scope of Practical Skill

- PA0101 Identify, select and use hand tools (hand tools include but are not limited to hammers, hacksaw, taps, dies, spanners, Allen keys, etc.).
- PA0102 Care for and maintain hand tools.
- PA0103 Store hand tools.
- PA0104 Identify, select and use appropriate power tools (power tools include but are not limited to drills, angle grinders, buffing machines, etc.).
- PA0105 Use thread-locking compounds (e.g. Loctite).

Applied Knowledge

- AK0101 Techniques for using and maintaining tools and equipment.
- AK0102 Safety procedures and requirements.
- AK0103 Manufacturers' procedures and instructions.
- AK0104 Procedure for handling and storing hand and power tools.

- AK0105 Functions of hand and power tools.
- AK0106 Correct application of tools.
- AK0107 Typical hazards and risks associated with basic hand and power tools.
- AK0108 Environmental requirements and practices.

Internal Assessment Criteria

- IAC0101 The correct hand tools are identified, selected, and used according to purpose.
- IAC0102 Hand tools are cared for and maintained.
- IAC0103 Hand tools are stored.
- IAC0104 Appropriate power tools are identified, selected and used accordingly.
- IAC0105 Thread-locking compounds are safely used.

1.2.2. PM-01-PS02: Identify, use and care for measuring equipment.

Given a variety of measuring equipment, working instruction, Standard Operating Procedures and the correct PPE, the learner must be able to:

Scope of Practical Skill

- PA0201 Identify, select, measuring equipment (measuring equipment include but are not limited to tape measure and ruler; vernier; micro metres; height gauge; go-no-go gauge, scales, pyrometer, torque wrench etc.).
- PA0202 Inspect and use measuring equipment.
- PA0203 Care for, maintain and store measuring equipment.
- PA0204 Complete the relevant documentation with respect to measuring instruments visual defects, operational status and readings.
- PA0205 Ensure that measuring tools have been calibrated.

Applied Knowledge

- AK0201 Techniques for using and reading measuring devices.
- AK0202 Safe working procedures.
- AK0203 Safety and housekeeping standards related to measuring equipment.

- AK0204 Inspection techniques.
- AK0205 Manufacturers' procedures and instructions related to measuring (clearance and tolerance).

Internal Assessment Criteria

- IAC0201 The correct measuring equipment is identified and selected for use.
- IAC0202 Measuring equipment is inspected and used for purpose.
- IAC0203 Measuring equipment is cared for, maintained and stored.
- IAC0204 The relevant documentation with respect to measuring instruments visual defects, operational status and readings is completed.
- IAC0205 Efforts are made to ensure that measuring tools have been calibrated.

1.2.3. PM-01-PS03: Identify, use and care for lifting and stacking equipment.

Given a variety of lifting and stacking equipment, working instruction and the correct PPE, the learner must be able to:

Scope of Practical Skill

- PA0301 Identify, use and care for lifting and stacking equipment.
- PA0302 Identify, select the correct lifting and stacking equipment in relation to the load rating (lifting and stacking equipment include but are not limited to slings, eye bolts, shackles, chains, etc.).
- PA0303 Perform routine checks prior to using lifting and stacking equipment.
- PA0304 Adhere to the relevant Legislative requirements for operating lifting and stacking equipment.
- PA0305 Complete relevant documentation with respect to lifting and stacking equipment visual defects and operational status.

Applied Knowledge

- AK0301 Techniques for using lifting and stacking equipment.
- AK0302 Safe working procedures.
- AK0303 Safety and housekeeping standards related to lifting and stacking equipment.

- AK0304 Inspection techniques.
- AK0305 Statutory requirements with respect to lifting and stacking equipment.
- AK0306 Recording and reporting procedures.

Internal Assessment Criteria

- IAC0301 Lifting and stacking equipment are identified, used and cared for.
- IAC0302 Lifting and stacking equipment are identified, selected in relation to the load rating.
- IAC0303 Routine checks are performed prior to using lifting and stacking equipment.
- IAC0304 Legislative requirements for operating lifting and stacking equipment are adhered to.
- IAC0305 The relevant documentation is completed with respect to lifting and stacking equipment visual defects and operational status.

2.2.4. PM-01-PS04: Perform basic computer operations.

Scope of Practical Skill

Given a personal computer and document, spreadsheet and communication applications, the learner must be able to:

- PA0401 Start up and shut down computer and use basic input and output device.
- PA0402 Create, open and save files, folders and documents.
- PA0403 Compile simple reports.
- PA0404 Compile spreadsheets including basic arithmetic functions
- PA0405 Retrieve, access, read and print documents.

Applied Knowledge

- AK0401 Input and output device.
- AK0402 Features and use of the application functions.

- AK0403 Formatting of text, paragraphs and cells.
- AK0404 Inserting, moving, copying and deleting text.
- AK0405 Basic spreadsheet formulas.

Internal Assessment Criteria

- IAC0401 Computer and related device are cared for and used correctly.
- IAC0402 Document and file names are easily identified in terms of their purpose and content.
- IAC0403 The application functions are described and used appropriately.
- IAC0404 Computer files are named consistently and saved in an appropriate way.
- IAC0405 Reports are produced as required.
- IAC0406 Spreadsheets are produced as required.
- IAC0407 Text is checked for spelling and grammar and corrected.

1.3 Provider Programme Accreditation Criteria

Physical Requirements:

- Access to all the equipment, materials and tools listed under each practical skill.
- Access to training manuals and other relevant documentation, manufacturers' manuals and specifications.
- A quality management system which includes regular tool inspections, calibrations, documents, etc.
- Adequate area to accommodate the number of learners, as prescribed by the OHS Act, that is well lit and well ventilated.

Human Resource Requirements:

- Trainer to learner ratio of 1:15 (maximum).
- Trainer to be a qualified artisan with a minimum of 2 years' relevant industry experience.
- Trainer to have completed a recognized occupational training course

Legal Requirements:

- Compliance with all applicable legal requirements.

1.4 Exemptions

- None.

2. 714204-001-00-00-PM-02, Monitor the conversion process, NQF Level 2, Credits 4.

2.1 Purpose of the Practical Skill Modules

The focus of the learning in this module is on providing the learner an opportunity to practice activities related to monitoring the conversion process and respond to changes.

The learner will be required to:

- PM-01-PS01: Monitor input material flow and respond to changes.

