



## FY1W 04 – Prepare and Undertake Pipe Jointing

This Unit comprises of the following combinations of National Occupational Standards (NOS) shown below by award it appears in.

## EUSDSG3.47

### Prepare resources for pipe jointing activities



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#### Overview

This involves being able to prepare work areas, materials and equipment to undertake pipe jointing. It involved ensuring that others using the work area are safe and aware of possible disruption, and that the work area is properly protected.

The person carrying out this work must ensure that the equipment they are using is appropriate to the job, in correct operating order and set up correctly to carry out the required work.

Preparation of materials includes jointing consumables and pipework. This unit is applicable to those preparing and aligning joints using cutting, expanding, flaring, hydraulic, compression and abrasive techniques, and propane, butane, oxy-acetylene and/or high temperature gas flame.

Note: This national occupational standard (Ref ID M30) belongs to SummitSkills – the Sector Skills Council for the Building Services Engineering Sector.

## EUSDSG3.47

### Prepare resources for pipe jointing activities

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#### Performance criteria

*You must be able to:*

- P1 work safely at all times, complying with health and safety and other relevant regulations and guidelines
- P2 ensure that the work environment is suitable for the work activities to be undertaken
- P3 obtain all the required equipment and materials and ensure that they are suitably prepared for the activities to be carried out
- P4 in line with work requirements, prepare the work area for the storage of materials and finished products
- P5 ensure that all necessary service supplies are connected and ready for use
- P6 make sure that required safety arrangements are in place to protect other workers from activities likely to disrupt normal working
- P7 inform the appropriate people when preparations are completed
- P8 deal promptly and effectively with problems within their control and report those that cannot be solved
- P9 report completion of preparations in-line with organisational procedures

## **EUSDSG3.47**

### **Prepare resources for pipe jointing activities**

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#### **Knowledge and understanding**

*You need to know and understand:*

- K1 health and safety legislation, regulations and safe working practices and procedures
- K2 work area preparation requirements and methods
- K3 types of equipment necessary to undertake jointing activities safely
- K4 how to identify necessary materials and recognise defects
- K5 safe materials handling and preparation methods and techniques
- K6 tools and equipment care and control procedures
- K7 organisational reporting lines and procedures

## **EUSDSG3.47**

### Prepare resources for pipe jointing activities

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**Status** Imported

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**Originating organisation** Summit Skills

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**Original URN** DSG3.47

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**Relevant occupations** Engineering; Science and Engineering Technicians

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**Suite** Down Stream Gas

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**Key words** prepare, resources, pipe, pipes, jointing

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## Overview

This unit is applicable to those that join pipework by brazing, soldering, welding or mechanical means to meet specifications and establish compliance with pipework jointing specifications.

The person carrying out this work is required to undertake the jointing process for different types of joints, in various positions and to conduct visual inspections and checks of the completed work.

The activities involved include connecting pipework joints using cutting, expanding, flaring, hydraulic, compression and abrasive techniques, and propane, butane, oxy-acetylene and/or high temperature gas flame.

# SUMMES31

## Connect pipework

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### Performance criteria

*You must be able to:*

- P1 work safely at all times, complying with health and safety and other relevant regulations and guidelines
- P2 follow the relevant joining procedures and job instructions for completion and checking of work
- P3 check that the joint preparation complies with the specification
- P4 check that joining and related equipment and consumables are as specified and fit for the purpose
- P5 make the joints as specified using the appropriate joining technique
- P6 produce joints of the required quality and of specified dimensional accuracy
- P7 where appropriate, shut down the equipment to a safe condition on completion of joining activities
- P8 in line with approved and agreed procedures, deal promptly with excess and waste materials and temporary attachments
- P9 deal promptly and effectively with problems within their control and report those that cannot be solved
- P10 use all the correct tools and inspection equipment and check that they are in useable condition
- P11 carry out checks on completed work in an appropriate sequence using approved methods and procedures
- P12 identify and assess any defects or variations from the specification and take appropriate action
- P13 report completion of compliance activities in line with organisational procedures

# SUMMES31

## Connect pipework

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### Knowledge and understanding

*You need to know and understand:*

- K1 health and safety legislation, regulations, safe working practices and procedures relevant to the work being carried out
- K2 jointing specifications and joining procedures for the work being carried out
- K3 how to interpret engineering drawings and related specifications
- K4 jointing processes and equipment relevant to the specification
- K5 safe material handling, preparation, finishing methods and techniques
- K6 appropriate materials and their joining characteristics
- K7 setting, operating and care procedures for the equipment being used
- K8 appropriate personal approval tests and how to conduct them safely
- K9 hazards arising from joining operations
- K10 appropriate compliance checking methods and techniques
- K11 how to identify defects in products and assets
- K12 organisational reporting lines and procedures
- K13 organisational and regulatory quality control systems and documentation procedures
- K14 inspection equipment care and control procedures



# SUMMES31

## Connect pipework

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**Developed by** SummitSkills

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**Relevant occupations** Building and construction; Skilled Trades Occupations

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**Suite** Mechanical Engineering Services

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**Key words** join, connect, to appropriate standard, within specification