

“PROCESS” MACHINE SETTING

“Process” refers to specific volume plastics manufacturing processes (e.g., Injection Moulding, Blow Moulding, Extrusion, etc.)

NQF LEVEL

4

SP0078/06-17

Duration:	9 days
Target:	Candidates competent in NQF Level 3
Prerequisite:	NQF Level 3
NQF Info:	NQF Level 4
Qualification:	Towards the Further Education and Training Certificate in Plastics Manufacturing NQF Level 4
Credits:	30
Certification:	merSETA-accredited Plastics SA Certification

Unit Standards

- Set and adjust plastics manufacturing machine conditions to produce quality finished products [119155]
- Changeover and set up tooling for plastics manufacturing processes [119140]
- Monitor maintenance of plastics manufacturing equipment, tooling and services [119187]

Objective of Learning Programme

To perform product changeovers, set plastics manufacturing equipment, and adjust the machine setting in response to changes in the process. To perform the tooling change-over process. To monitor maintenance of plastics manufacturing equipment, tooling and services.

Outcomes

At the end of the learning programme, learners will be able to

- Determine product and process requirements, plan the setting process and collect the necessary tools, instruments and materials.
- Set process parameters and start up manufacturing equipment to manufacture first offs.
- Conduct quality checks on manufactured products, determine conformance to standards and adjust machine settings for any deviations.
- Identify and resolve product-and process-related problems and respond to emergency situations or critical events.
- Hand-over the process to production staff, complete all relevant documentation and report incidents or issues. This includes cleaning, emptying channels and chambers, removal of heaters, (or other attachments such as hoses), attaching slings, eye bolts, bars, adaptor plates and rings. Perform calibration, and set up die gaps.
- Monitor the functioning of equipment, tooling and services during manufacturing operations and identify problems.

Contents

- Product and process requirements include all specifications, setting and any other procedures, work instructions, production planning documentation, reading of drawings and sketches, applicable standards, e.g. ISO 9000 and ISO 14000. Plan includes performing calculations, preparing documentation such as requisitions, organising and arranging with other persons, such as assistants and operational staff. This includes use of tools, including hand and power tools, measuring equipment such as pyrometers, gauges, scales, polarising filters and ultraviolet lights.
- Product and process requirements include all change-over and set up of tooling for plastics manufacturing processes, as well as the monitoring of maintenance of plastics manufacturing equipment, tooling and services.

Assessment and Certification

- Workplace Experience Assignments to be submitted within two weeks following training. A Plastics|SA Certificate of Competence is issued to successful candidates.
- Relevant credits may be awarded to successful learners upon merSETA due approval process.