2.2 Guidelines for Practical Skills

2.2.1. PM-01-PS01: Monitor input material flow and respond to changes.

Given a variety of working instruction, Standard Operating Procedures and the correct PPE, the learner must be able to:

Scope of Practical Skill

- PA0101 Select appropriate tools and equipment according to the production schedule.
- PA0102 Read and interpret documentation provided.
- PA0103 Select and gather input material and consumables according to instructions.
- PA0104 Handle and process input material accordingly.
- PA0105 Perform the required operations on plastics manufacturing machine/ equipment within scope of work.
- PA0106 Record processing conditions, outputs, stoppages, and changes and determine output figures.
- PA0107 Recognise and report changes which affect the manufacturing process.
- PA0108 Identify, respond to and record and report problems related to manufacturing equipment.
- PA0109 Re-start equipment and process that has been pre-set by a setter.
- PA0110 Monitor the performance of manufacturing equipment and respond to changes.
- PA0111 Adhere to health and safety requirements.
- PA0112 Perform housekeeping activities.

- PA0113 Process and handle scrap including returns according procedures

Applied Knowledge

- AK0101 Techniques for using and maintaining tools and equipment.
- AK0102 Safety procedures and requirements.
- AK0103 Manufacturers' procedures and specifications with respect to materials.
- AK0104 Reporting and recording procedures, templates and related documents.
- AK0105 Physical properties and characteristics of input materials.
- AK0106 Chemical properties and characteristics of input materials
- AK0107 Handling input materials according to Material Safety Data Sheet
- AK0108 Types of defects.
- AK0109 Knowledge about equipment malfunction or faults.
- AK0110 Environmental requirements and practices.

Internal Assessment Criteria

- IAC0101 Appropriate tools and equipment are selected according to the production schedule.
- IAC0102 Documentation provided is read and interpreted.
- IAC0103 Required input material and consumables are selected, gathered and prepared according to instructions.
- IAC0104 Input material is handled and processed accordingly.
- IAC0105 The necessary operations on plastics manufacturing machine/ equipment are performed within scope of work.
- IAC0106 Processing conditions, outputs, stoppages, and changes are recorded and output figures are determined.
- IAC0107 Changes which affect the manufacturing process are recognised and reported.
- IAC0108 Problems related to manufacturing equipment are identified, responded to, recorded and reported accordingly.
- IAC0109 Equipment and process that has been pre-set by a setter is re-started, when necessary.

- IAC0110 The performance of manufacturing equipment is monitored and the necessary action is taken to respond to changes.
- IAC0111 Health and safety requirements are adhered to
- IAC0112 Housekeeping activities are performed
- IAC0113 Scrap and returns are processed and handled according procedures.

2.3 Provider Programme Accreditation Criteria

Physical Requirements:

Demonstrate access to:

- A normal lecture environment with multi-media facilities, pictures and various examples of products

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level
- Facilitators must be registered assessors with an understanding of the QCTO methodology

Legal Requirements:

- The provider must meet all the OHS legal requirements

2.4 Exemptions

- None.

3. 714204-001-00-00-PM-03, Perform finishing and packaging operations, NQF Level 2, Credits 4.

3.1. Purpose of the Practical Skill Module

The focus of the learning in this module is on providing the learner an opportunity to be familiar with activities related to finishing procedures.

The learner will be required to:

- PM-03-PS01: Perform finishing procedures.

3.2. Guidelines for Practical Skills

3.2.1. PM-03-PS01: Perform finishing procedures.

Scope of Practical Skill

Given plastics products, instructions, documentation, tools and equipment and Standard Operating Procedures, the learner must be able to:

- PA0101 Determine packaging and finishing requirements or components and prepare work area.
- PA0102 Choose and use the right tool to cut, trim and finish products.
- PA0103 Visually inspect defects and remove them from production line.
- PA0104 Measure products using appropriate measuring instruments / devices.
- PA0105 Identify non-conforming products.
- PA0106 Conduct basic tests as per product specifications.
- PA0107 Track, summarise, capture or record non-conforming products.
- PA0108 Communicate the number and nature of non-conforming products.
- PA0109 Lift, load and unload products, equipment and containers.
- PA0110 Prepare products for the next stage (next stage includes but is not limited to packaging, storage, secondary operations).
- PA0111 Adhere to health and safety requirements.
- PA0112 Perform housekeeping activities.

Applied Knowledge

- AK0101 Safe work procedures.
- AK0102 Packaging and finishing requirements.
- AK0103 Characteristics and properties of finished products.
- AK0104 Measuring instruments.
- AK0105 Knowledge about defective products.
- AK0106 Types of tests and testing instruments.
- AK0107 Recording, capturing and reporting procedures

Internal Assessment Criteria

- IAC0101 Packaging and finishing requirements or components are determined and working area is prepared.
- IAC0102 The right tool is chosen and used to cut, trim finish products.
- IAC0103 Defects are visually inspected and removed from production line.
- IAC0104 Products are measured using appropriate measuring instruments / devices.
- IAC0105 Non-conforming products are identified.
- IAC0106 Basic tests are conducted as per product specifications.
- IAC0107 Non-conforming products are tracked, summarised, and recorded.
- IAC0108 The number and nature of non-conforming products are communicated.
- IAC0109 Products, equipment and containers are lifted, loaded, and unloaded.
- IAC0110 Products for the next stage are prepared.
- IAC0111 Health and safety requirements are adhered to.
- IAC0112 Housekeeping activities are performed.

3.3 Provider Programme Accreditation Criteria

Physical Requirements:

Demonstrate access to:

- A normal lecture environment with multi-media facilities, pictures and various examples of products.

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

3.4 Exemptions

- None.

4. 714204-001-00-00-PM-04, Perform basic maintenance on tooling and equipment, NQF Level 2, Credits 4.

4.1 Purpose of the Practical Skill Modules

The focus of the learning in this module is on providing the learner an opportunity to practice activities related to basic maintenance on tooling and equipment.

The learner will be required to:

- PM-04-PS01: Perform basic maintenance on tooling and equipment.

4.2. Guidelines for Practical Skills

4.2.1. PM-04-PS01: Perform basic maintenance on tooling and equipment.

Scope of Practical Skill

Given checklist, work instructions, Standard Operating Procedures and PPE, the learner must be able to:

- PA0101 Identify tools and supplies/ consumables required basic maintenance.
- PA0102 Identify the type of basic maintenance required.
- PA0103 Perform basic maintenance within area of scope (clean, dust, lubricate)
- PA0104 Report problems related to tooling, parts or equipment that require maintenance outside one's scope.
- PA0105 Handle and store tools and equipment according to Standard Operating Procedures.
- PA0106 Adhere to health and safety requirements whilst performing basic maintenance on tooling and equipment.
- PA0107 Perform housekeeping activities.

