

Trade of Plumbing

Module 1: Thermal Process and Mild Steel Pipework

Unit 2: Manual Handling

Phase 2

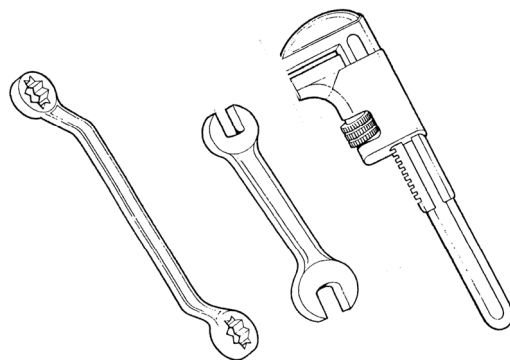


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Document Release History

Date	Version	Comments
June 2006	V.1.0	
04/03/14	2.0	SOLAS transfer

Module 1 –Thermal Process and Mild Steel Pipework

Unit 2 – Manual Handling

Duration – 3 Hours

Learning Outcome:

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

- List the main statutory requirements of both employers and employees in relation to manual handling and general safety in the workplace.
- Explain the structure of the spine.
- Explain the functions of muscles, tendons and ligaments.
- Explain the types of injury that may occur from lifting and handling loads.
- Explain the requirement for a pre-lift analysis of a load.
- Explain how the body should be positioned before attempting a lift.
- Explain and demonstrate good handling techniques for lifting workplace objects.
- Explain and demonstrate good handling techniques for pushing and pulling a workplace object.
- Demonstrate the correct procedures for team lifting a load.
- Describe the various types of handling devices and in what situations they may be used.
- Correctly demonstrate how to handle a typical workplace load using a handling aid.

Key Learning Points:

- Rk** Duty of employer towards employee to:
- a) Take measures where possible to avoid manual handling.
 - b) Carry out risk assessment where manual handling is unavoidable to reduce dangers involved.
 - c) Provide employee with precise information about the load.
- Rk** Duty of employee to:
- a) Take reasonable care for his safety and welfare and that of others in the workplace.
 - b) Use any equipment, protective clothing or other means provided by the employer for securing his safety and welfare in the workplace.
 - c) Report any problems or defects to his employer which might endanger health and safety.
- Rk** Structure of the spine: spinal cord, spinal canal, vertebrae, intervertebral discs.
- H** Injuries resulting from lifting heavy loads, (Prolapsed/slipped disc, cuts and abrasions, crushed feet and hands, muscle and joint strain).
- Rk** Pre-lift analysis of a load, (Checking object for sharp edges, difficult to grasp, unstable, teamwork required).
- H** Workplace obstacles/hazards such as slippery/uneven surfaces, poor lighting conditions, steps.
- Sk** Other factors that may hinder movement such as clothing or personal protective equipment.
- Sk** Use of good posture before beginning to lift a load.
- Sk** Raising a load correctly.
- P** Putting the load down correctly.
- Rk** Coordination of team activity when team lifting.
- Sk** Good handling techniques for pushing and/or pulling an object using a handling device.
- P** Safe working practices at all times when handling heavy objects.

Training Resources:

- Overhead projector, transparencies, information sheets, instructional videos.
- Samples of various materials/objects typical of the apprentice's workplace.
- Various handling devices used in the apprentice's workplace.

Exercise:

Apprentice to answer sample questions:

1. Apprentice to answer general questions on correct procedures for lifting heavy objects.
2. Apprentice to state the main obligations of employer and employee in relation to safe handling in the workplace.
3. Under supervision and using the correct handling techniques, the apprentice is required to lift a workplace object from:
 - a) Ground to ground.
 - b) Ground to bench.
 - c) Ground to height.
 - d) Bench to bench.
4. Under supervision and using the correct handling techniques, the apprentice is required to operate a handling device to move a typical workplace object from one location to another.

Key Learning Points Code:

M = Maths **D** = Drawing **RK** = Related Knowledge **Sc** = Science
P = Personal Skills **Sk** = Skill **H** = Hazards

About Unit 2

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

Self Assessment

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