

STRUCTURAL OXY – ACETYLENE GAS WELDING (INTERMEDIATE)

Weld carbon steel work pieces using the oxy-acetylene gas welding process in all positions.

US 243053 Level 3 (8 Credits)

Describe and explain the oxy-acetylene gas welding process.

- ☑ Parts include: Welding hoses, jubilee clamps, gas cylinders (oxygen and acetylene), regulators, welding torch, welding nozzles, non-return valves and flashback arrestors.
- ☑ The importance of correct assembly of the oxy-acetylene gas welding equipment, and the consequences of incorrect assembly, is explained with reference to the vendor requirements.
- ☑ Basic and major components of the oxy-acetylene gas welding equipment are identified and the explanation of function and purpose is correct in terms of vendor requirements and standards.
- ☑ Parts and components correctly identified and the implications for not testing for leaks are explained.
- ☑ Terms and definitions used are consistent with generally accepted welding terminology as recorded in international welding standards.

Select, assemble and conduct pre operational checks of oxy-acetylene gas welding equipment.

- ☑ Verification of identification and selection of oxy-acetylene gas welding equipment as specified in the welding procedure specification.
- ☑ Pre-operational checks are carried out in accordance with vendor specifications and to be leak free.
- ☑ Manufacturer's specification, worksite practices and safety and environmental issues.

Prepare work pieces prior to welding.

- ☑ Work pieces prepared prior to welding as specified on drawing and worksite practices.
- ☑ Dimensions and alignment checked as specified on drawing.

- ☑ Work piece tack welded in position as per drawing specifications.
- ☑ Safety precautions adhered to.
- ☑ Inspect work piece prior to welding.
- ☑ Worksite practices, tools, equipment, safety requirements and materials.

Weld metals with oxy-acetylene gas welding process.

- ☑ Welding filler material selected as specified in the welding procedure specifications.
- ☑ Work piece welded in position.
- ☑ Safety precaution adhered to during welding process.
- ☑ Work piece cleaned after welding as per worksite practices.

Inspect welded work piece for defects.

- ☑ All residues flaking of material and slag removed as specified in cleaning procedure.
- ☑ Welded work piece conforms to job specifications.
- ☑ Inspection methods and procedures selected are conducive to specifications.
- ☑ Documentation completed as reflected in worksite practices.
- ☑ Worksite practices, inspection methods, and cleaning procedures.
- ☑ Welded joints acceptance criteria to be in accordance with a national and/or international welding standard.

Care for and store welding consumables and equipment.

- ☑ Tools and equipment cared for as per manufacturer's specifications and stored as per worksite practices.
- ☑ Tools and equipment stored to conform to worksite practices.
- ☑ Welding consumables stored in accordance with worksite practices.
- ☑ Tools and equipment stored to conform to worksite practices.


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COURSE DURATION: 5 - 7 DAYS