

FABRICATE COMPLEX FABRICATION ASSEMBLIES

Duration:	5 days
Target:	Thermoplastics welders / candidates competent in NQF Level 2
Prerequisite:	NQF Level 2
NQF Info:	NQF Level 3
Qualification:	Towards the National Certificate in Thermoplastic Fabrication NQF Level 3
Credits:	53
Certification:	merSETA-accredited Plastics SA Certification

Unit Standards

- Fabricate thermoplastic assemblies requiring complex welds [14699]
- Develop work instructions for thermoplastics fabrication using drawings [14688]
- Lay out and mark off regular and irregular shapes for thermoplastic fabrication [14700]
- Adapt to working in a client's work environment [14720]

Objective of Learning Programme

To enable learners to determine project requirements, prepare and select materials, determine setting from welding tables, prepare machinery and control sheets; fabricate assemblies requiring complex welds; check dimensions, assess welds and correct faults; recognise and report fabrication problems and record welding data. Produce basic drawings of components, plan work and develop work instructions, interpret engineering drawings, job instructions and sequence of operations; prepare for laying out and marking off, apply quality checks, apply safe working practices, know the rules related to working off site, determine client's workplace policies, understand, describe and discuss the relationship between contractor and client.

Outcomes

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

- Determine from drawings the project requirements, select materials and plan a sequence; prepare materials for the fabrication process; determine setting from welding tables, prepare machinery and control sheets; co-ordinate efforts with those of other work group members; fabricate assemblies requiring complex welds; check dimensions, evaluate the integrity of component or assembly, assess welds and correct faults; recognise and report fabrication problems.
- Derive components and produce basic drawings of the components; plan work and develop work instructions; interpret engineering drawings.
- Interpret job instructions, determine sequence of operations and prepare for laying out and marking off; mark out surface developments; apply quality checks on materials; identify and report non-conformances, record information on work done and provide feedback; apply safe working practices and discuss issues related to safety.
- Understand, describe and discuss employer's rules and procedures related to working off site; determine the client's workplace policies and procedures and adapt work processes; understand, describe and discuss the relationship between contractor and client.

Contents

- Fabricate assemblies requiring complex welds
- Produce and interpret drawings, plan work, prepare for laying out and marking off
- Apply quality checks and safe work practices
- Know the relationship between contractor and client.

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 merSETA due approval process.