September 2014

City & Guilds

601/4169/4 Level 1 Award in Introductory Thermal Cutting Techniques

OVERVIEW

What does the qualification cover?

This single unit qualification allows you to demonstrate the following skills and knowledge through the completion of assignments in producing a flat profile plate, an angle bracket and a curved profile plate:

- measure and mark out in preparation for thermal cutting
- set up, prepare and shut down equipment for thermal cutting
- make a selection of cuts using thermal cutting techniques
- understanding of the thermal cutting process requirements.

Components produced can be from a variety of materials and must be between 6mm-12mm thick. All tolerances will be +/- 3mm.

This is a Framework qualification.

Who could take this qualification?

This would be ideal for someone who has no experience of thermal cutting or engineering as it provides an introduction to a specific engineering skill where there are shortages. It would also be suitable for someone who is looking to increase their range of engineering skills, such as a welder or fabricator.

What could this qualification lead to?

It could lead to thermal cutting or semi-skilled sheet metal worker job roles across a number of sectors including:

- General engineering
- Automotive
- Energy
- Construction
Again if you are a newcomer to Engineering you may also want to consider a longer programme in
the Level 1 Certificate in Welding, Fabrication and Cutting skills, which will allow you to develop a
broader range of skills. This may lead to a career as an engineering fitter welder or pipe fitter, or
progression onto an intermediate apprenticeship in Engineering.

There is also a Level 2 Award in Thermal Cutting Techniques. This will enable you to develop your
practical skills further as you will work within tolerances of +/- 2mm, material thickness will be
between 1.6mm-12mm and you will produce more complex components such as a manifold
bracket and a flanged pipe.

On completion of the Level 1 Award in Introductory Thermal Cutting Techniques you may
wish to consider progression to an intermediate Engineering apprenticeship, or onto other
qualifications including:

Level 2 Award in Thermal Cutting Techniques
Level 2 Certificate in Welding, Metal Fabrication and Cutting Skills.
Level 2 Certificate in Engineering.
Level 2 NVQ Diploma in Performing Engineering Operations

Who supports this qualification?

It is supported by the following Colleges of Further Education:

- Hartlepool College
- Leeds City College
- Lincoln College