

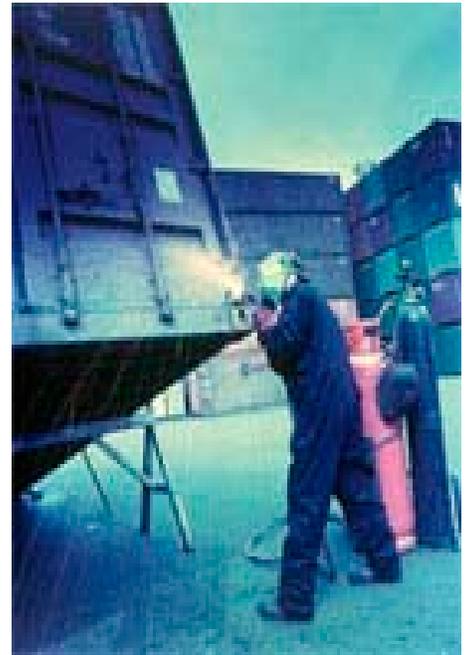
GAS WELDING AND CUTTING

06-11

ALL EMPLOYEES ARE TO BE TRAINED PRIOR TO USING EQUIPMENT

I. Pre Operation Read Operators Manual Prior to Use.

- **Tanks need to be secured in an upright position** to a stand, cart or the wall.
- **Oxygen tanks should never be moved around without the valve cap screwed in place.** If it were to fall over or be knocked over and the valve knocked off, the tank is like an unguided and unpredictable missile propelled by the compressed oxygen.
- **Acetylene tank should never be laid down horizontally while it is being used,** as acetylene will leak out through the valve.
- **Ventilation** - Insure good ventilation.
- **Regulator** – Check regulator and hose/back flow prevention.
- **Hoses** – Oxygen (O₂) is **green**. Acetylene (fuel) is **red** and they are threaded in opposite directions – acetylene has left-hand threaded connectors, oxygen has right-hand threaded connectors.
- **Tips** - Check for correct welding tip and determine if it is clear of debris.



Acetylene Tank set at 5 PSI pressure. Note red line if the PSI goes over 15 lbs.



II. Operation

Before you starting working with the equipment, you must have clean hands-- no motor oil, French fry grease from lunch, etc.

- **Turn Acetylene on first** and light, then Oxygen and adjust to desired flame.
- **Open Acetylene** tank approximately 1/4 turn (to shut off in emergency).
- **Open Oxygen** tank completely.
- **Check Acetylene Pressure** Use at 10 lbs - never to exceed 15 lbs.
- **Check O2 Pressure** 30 to 40 lbs. (depends on thickness of metal.)
- **Position** of wand depends on metal thickness, more toward 90 degrees for thick metal and closer to 45 degrees for thin metal (keep at least 1/8" above metal.)
- **Use lever** to inject Oxygen when hotter flame is desired.

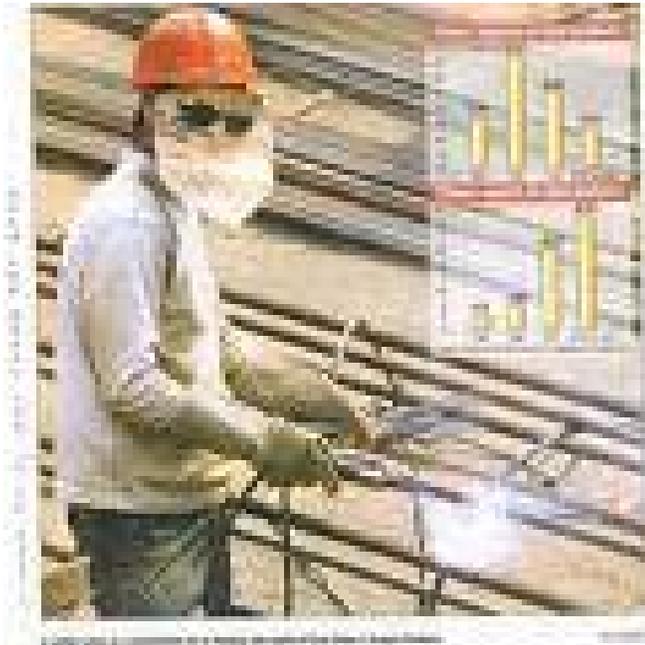
Personal Protective Equipment (PPE)

- **Eye protection** and hood
(Use #3-4 shaded lenses for gas)
- **Pants** should cover shoes to keep molten debris out
- **Leather coat/apron** or other non-flammable clothing is a must
- **Loose** items restrained such as long hair and clothes
- **Welding gloves.**



^ What's right about this PPE?

← Is there anything wrong with this PPE?



Site Assessment

- **Assure Area** is clear of people and property.
- **Flammables** - Assure no flammable and/or combustible material is in the area.

Operation - Includes:

- **Brazing** - Use small tip with reduced O₂ pressure.



Welding Tips

III. Post Operation

Clean and inspect for damage or additional maintenance prior to checking in.



- **Turn acetylene** off first, then O₂ off second.
- **Release pressure** in the lines when done.
- **Clean Tips** with brush/cleaner; don't over tighten. You could damage the tip seats.

- **Lockout/Tagout** if there is any equipment damage or equipment needs to be repaired/replaced.

IV. Demonstration and Proficiency - All persons trained on welding and cutting are required to demonstrate their proficiency prior to signing the training ledger.

PROFICIENCY TEST GAS WELDING & CUTTING

06-11

I. Multiple Choice

1. Inspect the following before operation:
 - a) Secured tanks.
 - b) Good ventilation.
 - c) Regulator hose.
 - d) Tips.
 - e) All of the above.

2. Personal Protective Equipment required (PPE):
 - a) Eye protection/hood.
 - b) Pants over shoes.
 - c) Leather coat/apron.
 - d) Welding gloves.
 - e) All of the above.

3. What procedure is accurate?
 - a) Open acetylene tank full
 - b) Open O₂ tank completely
 - c) O₂ pressure 10 lbs.
 - d) All the above
 - e) None of the above

II. True/False

4. _____ Tanks need to be secured in an upright position to a stand, cart, or wall.
5. _____ Acetylene hose is green.
6. _____ Always open acetylene tank fully.
7. _____ Ignite the acetylene gas first.
8. _____ Keep flammable material handy.
9. _____ Wear short pants, loose clothing (preferably 100% cotton) when using welders.
10. _____ The correct level of shaded LENSES is critical for proper Eye protection and should always be used.
11. _____ Turn off O₂ first.

Employee Name: _____ Pass _____ No/Pass _____ Date: _____
Take this test to your supervisor or trainer for sign off.