

# EUSMUNC11 (SQA Unit Code - FA93 04)

## Joint materials by butt fusion processes on Utilities Network Construction



---

### Overview

This national occupational standard defines the competence required to joint materials by butt fusion, using non-automatic and automatic machines, on parent materials with the same SDR rating, and polymer type. The jointing process may be carried out in all weather conditions in accordance with industry standards and specifications.

# EUSMUNC11 (SQA Unit Code - FA93 04)

## Joint materials by butt fusion processes on Utilities Network Construction

---

### Performance criteria

*You must be able to:*

#### **Make joints using butt fusion techniques**

- P1 work safely and ensure compliance with health, safety, environment and other regulations and guidelines
- P2 carry out site specific risk assessment, and review in accordance with company procedures
- P3 select and wear the designated PPE
- P4 follow the job instructions and procedures accurately for preparing and making joints
- P5 check and confirm joint preparation complies with the specification and meets quality requirements.
- P6 check that jointing and related equipment and consumables are as specified and fit for purpose
- P7 provide adequate weather protection during the entire jointing cycle.
- P8 carry out and monitor the machine operations in accordance with specifications and job instructions
- P9 make butt joints of the required quality and specified dimensional accuracy
- P10 de-bead and carry out approved quality assurance test on bead
- P11 ensure joint and bead are identifiable by marking in accordance with company procedures
- P12 shut down the equipment to a safe condition on completion of jointing activities
- P13 deal promptly with excess and waste materials and temporary attachments, in line with approved and agreed procedures

*You must be able to:*

#### **Use and communicate data and information**

- P14 follow all approved procedures and practices and statutory and regulatory involved in the work activity
- P15 check with designated personnel any circumstances where information appears incorrect
- P16 use organisational information systems to record and store jointing data and information
- P17 follow all procedures where you are a lone worker

*You must be able to:*

#### **Resolve problems that arise from jointing materials**

- P18 report promptly - to the designated person - damage or defects to tools, equipment or materials

## **EUSMUNC11 (SQA Unit Code - FA93 04)**

### **Joint materials by butt fusion processes on Utilities Network Construction**

---

- P19 resolve day to day problems within the responsibility of the job role
- P20 refer matters outside the responsibility of the job role to the designated people using approved procedures
- P21 deal with emergency situations as specified in approved procedures

# EUSMUNC11 (SQA Unit Code - FA93 04)

## Joint materials by butt fusion processes on Utilities Network Construction

---

### Knowledge and understanding

*You need to know and understand:*

#### **General**

- K1 The main responsibilities of the employer and employee under the Health and Safety at Work Act
- K2 the health and safety guidance governing work in excavations
- K3 the safe procedures for handling hazardous materials
- K4 organisational accident recording and reporting procedures
- K5 the range and use of personal protective equipment for the work

*You need to know and understand:*

#### **Butt fusion jointing**

- K6 health, safety and environment legislation and environmental procedures relevant to the work activities
- K7 manual handling procedures
- K8 industry codes of practice and company procedures.
- K9 why only pipes of similar specifications can be joined together
- K10 how to interpret engineering specifications relevant to the engineering activity
- K11 different stages that take place during the jointing process and the importance of allowing each phase to complete
- K12 the need for pipe support and alignment and the consequences of poor support and mis-alignment
- K13 cause and effect of defects and contamination such as misalignment split defects, inadequate bead, excessive bead pipe specifications, compatibility, different types of materials and consumables
- K14 maintenance procedures, equipment calibration, consequences of poor maintenance
- K15 different quality assurance procedures that can be applied in recognising defects including non destructive and destructive testing
- K16 the correct reporting procedures

# **EUSMUNC11 (SQA Unit Code - FA93 04)**

## **Joint materials by butt fusion processes on Utilities Network Construction**

---

### **Additional Information**

#### **Behaviours**

**Behaviour which underpins effective performance**

**You work in a manner in which you:**

1. are vigilant to possible risks and hazards
2. treat people with civility

## **EUSMUNC11 (SQA Unit Code - FA93 04)**

### **Joint materials by butt fusion processes on Utilities Network Construction**

---

**Developed by** Energy and Utility Skills

---

**Version number** 1

---

**Date approved** October 2009

---

**Indicative review date** October 2014

---

**Validity** Current

---

**Status** Original

---

**Originating organisation** Energy and Utility Skills

---

**Original URN** MUNC11

---

**Relevant occupations** Construction, planning and the built environment

---

**Suite** Multi-Utility Network Construction

---

**Key words** joint, butt, fusion, utility, utilities, network, construction, water, gas

---