Applied Knowledge

- AK0101 Safe work procedures.
- AK0102 Equipment cleaning and lubricating supplies/ consumables.
- AK0103 Equipment basic maintenance requirements and procedure.
- AK0104 Reporting and recording procedures.
- AK0105 Documentation to be completed.

Internal Assessment Criteria

- IAC0101 Tools and supplies/ consumables required for basic maintenance are identified.
- IAC0102 The type of basic maintenance required is identified.
- IAC0103 Basic maintenance within area of scope is performed basic maintenance includes but is not limited to cleaning, dusting, lubricating, etc.)
- IAC0104 Problems related to tooling, parts or equipment that require maintenance outside one's scope are reported.
- IAC0105 Tools and equipment are handled and stored according to Standard Operating Procedures.
- IAC0106 Health and safety requirements are adhered to whilst performing basic maintenance on tooling and equipment.
- IAC0107 Housekeeping activities are performed.

4.3 Provider Programme Accreditation Criteria

Physical Requirements:

Demonstrate access to:

- Equipment, hand tools, power tools and PPE.
- Various types of tools, die, forming device and auxilliary equipment to cover the appropriate plastics manufacturing process undertaken.

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

4.4 Exemptions

- None.

5. 714204-001-00-00-PM-05, Operate ancillary lifting equipment within the statutory requirements as well as organisations' policies, NQF level 2, Credits 5.

5.1 Purpose of the Practical Skill Modules

The focus of the learning in this module is on providing the learner an opportunity to practice activities related to the operation of ancillary lifting equipment within the statutory requirements as well as organisations' policies.

The learner will be required to:

- PM-05-PS01: Operate ancillary lifting equipment within the statutory requirements as well as organisations' policies.

5.2. Guidelines for Practical Skills

5.2.1 PM-05-PS01: Operate ancillary lifting equipment within the statutory requirements as well as organisations' policies.

Scope of Practical Skill

Given production schedule, work instructions and Standard Operating Procedures, PPE, the learner must be able to:

- PA0101 Adhere to Health and Safety requirements.
- PA0102 Identify different types of lifting equipment as per job specifications.
- PA0103 Assess the condition of lifting equipment.
- PA0104 Safely lift equipment in accordance with Standard Lifting Procedures.
- PA0105 Ensure safety of fellow colleagues.
- PA0106 Move equipment according to Standard Operating Procedures

Applied knowledge.

- AK0101 Health and safety requirements
- AK0102 Different types of lifting equipment
- AK0103 Condition of lifting equipment
- AK0104 Standard Lifting Procedures
- AK0105 Standard Operating Procedures

Internal Assessment Criteria

- IAC0101 Health and Safety requirements are adhered to
- IAC0102 Different types of lifting equipment are identified as per job specifications
- IAC0103 The condition of lifting equipment is assessed.
- IAC0104 Equipment is safely lifted in accordance with Standard Lifting Procedures
- IAC0105 Precautionary measures are taken to ensure safety of fellow colleagues.
- IAC0106 Equipment is moved according to Standard Operating Procedures

5.3 Provider Programme Accreditation Criteria

Physical Requirements:

Demonstrate access to:

- Equipment, various types of lifting equipment and PPE

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

5.4 Exemptions

- None.

6. 714204-001-00-00-PM-06, Perform routine maintenance on manufacturing equipment, NQF Level 3, Credits 15.

6.1 Purpose of the Practical Skill Modules

The focus of the learning in this module is on providing the learner an opportunity to be familiar with activities related to routine maintenance on manufacturing equipment.

The learner will be required to:

- PM-06-PS01: Perform routine maintenance on manufacturing equipment.

6.2. Guidelines for Practical Skills

6.2.1 PM-06-PS01: Perform routine maintenance on manufacturing equipment.

Scope of Practical Skill

Given manufacturing equipment that require maintenance, work instructions, PPE, tools and power tools, the learner must be able to:

- PA0101 Run and observe performance of machinery and equipment (start, stop, clean or purge, etc.).
- PA0102 Identify and record malfunctioning and faulty machinery and equipment.
- PA0103 Respond to questions and explain issues related to performing routine maintenance on a production machine.
- PA0104 Perform routine maintenance activities within scope.
- PA0105 Alert appropriate personnel about identified maintenance problems.
- PA0106 Update maintenance records.

Applied Knowledge

- AK0101 Safe work procedures.
- AK0102 Routine maintenance requirements.
- AK0103 Conditions for malfunctioning and faulty machinery and equipment.
- AK0104 Reporting and recording templates and procedures.

Internal Assessment Criteria

- IAC0101 Performance of machinery and equipment is observed. (Performance includes ability of machinery to start, stop, etc.).
- IAC0102 Malfunctioning and faulty machinery and equipment are identified and recorded.
- IAC0103 Questions are responded to and issues related to performing routine maintenance on a production machine are explained.
- IAC0104 Routine maintenance activities within scope are performed.
- IAC0105 Any identified maintenance problems are alerted to appropriate personnel.
- IAC0106 Maintenance records are updated.

6.3 Provider Programme Accreditation Criteria

Physical Requirements:

Demonstrate access to:

- Equipment, various types of tools, die, forming device and auxiliary equipment hand tools and PPE.

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

6.4 Exemptions

- None.

7. 714204-001-00-00-PM-07, Perform plastics manufacturing routine operations, NQF Level 3, Credits 15

7.1 Purpose of the Practical Skill Modules

The focus of the learning in this module is on providing the learner an opportunity to be familiar with activities related to plastics manufacturing routine operations.

The learner will be required to:

- PM-07-PS01: Perform plastics manufacturing routine operations.

