Plastics|SA

# "PROCESS" MACHINE OPERATIONS

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

NQF LEVEL 3

SP0080/06–17

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| **Duration:** | 5 days |
| **Target:** | Operators / candidates competent in NQF Level 2 |
| **Prerequisite:** | NQF Level 2 |
| **NQF Info:** | NQF Level 3 |
| **Qualification:** | Towards the National Certificate in Plastics Manufacturing NQF Level 3 |
| **Credits:** | 18 |
| **Certification:** | **mer**SETA-accredited Plastics\|SA Certification |

## Unit Standards

- Perform routine operations on plastic manufacturing equipment [119162]
- Transport and care for tooling in plastics manufacturing processes [119142]
- Perform routine maintenance tasks on plastic manufacturing[ equipment [119174]

## Objective of Learning Programme

To be able to perform routine operations, including maintenance on manufacturing equipment in the context of relevant plastic manufacturing processes, e.g., injection moulding, blow moulding, extrusion, thermoforming, rotational moulding, and relevant others

## Outcomes

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

- Monitor equipment and material, conduct quality checks and resolve problems. Perform start up and shutdown procedures on the manufacturing equipment. Perform start up and shutdown procedures on the manufacturing equipment
- Prepare for and perform purging and material or colour changeover procedures
- Report and record information related to manufacturing equipment and operations
- Discuss and explain issues related to manufacturing equipment and operations
- Carry out routine checks on production machines and operations and perform routine maintenance activities. Update maintenance records. Prepare tooling for installation or storage. Determine requirements; select and transport tooling as well as assist with the installation of tooling

## Contents

- Conduct quality checks include monitoring of product mass, dimensions, colour or any other critical part of the product specification, including instruments, measuring equipment and measuring gauges related to the product.
- Start up includes heat soak time, shutdown and purging (including responding to emergency situations). Checks include fluid levels, wear and tear, sharpness, leaks, damage to cables, pipes and hoses, connections and fittings, tooling, safety devices and switches. Use of tooling preparation includes fitting elements for moving, lifting and lowering tooling; cleaning, lubricating, use of release agents; processed material; polishing surfaces; applying corrosion inhibitors, covers tooling components include deckle bars; stripper plates, slides, cores, spacers, blow pins, mandrels.

## 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 **mer**SETA due approval process.