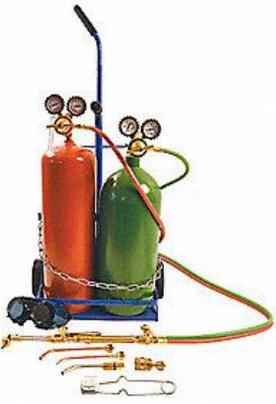




Safe Operating Procedures

SOPs are designed to help employees identify hazards, limitations, PPE, & safety training for specific equipment/tasks.
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	Equipment/ Task Name	Using an Oxy-Acetylene Welder
	Departments Impacted	Art & Architecture Department
	Purpose	An oxy-acetylene welder uses fuel gases with oxygen as a heating medium. By using this combination, the base metal and a filler rod are melted using a flame produced at the tip of a welding torch. Fuel gas and oxygen are combined in the proper proportions inside a mixing chamber in the torch. Molten metal from the plate edges and filler metal, if used, intermix in a common molten pool and join when cooling.

General Precautions:

A welding area of a minimum 35 feet in diameter must be established. Flammable materials must be removed from the welding area. A fire extinguisher with a minimum rating of 2A20B:C must be readily available to the welder. A fire alarm must be readily available. Ensure that ventilation is sufficient to avoid setting off a smoke detector fire alarm.

TASK	HAZARDS	CONTROLS
1. Close off welding area.	Flashing	Close welding curtain to shield outsiders from flashing.
2. Prepare for arc welding.	Inhalation of fumes	Turn on exhaust fan and timer.
	Flashing	Wear welding hood.
	Sparks	Wear welding jacket, apron, gloves, work shoes.
	Slag splatter	Wear welding jacket, apron, gloves, work shoes.
3. Set gauges, turn on gas cylinders.	Pinching fingers and hands.	Avoid pinch points.
4. Clean tip, make sure hose valves are tight, unwrap hoses.	Pinching fingers.	Avoid pinch points.
	Tripping.	Keep hoses untangled and free from feet.
5. Use striker to light torch.	Burning fingers, hands body; flashing.	Wear welding hood, welding jacket, apron, gloves, and work shoes.
6. Apply flame to material.	Flashing, sparks, slag splatter.	Wear welding hood, welding jacket, apron, gloves, and work shoes.
7. Allow material to cool on workbench.	Burn to hands or fingers.	<ul style="list-style-type: none"> Wear gloves. Chalk mark welded area "Hot."
8. Close valves, bleed off regulators, wrap hoses.	Pinching fingers.	Avoid pinch points.
	Tripping.	Keep hoses untangled and free from feet.
9. Use chipping hammer to remove	Eye damage by flying debris from hammer strikes.	Wear safety glasses.



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excess slag.		Injuring fingers with hammer.	Use caution to avoid striking fingers or hands with hammer.		
Required Training:		Required Personal Protective Equipment (PPE)			
1. Operation of gas welder. 2. Operation of a fire extinguisher. 3. Location and use of the fire alarm.		1. Welding hood 2. Welding jacket and apron 3. Gloves 4. Safety glasses, work shoes			
SOP ID	A009	Related Documents	Art Shop Manual	Creation/Revision Date	9/2018

Suggestions, questions, or comments? Please contact EH&S