7.2. Guidelines for Practical Skills

7.2.1 PM-07-PS01: Perform plastics manufacturing routine operations.

Scope of Practical Skill

Given production schedule, work instructions, Standard Operating Procedures and PPE, the learner must be able to:

- PA0101 Read and interpret the production schedule.
- PA0102 Perform start up and shut down procedures on the manufacturing equipment.
- PA0103 Report and record information related to manufacturing equipment and operations.
- PA0104 Discuss and explain issues related to manufacturing equipment and operations.
- PA0105 Prepare for and perform purging and material changeover or colour changeover procedures.
- PA0106 Conduct quality checks, troubleshoot and resolve problems.
- PA0107 Make minor adjustments.
- PA0108 Alert appropriate personnel about identified problems.
- PA0109 Participate in team debriefing sessions.
- PA0110 Monitor equipment and material.
- PA0111 Ensure safe operations.

- PA0112 Perform manufacturing best practices (housekeeping, teamwork, visual performance measurements, ensure attainment of 5 philosophy include but are not limited to Sorting, setting in order, Standardising, Sustainability, Shining, etc.)
- PA0113 Adhere to standard conditions of employment inclusive of statutory Health, Safety, Environmental and Energy requirements.

Applied Knowledge

- AK0101 Safe work procedure.
- AK0102 Production schedule.
- AK0103 Input processing requirements.
- AK0104 Output quality requirements.
- AK0105 Types of defects.
- AK0106 Reporting and recording templates and procedures.
- AK0107 Manufacturing best practices.
- AK0108 Statutory Health, Safety, Environmental and Energy requirements.

Internal Assessment Criteria

- IAC0101 The production schedule is read and interpreted.
- IAC0102 Start up and shut down procedures are performed on the manufacturing equipment.
- IAC0103 Information related to manufacturing equipment and operations is reported and recorded.
- IAC0104 Issues related to manufacturing equipment and operations are discussed and explained.
- IAC0105 Preparation for purging and material changeover or colour changeover procedures are performed and carried out.
- IAC0106 Quality checks are conducted, troubleshooting operations are performed and identified problems are resolved.
- IAC0107 Minor adjustments are made.
- IAC0108 Appropriate personnel is alerted about identified problems.
- IAC0109 Contributions in team debriefing sessions are made.

- IAC0110 Equipment and material are monitored.
- IAC0111 Housekeeping is performed.
- IAC0112 Manufacturing best practices are performed (best practices include but are not limited to housekeeping, teamwork, visual performance measurements and attainment of 5 philosophies include but are not limited to Sorting, setting in order, Standardising, Sustainability, Shining, etc.)
- IAC0113 Standard conditions of employment inclusive of statutory Health, Safety, Environmental and Energy requirements are adhered to.

7.3 Provider Programme Accreditation Criteria

Physical Requirements:

Demonstrate access to:

- Equipment, various types of tools, die, forming device and auxilliary equipment hand tools and PPE.

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

7.4 Exemptions

- None.

8. 714204-001-00-00-PM-08, Perform tool, die and forming device changeover operations, NQF Level 3, Credits 15.

8.1 Purpose of the Practical Skill Modules

The focus of the learning in this module is on providing the learner an opportunity to assist a qualified Setter with activities related to tooling, die and forming device changeover operations.

The learner will be required to:

- PM-08-PS01: Perform tool, die and forming device changeover operations.

8.2. Guidelines for Practical Skills

8.2.1. PM-08-PS01: Perform tool, die and forming device changeover operations.

Scope of Practical Skill

Given production schedule, work instructions and Standard Operating Procedures, PPE, the learner must be able to:

- PA0101 Determine requirements, select and transport tooling.
- PA0102 Prepare tooling for changeover operations and storage.
- PA0103 Assist with the changeover operations of tooling.
- PA0104 Maintain the condition of tooling during production.
- PA0105 Complete records, recognise and report problems.
- PA0106 Respond to questions and respond to issues related to transporting and caring for tooling.
- PA0107 Ensure machinery safe operations (safe operations include but are not limited to statutory operations of lifting equipment).
- PA0108 Perform housekeeping.

Applied Knowledge

- AK0101 Safe work procedures.
- AK0102 Changeover operations.
- AK0103 Tooling changeover requirements.

- AK0104 Reporting and recording templates and procedures.

Internal Assessment Criteria

- IAC0101 Requirements are determined, tooling is selected and transported.
- IAC0102 Tooling is prepared for changeover and storage.
- IAC0103 Assistance is provided for tooling changeover operations.
- IAC0104 The condition of tooling is maintained during production.
- IAC0105 Records are completed, problems are recognised and reported.
- IAC0106 Questions and issues related to transporting and caring for tooling are responded to.
- IAC0107 Safety of machinery operations is ensured. Safe operations include but are not limited to statutory operations of lifting equipment).
- IAC0108 Housekeeping is performed.

8.3 Provider Programme Accreditation Criteria

Physical Requirements:

Demonstrate access to:

- Equipment, various types of tools, die, forming device and auxilliary equipment, hand tools and PPE.

Human Resource Requirements:

- The trainer: learner ratio may not exceed 1:20
- Facilitators must have practical experience or knowledge of industry requirements.
- Facilitators must have an NQF 5 plastics related qualification or have subject matter expertise at a level higher than the subject level.
- Facilitators must be registered assessors with an understanding of the QCTO methodology.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

8.4 Exemptions

- None.

SECTION 3C: WORK EXPERIENCE MODULE SPECIFICATIONS

List of Work Experience Module Specifications

- 714204-001-00-00-WM-01, Plastics manufacturing conversion processes, NQF Level 2, Credits 5.
- 714204-001-00-00-WM-02, Finishing and packaging operations, NQF Level 2, Credits 5.
- 714204-001-00-00-WM-03, Basic maintenance on tooling and equipment operations, NQF Level 2, Credits 5.
- 714204-001-00-00-WM-04, Processes related to the operation of ancillary lifting equipment within the statutory requirements as well as organisations' policies, NQF Level 2, Credits 2.
- 714204-001-00-00-WM-05, Routine maintenance on manufacturing equipment, NQF Level 3, Credits 6.
- 714204-001-00-00-WM-06, Plastics manufacturing routine operations, NQF Level 3, Credits 15
- 714204-001-00-00-WM-07, Tooling, die and forming device changeover operations, NQF Level 3, Credits 14.

1. 714204-001-00-00-WM-01, Plastics manufacturing conversion processes, NQF Level 2, Credits 5.

1.1. Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Gain exposure in monitoring input material flow and respond to changes under the guidance of a mentor.

The learner will be required to

- WM-01-WE01: Use, handle, care for and store a variety of hand and power tools, measuring instruments, lifting and stacking equipment under the guidance of a mentor over a period of two weeks.
- WM-01-WE02: Monitor input material flow and respond to changes under the guidance of a mentor, over a period of a month.

