

MIG Welder Certification



Student:

Trainer:

Date:

Certification for: MIG Welder (Metal Shop)

Training Check-Off List:

To be certified to use the CMS's MIG welding machines independently, the student must demonstrate an understanding of the following tool features, policies, and operational steps.

Tool Anatomy

- Parts of the MIG Welder are properly identified
 - Pressure regulator
 - Speed selector
 - Voltage selector
 - Ground clamp
 - Gun
 - Nozzle
 - Contact Tip
 - Tip holder

Gas Tank Safety

- Never move the gas tank without the cap on!

Materials

What materials may not be welded with the CMS's MIG welding machines?

- Clean Carbon Steel

What materials may be welded with the CMS's MIG welding machines?

- Galvanized metals
- Aluminum
- Stainless Steel

Pre-Operation

- Personal Protection Gear - safety glasses, welding helmet, welding gloves, welding jacket (or long sleeves!)
 - Do not wear clothing made from synthetic or synthetic blends.
- No unrestrained long hair and no flowing clothes. Closed-toed shoes are required.
- Make sure there are no puddles on the floor in welding area, particularly around machines and foot pedals.
- Make sure that the welding area is free of flammable materials.
- Adjust welding screens to make sure no bystanders can be caught by arc-flash.
- Regulator:
 - Depress torch trigger to start the gas cycle, then adjust the flow-meter or regulator (if necessary). See individual machine pages for optimal settings.
- Set the machine appropriately for the gauge of steel you will be welding, using the chart on the inside of the side panel.

Operation

- Turn on the fume extractor and position the end of the extraction arm near your workpiece.
- Clip the wire electrode to within 1/4" of the end of the gas nozzle before starting a weld.
- Clean the gas lens and contact tip as needed.
- Replace the contact tip if you're experiencing wire feed problems and it is absolutely necessary.
- Hold the torch as appropriate to your weld position and requirements.
- Treat all work as if it is hot enough to burn you through your gloves.

Post-Operation

- Turn off the fume extractor.
- Turn off the machine (MIG welder).
- Turn off the gas using the large valve on the cylinder.
- Disconnect the ground clamp, coil cords and store neatly.
- Return all tools.
- Clean the workbench.
- Sweep up (the floor) after yourself.

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Lockout/Tagout Procedure

- Unplug the machine, coil the cord, and place the plug end in a safe/visible location. Fill out an “Out of Order” tag and post it on the machine. Notify the Metalshop Lead (and Desker, if on site).

Questions

Who do you contact if you have questions about the CMS MIG welding machines?

- The CMS Metalshop Leads, at metalshop@claremontmakerspace.org

Pass/Fail:

Comments:

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Student Signature: **Date**

Certifier Signature: **Date**



Certifier: Please scan this QR Code to email info@claremontmakerspace.org, and include a list of students who have passed this test.

Then, return this form to the front desk (even if the student failed!).