

# Welder



## Safety

Use eye protection at all times! Use a welding mask when welding! Please read the instructions carefully!

If you are using this tool for the first time, please contact a member of the board. You can find a list of HMS approved personell [here](#).

Omega Verksted has a Kemppi **DC welding machine** for TIG and electrode welding.



## Instructions

### Protective Equipment

#### Mandatory

- Welding mask
- Heat resistant gloves (preferably leather)
- Jacket for UV protection
- Hearing protection is required for some side tasks encountered during welding, such as removing dross (slagg)

### Safe Usage

- Make sure that the working area is tidy and completely free of flammable materials!
- Wear eye protection at all times. A welding mask must be worn while welding.
- Position the fume extractor directly over your working area, as close as possible to the workpiece.
- Make sure your workpiece is grounded. Normally this is done by grounding the work table.
- Fresh welds are very hot. Do not touch them, even with gloves. Grab the workpiece by a section at least 20-30cm away from the weld.

### Good welding (WIP)

The above points will ensure safe operation of the welding apparatus. However, welding well requires a lot of technique and experience. Some tips are given below.

#### Any technique

- If the workpiece is heating up too fast and you get holes, you might be using too much current
- If the workpiece is heating up too slow, you might be using too little current.
- You will usually want to point weld your pieces together first before fully welding them. Otherwise they will generally bend due to thermal expansion and become skewed.

#### TIG Welding

- Make sure the electrode does not touch the workpiece. Try to keep it around 2-3mm apart from the workpiece

#### MMA Welding (electrode/"pinne")

- Make sure the coating on the electrode is not damaged

### Maintenance

#### Gass

Gassflasken vi har er en utleieflaske fra Aga, med rent argon. Denne kan fylles hos Aga i Trondheim. Omega Verksted har konto hos dem, og de sender faktura etter fylling.

#### Reservedeler

Gasshette, gassmunnstykke, elektrode og elektrodehylse må byttes regelmessig. Disse kan kjøpes hos Würth, Tess eller på internett.