1.2 Guidelines for Work Experiences

1.2.1. WM-01-WE01: Use, handle, care for and store a variety of hand and power tools, measuring instruments, lifting and stacking equipment under the guidance of a mentor over a period of two weeks.

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Read and interpret production schedule and related documentation provided.
- WA0102 Select appropriate tools and equipment according to the production schedule.
- WA0103 Perform routine checks prior to using tools and equipment.
- WA0104 Complete the relevant documentation regarding condition of tools and equipment before use.
- WA0105 Safely use and handle a variety of tools and equipment accordingly.
- WA0106 Adhere to the relevant Legislative requirements for operating lifting and stacking equipment.
- WA0107 Complete the relevant documentation regarding condition of tools and equipment after use.

- WA0108 Report damaged tools and equipment according to procedure.
- WA0109 Care for a variety of tools and equipment; and store accordingly.
- WA0110 Adhere to health and safety requirements.
- WA0111 Perform housekeeping activities.

Supporting Evidence

- SE0101 Logbook signed by learner and mentor.
- SE0102 Progress report.
- SE0103 Checklist.
- SE0104 Observation sheet.

1.2.2. WM-01-WE02: Monitor input material flow and respond to changes under the guidance of a mentor, over a period of a month.

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0201 Select and gather input material and consumables according to instructions.
- WA0202 Handle and process input material accordingly.
- WA0203 Perform the required operations on plastics manufacturing machine/ equipment within scope of work.
- WA0204 Record processing conditions, outputs, stoppages, and changes and determine output figures.
- WA0205 Recognise and report changes which affect the manufacturing process.
- WA0206 Identify, respond to and record and report problems related to manufacturing equipment.
- WA0207 Re-start equipment and process that has been pre-set by a setter.
- WA0208 Monitor the performance of manufacturing equipment and respond to changes.

- WA0209 Adhere to health and safety requirements.
- WA0210 Perform housekeeping activities.

Supporting Evidence

- SE0201 Logbook signed by learner and mentor.
- SE0202 Progress report.
- SE0203 Checklist.
- SE0204 Observation sheet.

1.3 Contextualised Workplace Knowledge

- 1 Standard Operating Procedures.
- 2 Organisation's structures, policies and procedures.
- 3 Communication strategies and protocols.
- 4 Organisation's core business, vision and mission

1.4 Criteria for Workplace Approval

Physical Requirements:

Demonstrate access to:

- Plastics Manufacturing machines, auxilliary equipment and services
- Handling and lifting equipment, hand tools and PPE
- Various types of mould, tools and forming device to cover Plastics Manufacturing.

Human Resource Requirements:

- Mentors must have 5 years within the production process or be experienced Operators or tools makers.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

1.5 Exemptions

- None

2. 714204-001-00-00-WM-02, Finishing and packaging operations, NQF Level 2, Credits 5.

2.1. Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Gain exposure in performing finishing and packaging operations under the guidance of a mentor.

The learner will be required to

- WM-02-WE01: Perform finishing and packaging operations under the guidance of a mentor over a month.

2.2 Guidelines for Work Experiences

2.2.1. WM-02-WE01: Perform finishing and packaging operations under the guidance of a mentor over a month.

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Read and interpret the production schedule to determine packaging and finishing requirements or components and prepare work area.
- WA0102 Choose and use the right tool to cut, trim and finish products.
- WA0103 Visually inspect defects and remove them from production line.
- WA0104 Measure products using appropriate measuring instruments / devices.
- WA0105 Identify non-conforming products.
- WA0106 Conduct basic tests as per product specifications.
- WA0107 Track, summarise, capture or record non-conforming products.
- WA0108 Communicate the number and nature of non-conforming products.
- WA0109 Lift, load and unload products, equipment and containers.
- WA0110 Prepare products for the next stage (next stage includes but is not limited to packaging, storage, secondary operations).
- WA0111 Adhere to health and safety requirements.
- WA0112 Perform housekeeping activities.

Supporting Evidence

- SE0101 Logbook signed by learner and mentor.
- SE0102 Progress report
- SE0103 Checklist
- SE0103 Observation sheet

2.3 Contextualised Workplace Knowledge

- 1 Standard Operating Procedures.
- 2 Organisation's structures, policies and procedures.
- 3 Communication strategies and protocols.
- 4 Organisation's core business, vision and mission

2.4 Criteria for Workplace Approval

Physical Requirements:

Demonstrate access to:

- Plastics Manufacturing machines, auxilliary equipment and services
- Handling and lifting equipment, hand tools and PPE
- Various types of mould, tools and forming device to cover Plastics Manufacturing.

Human Resource Requirements:

- Mentors must have 5 years within the production process or be experienced Operators or tools makers.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

2.5 Exemptions

- None

3. 714204-001-00-00-WM-03, Basic maintenance on tooling and equipment operations, NQF Level 2, Credits 5.

3.1. Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Gain exposure in performing basic maintenance on tooling and equipment under the guidance of a mentor.

The learner will be required to

- WM-03-WE01: Perform basic maintenance on tooling and equipment under the guidance of a mentor over two weeks.

3.2 Guidelines for Work Experiences

3.2.1. WM-03-WE01: Perform basic maintenance on tooling and equipment under the guidance of a mentor over two weeks.

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Identify tools and supplies/ consumables required basic maintenance.
- WA0102 Identify the type of basic maintenance required.
- WA0103 Perform basic maintenance within area of scope (clean, dust, lubricate)
- WA0104 Report problems related to tooling, parts or equipment that require maintenance outside one's scope.
- WA0105 Handle and store tools and equipment according to Standard Operating Procedures.
- WA0106 Adhere to health and safety requirements whilst performing basic maintenance on tooling and equipment.
- WA0107 Perform housekeeping activities.

Supporting Evidence

- SE0101 Logbook signed by learner and mentor.
- SE0102 Progress report.

- SE0103 Checklist
- SE0104 Observation sheet.

3.3 Contextualised Workplace Knowledge

- 1 Standard Operating Procedures.
- 2 Organisation's structures, policies and procedures.
- 3 Communication strategies and protocols.
- 4 Organisation's core business, vision and mission

3.4 Criteria for Workplace Approval

Physical Requirements:

Demonstrate access to:

- Plastics Manufacturing machines, auxilliary equipment and services
- Handling and lifting equipment, hand tools and PPE
- Various types of mould, tools and forming device to cover Plastics Manufacturing.

