BCSA CRAFT TRAINING

FABRICATOR WELDER

The BCSA CRAFT Fabricator Welder Apprenticeship Scheme is a modular training course that is completed in the workplace. The modules will be used to guide the apprentice through the different aspects of the role of marking, cutting and assembling steel components with the assistance of those with the skills and knowledge to guide the apprentice until they reach a satisfactory level of competence against each module. Completion of the apprenticeship will only be recognised when all the modules are completed and the apprentice has had sufficient time to develop and build experience in the role.

The learner will (know, understand or be able to):	**The learner will cover:**
1. Health and safety	Demonstrate good working practices to reduce exposure to any hazards Carry out work safely Leave the workplace in a safe and tidy condition
2. Welding fume hazard	Identify the hazards associated with arc welding and cutting fumes Demonstrate good working practices to reduce exposure to hazards
3. Material sizes and drawings	Understand the different steel components used in steelwork fabrication How to recognise the different sizes and shapes of materials used Recognise and understand the labels and symbols used in drawings.
4. Marking out for fabrication	Recognise the different hand tools and equipment used Understand how to use the tools and equipment to mark steelwork Understand how to translate the information from the drawings or sketches
5. Shearing, punching, cropping and sawing	Understand the variety of machines and their usage Set up jigs and stops for multi-production Work to the details provided by production sketches
6. Oxygen flame cutting	Understand how the equipment is set up to produce different finishes Recognise the appropriate use of manual and mechanical equipment Understand the safety requirements of pressurised gas systems
7. Hand held disc grinding and cutting	Recognise the appropriate accessories and how they are attached Understand the testing process before first operation Operate the equipment in a safe and efficient manner
8. Arc welding process	Understand the process of welding Identify the various welding joints and preparation Understand the symbols used on production drawings
9. Assembling Structural steelworks	Recognise the variety of tools and equipment used in assembly Understand the use of jigs to aid assembly Work to detailed drawings to produce accurate assemblies
10. MAG welding	Understand the principles of semi automatic welding Be able to set up the equipment to meet the company procedures Demonstrate good welding techniques to produce appropriate profiles
11. Submerged Arc welding	Understand how and when SAW is the preferred process Be able to set up the equipment to meet company procedures Operate the equipment to produce the required finished product
12. Drilling	Understand the transferable accessories needed to set up the equipment for use Understand the production sketches to ensure accurate application Operate the equipment to comply with company procedures
13. Welding practice and control	Understand the terminology used in welding processes Describe the key features of weld preparation joints Describe the key features of a completed welded joint Recognise weld imperfections and how they can be prevented

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