

Basic Arc Welding**CLMW04X****Course Objectives****To enable course members to:**

- Strike an arc correctly
- Prepare metal for welding
- Set up and operate a welding set and select correct voltage, current and electrode size
- Weld metal in the flat position carrying out butt and fillet welds, including pad building
- Select appropriate safety equipment and clothing for the tasks to be performed
- Operate a welding set in a safe and efficient manner

Who is the Course For?

People who have little or no knowledge of electric arc welding and will be required to use arc welding equipment for non structural welding tasks.

Pre-entry requirements

Metal should be prepared prior to course or prepared by instructor during course

Duration/Format

Two days for novices or 1 day for people with some experience

NVQ/SVQ Linkage**Instructor/Trainee Ratio**

Max: 1:6 (providing there are 3 machines)

Course Content**Introduction**

Check work areas and equipment
Welding equipment and set up
Striking an arc
Weld runs on flat
Finished a bead on restarting

Pad building

Square edge butt weld
Fillet weld
Tidy up

Facilities/Equipment required:**Organiser**

Operative fire extinguisher (dry powder, CO₂, or BCF)
 3 welding sets (1 per 2 course members) minimum 150 amps and 50 and 80 open circuit volts. Each set correctly fused and installed.
 Metal bench with vice for each welding set, having no other electrical appliance on it.
 1 hammer, 1 chipping hammer, 1 wire brush, 1 pair of pliers, 1 chisel per welding set.
 Portable screening
 2 leather aprons
 2 pairs of leather gloves
 Organisers should liaise to ensure all requirements are made available.

Venue

Well lit workshop complying with COSHH regulations, with 30 amp correctly fused supply to each welding set (2 sets), adequate heating, adequate ventilation and seating

Instructor/Tutor

1 welding shield plus spare welding filters and cover glasses
 Clear safety goggles for each course member for chipping slag
 2 leather aprons
 2 pairs of leather gloves
 Overalls – NOT nylon
 Cap or hat

Trainees

1 welding shield plus spare welding filters and cover glasses
 Clear safety goggles for chipping slag
 Overalls – NOT nylon
 Cap or hat

Publications included in package

Workbook