Human Resource Requirements:

- Mentors must have 5 years within the production process or be experienced Operators or tools makers.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

3.5 Exemptions

- None

4. 714204-001-00-00-WM-04, Processes related to the operation of ancillary lifting equipment within the statutory requirements as well as organisations' policies, NQF Level 2, Credits 2

4.1. Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Gain exposure in operating ancillary lifting equipment within the statutory requirements as well as organisations' policies under the guidance of a mentor.

The learner will be required to

- WM-04-WE01: Operate ancillary lifting equipment within the statutory requirements as well as organisations' policies under the guidance of a mentor over a month.

4.2 Guidelines for Work Experiences

4.2.1. WM-04-WE01: Operate ancillary lifting equipment within the statutory requirements as well as organisations' policies under the guidance of a mentor over a month.

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Adhere to Health and Safety requirements.
- WA0102 Identify different types of lifting equipment as per job specifications.
- WA0103 Assess the condition of lifting equipment.
- WA0104 Safely lift equipment in accordance with Standard Lifting Procedures.
- WA0105 Ensure safety of fellow colleagues.
- WA0106 Move equipment according to Standard Operating Procedures.
- WA0107 Monitor equipment and material.

Supporting Evidence

- SE0101 Logbook signed by learner and mentor.
- SE0102 Progress report.
- SE0103 Checklist

- SE0104 Observation sheet.

4.3 Contextualised Workplace Knowledge

- 1 Standard Operating Procedures.
- 2 Organisation's structures, policies and procedures.
- 3 Communication strategies and protocols.
- 4 Organisation's core business, vision and mission

4.4 Criteria for Workplace Approval

Physical Requirements:

Demonstrate access to:

- Plastics Manufacturing machines, auxilliary equipment and services
- Handling and lifting equipment, hand tools and PPE
- Various types of mould, tools and forming device to cover Plastics Manufacturing.

Human Resource Requirements:

- Mentors must have 5 years within the production process or be experienced Operators or tools makers.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

4.5 Exemptions

- None

5. 714204-001-00-00-WM-05, Routine maintenance on manufacturing equipment, NQF Level 3, Credits 6.

5.1. Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Gain exposure in performing routine maintenance on manufacturing equipment under the guidance of a mentor.

The learner will be required to

- WM-05-WE01: Perform routine maintenance on manufacturing equipment under the guidance of a mentor over a month.

5.2 Guidelines for Work Experiences

5.2.1. WM-05-WE01: Perform routine maintenance on manufacturing equipment under the guidance of a mentor over a month.

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Run and observe performance of machinery and equipment (start, stop, clean or purge, etc.).
- WA0102 Identify and record malfunctioning and faulty machinery and equipment.
- WA0103 Respond to questions and explain issues related to performing routine maintenance on a production machine.
- WA0104 Perform routine maintenance activities within scope.
- WA0105 Alert appropriate personnel about identified maintenance problems.
- WA0106 Update maintenance records.
- WA0107 Adhere to health and safety requirements whilst performing basic maintenance on tooling and equipment.
- WA0108 Perform housekeeping activities.

Supporting Evidence

- SE0101 Logbook signed by learner and mentor.

- SE0102 Progress report.
- SE0103 Checklist
- SE0104 Observation sheet.

5.3 Contextualised Workplace Knowledge

- 1 Standard Operating Procedures.
- 2 Organisation's structures, policies and procedures.
- 3 Communication strategies and protocols.
- 4 Organisation's core business, vision and mission

5.4 Criteria for Workplace Approval

Physical Requirements:

Demonstrate access to:

- Plastics Manufacturing machines, auxilliary equipment and services
- Handling and lifting equipment, hand tools and PPE
- Various types of mould, tools and forming device to cover Plastics Manufacturing.

Human Resource Requirements:

- Mentors must have 5 years within the production process or be experienced Operators or tools makers.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

5.5 Exemptions

- None

6. 714204-001-00-00-WM-06, Plastics manufacturing routine operations, NQF Level 3, Credits 15

6.1. Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Gain exposure in performing plastics manufacturing routine operations under the guidance of a mentor.

The learner will be required to

- WM-06-WE01: Perform plastics manufacturing routine operations under the guidance of a mentor over a month.

6.2 Guidelines for Work Experiences

6.2.1. WM-06-WE01: Perform plastics manufacturing routine operations under the guidance of a mentor over a month.

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Read and interpret the production schedule.
- WA0102 Perform start up and shut down procedures on the manufacturing equipment.
- WA0103 Report and record information related to manufacturing equipment and operations.
- WA0104 Discuss and explain issues related to manufacturing equipment and operations.
- WA0105 Prepare for and perform purging and material changeover or colour changeover procedures.
- WA0106 Conduct quality checks, troubleshoot and resolve problems.
- WA0107 Make minor adjustments.
- WA0108 Alert appropriate personnel about identified problems.
- WA0109 Participate in team debriefing sessions.
- WA0110 Monitor equipment and material.

- WA0111 Ensure safe operations.
- WA0112 Perform manufacturing best practices (housekeeping, teamwork, visual performance measurements, ensure attainment of 5 philosophy include but are not limited to Sorting, setting in order, Standardising, Sustainability, Shining, etc.)
- WA0113 Adhere to standard conditions of employment inclusive of statutory Health, Safety, Environmental and Energy requirements.
- WA0114 Perform housekeeping activities.

Supporting Evidence

- SE0101 Logbook signed by the learner and mentor.
- SE0102 Progress report
- SE0103 Checklist
- SE0104 Observation sheet

6.3 Contextualised Workplace Knowledge

- 1 Standard Operating Procedures.
- 2 Organisation's structures, policies and procedures.
- 3 Communication strategies and protocols.
- 4 Organisation's core business, vision and mission

6.4 Criteria for Workplace Approval

Physical Requirements:

Demonstrate access to:

- Plastics Manufacturing machines, auxilliary equipment and services
- Handling and lifting equipment, hand tools and PPE
- Various types of mould, tools and forming device to cover Plastics Manufacturing.

Human Resource Requirements:

- Mentors must have 5 years within the production process or be experienced Operators or tools makers.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

6.5 Exemptions

- None

7. 714204-001-00-00-WM-07, Tooling, die and forming device changeover operations, NQF Level 3, Credits 14.

