

Trade of Plumbing

Module 1: Thermal Process and Mild Steel Pipework

Unit 8: Machine Bending Mild Steel Pipe

Phase 2

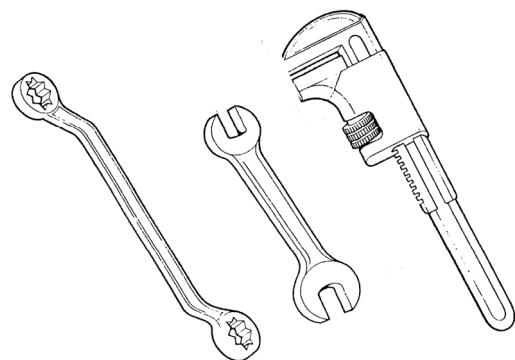


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Document Release History

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June 2006	V.1.0	
26/02/14	2.0	SOLAS transfer

Module 1 – Thermal Process and Mild Steel Pipework

Unit 8 – Machine Bending Mild Steel Pipe

Duration – 20 Hours

Learning Outcome:

By the end of this unit each apprentice will be able to:

- Form 90° square bends, crossovers and offset bends using hydraulic bending machine.
- Describe the principles of cooperation of hydraulic bending machines.

Key Learning Points:

- Sk Principles of operation of bending machine.**
- Rk Setting up bending machine, identification of formers.**
- Sk Machine bending 900 bends and double bends.**
- Sk Machine bending offset bends.**
- M Angles and use of set squares.**
- Sk Measurements, tolerances.**
- M**
- Sk Alignment of bends.**
- Rk Types of flanges and gaskets.**
- Sk Maintenance and care of hydraulic bending machine.**
- Sk Good working practice.**
- Sk Corrosion protection.**
- Sk Thread swarf, oil.**
- Sk Interpretation of drawings.**
- Rk Materials list.**
- Sk Manufacture and use of templates.**
- P Planning, communication.**

Training Resources:

- Classroom facilities.
- Information sheets.
- Workshop facilities.
- Hydraulic bending machines.

Exercise:

Apprentice to answer sample questions:

1. Machine bend mild steel pipe as per Exercises 2.1.8a and 2.1.8b in the curriculum document.

Key Learning Points Code:

M = Maths **D** = Drawing **RK** = Related Knowledge **Sc** = Science

P = Personal Skills **Sk** = Skill **H** = Hazards

About Unit 8

This unit is primarily a skill based unit, please refer to your instructor.

Self Assessment

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