

Overview

This Standard is about jointing materials by electro-fusion processes. Electro-fusion processes may be carried out on parent materials with the same or differing SDR ratings and polymer types.

Jointing materials by electro fusion includes providing weather protection, checking joint preparation, equipment and consumables, monitoring the jointing process, making electro-fusion joints to specification, shutting down equipment and dealing with waste.

This Standard is for anyone who carries out electro fusion jointing on utilities networks.

Performance criteria

You must be able to:

1. work in line with health, safety and environmental regulations, guidelines and procedures at all times
2. carry out and review site specific risk assessments in accordance with company procedures
3. select and wear required personal protective equipment in line with organisational procedures
4. check any circumstances where job instructions or organisational procedures appear incorrect with appropriate people
5. check that jointing and related equipment and consumables are as specified and fit for purpose
6. provide adequate weather protection in line with organisational procedures for the duration of jointing cycles
7. use lifting equipment when required in line with current regulations
8. report any damage or defects to tools, equipment or materials to appropriate people without delay
9. use appropriate electro-fusion jointing techniques to produce joints of the required quality
10. joint materials by electro-fusion processes in line with approved organisational procedures, practices and statutory and regulatory requirements
11. confirm compliance of completed joints with specified standards and specified dimensional accuracy
12. shut down equipment to a safe condition on completion of jointing activities
13. deal with excess and waste materials and temporary attachments without delay in line with organisational procedures
14. record and store jointing data and information in organisational information systems
15. resolve problems that are within your area of responsibility in line with organisational procedures
16. refer problems you cannot resolve to appropriate people using organisational procedures

Knowledge and understanding

You need to know and understand:

1. legislation, organisational procedures and codes of practice relating to health, safety and the environment including manual handling, use of equipment, hazardous materials, lifting equipment, work in excavations, risk assessments, accidents and personal protective equipment
2. the personal protective equipment (PPE) required for the work environment
3. the industry standards and organisational procedures relating to electro fusion jointing
4. the different types of pipe materials that can be jointed using electro fusion
5. how to interpret engineering specifications relevant to electro fusion processes
6. the different stages that take place during the jointing process and the importance of allowing each phase to complete
7. compatibility between different materials in relation to standard dimension ration (SDR) rating and polymer type
8. the need for pipe support, restraint, alignment and the consequences of poor support, restraint and mis-alignment
9. organisational quality assurance procedures that can be used to recognise defects
10. the cause and effect of defects and contamination to pipes and fittings and how to avoid them
11. how to operate jointing equipment in line with organisational procedures
12. the importance of jointing equipment calibration and the consequences of poor maintenance
13. organisational reporting procedures including who to report to about damage and problems
14. organisational information and data storage systems

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