7.1. Purpose of the Work Experience Modules

The focus of the work experience is on providing the learner an opportunity to:

Gain exposure in performing tool, die and forming device changeover operations under the guidance of a mentor.

The learner will be required to

- WM-07-WE01: Perform tool, die and forming device changeover operations under the guidance of a mentor over a month.

7.2 Guidelines for Work Experiences

7.2.1. WM-07-WE01: Perform tool, die and forming device changeover operations under the guidance of a mentor over a month.

Scope of Work Experience

The person will be expected to engage in the following work activities:

- WA0101 Determine requirements, select and transport tooling.
- WA0102 Prepare tooling for changeover operations and storage.
- WA0103 Assist with the changeover operations of tooling.
- WA0104 Maintain the condition of tooling during production.
- WA0105 Complete records, recognise and report problems.
- WA0106 Respond to questions and respond to issues related to transporting and caring for tooling.
- WA0107 Ensure machinery safe operations (safe operations include but are not limited to statutory operations of lifting equipment).
- WA0108 Perform housekeeping.

Supporting Evidence

- SE0101 Logbook signed by learner and mentor.
- SE0102 Progress report.

- SE0103 Checklist
- SE0104 Observation sheet.

7.3 Contextualised Workplace Knowledge

- 1 Standard Operating Procedures.
- 2 Organisation's structures, policies and procedures.
- 3 Communication strategies and protocols.
- 4 Organisation's core business, vision and mission

7.4 Criteria for Workplace Approval

Physical Requirements:

Demonstrate access to:

- Plastics Manufacturing machines, auxilliary equipment and services
- Handling and lifting equipment, hand tools and PPE
- Various types of mould, tools and forming device to cover Plastics Manufacturing.

Human Resource Requirements:

- Mentors must have 5 years within the production process or be experienced Operators or tools makers.

Legal Requirements:

- The provider must meet all the OHS legal requirements.

7.5 Exemptions

- None

SECTION 4: STATEMENT OF WORK EXPERIENCE

Curriculum Number:	714204-001-00-00
Curriculum Title:	Plastics Manufacturing Machine Operator

Learner Details	
Name:	
ID Number:	

Employer Details	
Company Name:	
Address:	
Supervisor Name:	
Work Telephone:	
E-Mail:	

714204-001-00-00-WM-01, Plastics manufacturing conversion processes, NQF Level 2, Credits 1.

WM-01-WE01	Use, handle, care for and store a variety of hand and power tools, measuring instruments, lifting and stacking equipment under the guidance of a mentor over a period of two weeks.		
	Scope Work Experience	Date	Signature
WA0101	Read and interpret production schedule and related documentation provided.		
WA0102	Select appropriate tools and equipment according to the production schedule.		
WA0103	Perform routine checks prior to using tools and equipment.		
WA0104	Complete the relevant documentation regarding condition of tools and equipment before use.		
WA0105	Safely use and handle a variety of tools and equipment accordingly.		
WA0106	Adhere to the relevant Legislative requirements for operating lifting and stacking equipment.		
WA0107	Complete the relevant documentation regarding condition of tools and equipment after use.		
WA0108	Report damaged tools and equipment according to procedure.		

WA0109	Care for a variety of tools and equipment; and store accordingly.		
WA0110	Adhere to health and safety requirements.		
WA0111	Perform housekeeping activities.		
	Supporting Evidence	Date	Signature
SE0101	Logbook signed by learner and mentor		
SE0102	Progress report		
SE0103	Observation sheet		
WM-01-WE02	Monitor input material flow and respond to changes under the guidance of a mentor, over a period of a month.		
	Scope Work Experience	Date	Signature
WA0201	Select and gather input material and consumables according to instructions.		
WA0202	Handle and process input material accordingly.		
WA0203	Perform the required operations on plastics manufacturing machine/ equipment within scope of work		
WA0204	Record processing conditions, outputs, stoppages, and changes and determine output figures.		
WA0205	Recognise and report changes which affect the manufacturing process.		
WA0206	Identify, respond to and record and report problems related to manufacturing equipment.		

WA0207	Re-start equipment and process that has been pre-set by a setter.		
WA0208	Monitor the performance of manufacturing equipment and respond to changes.		
WA0209	Adhere to health and safety requirements.		
WA0210	Perform housekeeping activities.		
	Supporting Evidence	Date	Signature
SE0201	Logbook signed by learner and mentor		
SE0202	Progress report		
SE0203	Observation sheet		

	Contextualised Workplace Knowledge	Date	Signature
1	Standard Operating Procedures.		
2	Organisation's structures, policies and procedures.		
3	Communication strategies and protocols.		
4	Organisation's core business, vision and mission		

	Additional Assignments to be Assessed	Date	Signature
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	Externally		
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714204-001-00-00-WM-02, Finishing and packaging operations, NQF Level 2, Credits 5

WM-02-WE01	Perform finishing and packaging operations under the guidance of a mentor over a month.		
	Scope Work Experience	Date	Signature
WA0101	Read and interpret the production schedule to determine packaging and finishing requirements or components and prepare work area.		
WA0102	Choose and use the right tool to cut, trim and finish products.		
WA0103	Visually inspect defects and remove them from production line.		
WA0104	Measure products using appropriate measuring instruments / devices.		
WA0105	Identify non-conforming products.		
WA0106	Conduct basic tests as per product specifications.		
WA0107	Track, summarise, capture or record non-conforming products.		
WA0108	Communicate the number and nature of non-conforming products.		
WA0109	Lift, load and unload products, equipment and containers.		
WA0110	Prepare products for the next stage (next stage includes but is not limited to packaging, storage, secondary operations).		

WA0111	Adhere to health and safety requirements.		
WA0112	Perform housekeeping activities.		
	Supporting Evidence	Date	Signature
SE0101	Logbook signed by the learner and mentor		
SE0102	Progress report		
SE0103	Observation sheet		

	Contextualised Workplace Knowledge	Date	Signature
1	Standard Operating Procedures.		
2	Organisation's structures, policies and procedures.		
3	Communication strategies and protocols.		
4	Organisation's core business, vision and mission		

	Additional Assignments to be Assessed Externally	Date	Signature
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714204-001-00-00-WM-03, Basic maintenance on tooling and equipment operations, NQF Level 2, Credits 5.

