

SHUKELA TRAINING CENTRE

31 Sugar Mill Way, Mount Edgecombe, 4300 P.O. Box 23, Mount Edgecombe, 4300

Telephone: +27 31 508 7700 Facsimile: +27 31 502 3520 Website: www.sasa.org.za

COURSE TITLE: BOILERMAKER PHASE 1

COURSE DURATION: 10 WEEKS

TARGET POPULATION: 1st year Apprentice Plater/Welder with a suggested

minimum educational level of Standard 8 with

Mathematics and Science.

COURSE CONTENT:

Induction to Shukela Training Centre.

- Identify and interpret engineering drawings.
- Identify engineering materials and their treatment.
- Identify basic hand and measuring tools and their uses.
- Identify profiles, plates and prepare a material list.
- Identify workshop equipment and its uses.
- Apply basic hand skills.
- Identify arc and gas welding equipment.
- Apply fundamentals of arc welding.
- Apply fundamentals of gas welding and brazing
- Apply fundamentals of gas cutting.
- Draw geometric constructions and apply marking off techniques.
- Lift and move equipment (Rigging).



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COURSE TITLE: BOILERMAKER PHASE 2

COURSE DURATION: 8 WEEKS

<u>TARGET POPULATION</u>: 2nd year Apprentices who have successfully completed

the Phase 1 Apprentice Boilermaker course or have been recommended for this course as a result of an

Assessment test conducted at this Centre.

COURSE CONTENT:

Apply construction techniques to cones.

- Apply construction techniques to components.
- Apply construction techniques to pipes.
- Apply construction techniques to flat bar rings.
- Weld metal using arc welding equipment.
- Weld metal using gas welding equipment.
- Weld metal using MIG equipment.
- Weld metal using TIG equipment.
- Apply special welding processes.



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COURSE TITLE : BOILERMAKER PHASE 3

COURSE DURATION: 7 WEEKS

TARGET POPULATION: 3rd and 4th year Apprentices who have completed the

Phase 2 Apprentice Boilermakers course or an

Assessment conducted at this centre and are eligible to

attempt the National Trade Test.

COURSE CONTENT:

Development and fabrication using radial line method.

- Development and fabrication using parallel line method.
- Development and fabrication using triangulation.
- Development and fabrication using cutting planes.
- Structural steel work.