Plastics|SA

NQF LEVEL 3

FABRICATE THERMOPLASTIC BENDS

Duration:	3 days
Target:	Thermoplastics welders / candidates competent in NQF Level 2
Prerequisite:	NQF Level 2 – Butt welding
NQF Info:	NQF Level 3
Qualification:	Towards the National Certificate in Thermoplastic Fabrication NQF Level 3
Credits:	15
Certification:	**mer**SETA-accredited Plastics|SA Certification

Unit Standard

- Fabricate thermoplastic assemblies requiring complex welds [14699]

Objective of Learning Programme

Fabricate fittings, manage machine setup, repair cracks, identify defects and causes and how to solve them; learn about saddle fusion.

Outcomes

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

- Know high pressure welding of HDPE
- Do a butt welding joint preparation
- Fabricate fittings
- Manage machine set up and pressure calculation
- Repair a crack
- Identify welding defects, causes and how to solve the problem
- Know the standardized weld pressure
- Complete jointing of Polyethylene
- Know saddle fusion
- List general butt welding guidelines

Contents

- High pressure welding of HDPE
- Quality control
- Butt welding joint and heating plate preparation
- Fabrication of fittings
- Machine setup and pressure calculation
- Repairing cracks
- Using PVC, PE material
- Welding defects and cause
- Rules for butt welding and butt welding guidelines; Butt fusion joint troubleshooting guide
- Electro-fusion
- Visual inspection of butt welded pipes

Assessment and Certification

- Workplace Experience Assignments (WEAs) to be submitted within two weeks following training.
- A Plastics|SA digital Certificate of Competence is issued to successful candidates.
    - Minimum requirements for competence: successful weld plus 70% on theory and WEA assessments, and 80% on practical assessment.

Relevant credits may be awarded to successful learners upon **mer**SETA due approval process.