WM-03-WE01	Perform basic maintenance on tooling and equipment under the guidance of a mentor over two weeks.		
	Scope Work Experience	Date	Signature
WA0101	Identify tools and supplies/ consumables required basic maintenance.		
WA0102	Identify the type of basic maintenance required.		
WA0103	Perform basic maintenance within area of scope (clean, dust, lubricate)		
WA0104	Report problems related to tooling, parts or equipment that require. maintenance outside one's scope.		
WA0105	Handle and store tools and equipment according to Standard Operating Procedures.		
WA0106	Adhere to health and safety requirements whilst performing basic maintenance on tooling and equipment.		
WA0107	Perform housekeeping activities.		
	Supporting Evidence	Date	Signature
SE0101	Logbook signed by the learner and mentor		
SE0102	Progress report		
SE0103	Observation sheet		

	Contextualised Workplace Knowledge	Date	Signature
1	Standard Operating Procedures.		
2	Organisation's structures, policies and procedures.		
3	Communication strategies and protocols.		
4	Organisation's core business, vision and mission		

	Additional Assignments to be Assessed Externally	Date	Signature

714204-001-00-00-WM-04, Processes related to the operation of ancillary lifting equipment within the statutory requirements as well as organisations' policies, NQF Level 2, Credits 2.

WM-04-WE01	Operate ancillary lifting equipment within the statutory requirements as well as organisations' policies under the guidance of a mentor over a month.		
	Scope Work Experience	Date	Signature
WA0101	Adhere to Health and Safety requirements		
WA0102	Identify different types of lifting equipment as per job specifications.		
WA0103	Assess the condition of lifting equipment.		
WA0104	Safely lift equipment in accordance with Standard Lifting Procedures.		
WA0105	Ensure safety of fellow colleagues.		
WA0106	Move equipment according to Standard Operating Procedures.		
WA0107	Monitor equipment and material.		
	Supporting Evidence	Date	Signature
SE0101	Logbook signed by the learner and mentor		
SE0102	Progress report		
SE0103	Observation sheet		

	Contextualised Workplace Knowledge	Date	Signature
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1	Standard Operating Procedures.		
2	Organisation's structures, policies and procedures.		
3	Communication strategies and protocols.		
4	Organisation's core business, vision and mission		

	Additional Assignments to be Assessed Externally	Date	Signature
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714204-001-00-00-WM-05, Routine maintenance on manufacturing equipment, NQF Level 3, Credits 6.

WM-05-WE01	Perform routine maintenance on manufacturing equipment under the guidance of a mentor over a month.		
	Scope Work Experience	Date	Signature
WA0101	Run and observe performance of machinery and equipment (start, stop, clean or purge, etc.).		
WA0102	Identify and record malfunctioning and faulty machinery and equipment.		
WA0103	Respond to questions and explain issues related to performing routine maintenance on a production machine.		
WA0104	Perform routine maintenance activities within scope.		
WA0105	Alert appropriate personnel about identified maintenance problems.		
WA0106	Update maintenance records.		
WA0107	Adhere to health and safety requirements whilst performing basic maintenance on tooling and equipment.		
WA0108	Perform housekeeping activities.		
	Supporting Evidence	Date	Signature
SE0101	Logbook signed by the learner and mentor		
SE0102	Progress report		

SE0103	Observation sheet		
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	Contextualised Workplace Knowledge	Date	Signature
1	Standard Operating Procedures.		
2	Organisation's structures, policies and procedures.		
3	Communication strategies and protocols.		
4	Organisation's core business, vision and mission		

	Additional Assignments to be Assessed Externally	Date	Signature

714204-001-00-00-WM-06, Plastics manufacturing routine operations, NQF Level 3, Credits 15.

WM-06-WE01	Perform plastics manufacturing routine operations under the guidance of a mentor over a month.		
	Scope Work Experience	Date	Signature
WA0101	Read and interpret the production schedule.		
WA0102	Perform start up and shut down procedures on the manufacturing equipment.		
WA0103	Report and record information related to manufacturing equipment and operations.		
WA0104	Discuss and explain issues related to manufacturing equipment and operations.		
WA0105	Prepare for and perform purging and material changeover or colour changeover procedures.		
WA0106	Conduct quality checks, troubleshoot and resolve problems.		
WA0107	Make minor adjustments.		
WA0108	Alert appropriate personnel about identified problems.		
WA0109	Participate in team debriefing sessions.		
WA0110	Monitor equipment and material.		
WA0111	Ensure safe operations.		
WA0112	Perform manufacturing best practices (housekeeping, teamwork, visual performance measurements, ensure attainment of 5		

	philosophy include but are not limited to Sorting, setting in order, Standardising, Sustainability, Shining, etc.)		
WA0113	Adhere to standard conditions of employment inclusive of statutory Health, Safety, Environmental and Energy requirements.		
WA0114	Perform housekeeping activities.		
	Supporting Evidence	Date	Signature
SE0101	Logbook signed by the learner and mentor		
SE0102	Progress report		
SE0103	Observation sheet		

	Contextualised Workplace Knowledge	Date	Signature
1	Standard Operating Procedures.		
2	Organisation's structures, policies and procedures.		
3	Communication strategies and protocols.		
4	Organisation's core business, vision and mission		

	Additional Assignments to be Assessed	Date	Signature
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	Externally		
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714204-001-00-00-WM-07, Tooling, die and forming device changeover operations, NQF Level 3, Credits 14.

WM-07-WE01	Perform tool, die and forming device changeover operations under the guidance of a mentor over a month.		
	Scope Work Experience	Date	Signature
WA0101	Determine requirements, select and transport tooling.		
WA0102	Prepare tooling for changeover operations and storage.		
WA0103	Assist with the changeover operations of tooling.		
WA0104	Maintain the condition of tooling during production.		
WA0105	Complete records, recognise and report problems.		
WA0106	Respond to questions and respond to issues related to transporting and caring for tooling.		
WA0107	Ensure machinery safe operations (safe operations include but are not limited to statutory operations of lifting equipment).		
WA0108	Perform housekeeping activities.		
	Supporting Evidence	Date	Signature
SE0101	Logbook signed by the learner and mentor		
SE0102	Progress report		

SE0103	Observation sheet		
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	Contextualised Workplace Knowledge	Date	Signature
1	Standard Operating Procedures.		
2	Organisation's structures, policies and procedures.		
3	Communication strategies and protocols.		
4	Organisation's core business, vision and mission		

	Additional Assignments to be Assessed Externally	Date	Signature