



Welding, Cutting and Brazing

Download additional self-inspection checklists at <http://engineering.tamu.edu/safety/>

Date _____
 Inspector _____
 Faculty/PI _____

Room No. _____
 Location _____
 Dept. _____

| Items for evaluation | Yes | No | Comments | Action to be taken |
|--|-----|----|----------|--------------------|
| Are only authorized and trained personnel permitted to use welding, cutting or brazing equipment? | | | | |
| Does each operator have a copy of the appropriate operating instructions, and are all operators directed to follow them? | | | | |
| Are compressed gas cylinders regularly examined for obvious signs of defects, deep rusting, or leakage? | | | | |
| Is care used in handling and storage of cylinders, safety valves, relief valves, etc., to prevent damage? | | | | |
| Are precautions taken to prevent the mixture of air or oxygen with flammable gases, except at a burner or in a standard torch? | | | | |
| Are only approved apparatus (torches, regulators, pressure-reducing valves, acetylene generators, manifolds) used? | | | | |
| Are cylinders kept away from sources of heat? | | | | |
| Are the cylinders kept away from elevators, stairs or gangways? | | | | |
| Is it prohibited to use cylinders as rollers or supports? | | | | |
| Are empty cylinders appropriately marked, and their valves closed? | | | | |
| Are signs reading "DANGER--NO SMOKING, MATCHES OR OPENLIGHTS," or the equivalent, posted? | | | | |
| Are cylinders, cylinder valves, couplings, regulators, hoses and apparatus kept free of oily or greasy substances? | | | | |

| Items for evaluation | Yes | No | Comments | Action to be taken |
|---|-----|----|----------|--------------------|
| Is care taken not to drop or strike cylinders? | | | | |
| Unless secured on special trucks, are regulators removed and valve-protection caps put in place before moving cylinders? | | | | |
| Do cylinders without fixed wheels have keys, handles, or non-adjustable wrenches on stem valves when in service? | | | | |
| Are liquefied gases stored and shipped valve-end up, with the valve covers in place? | | | | |
| Are provisions made to never crack a fuel-gas cylinder valve near sources of ignition? | | | | |
| Before a regulator is removed, is the valve closed and gas released from the regulator? | | | | |
| Is red used to identify the acetylene (and other fuel-gas) hose, green for oxygen hose, and black for inert gas and air hose? | | | | |
| Are pressure-reducing regulators used only for the gas and pressures for which they are intended? | | | | |
| Is open circuit (no load) voltage of arc welding and cutting machines as low as possible and not in excess of the recommended limits? | | | | |
| Under wet conditions, are automatic controls for reducing no load voltage used? | | | | |
| Is grounding of the machine frame and safety ground connections of portable machines checked periodically? | | | | |
| Are electrodes removed from the holders when not in use? | | | | |
| Is it required that electric power to the welder be shut off when no one is in attendance? | | | | |
| Is suitable fire extinguishing equipment available for immediate use? | | | | |
| Is the welder forbidden to coil or loop welding electrode cable around his body? | | | | |
| Are wet machines thoroughly dried and tested before being used? | | | | |
| Are work and electrode lead cables frequently inspected for wear and damage, and replaced when needed? | | | | |

| Items for evaluation | Yes | No | Comments | Action to be taken |
|---|-----|----|----------|--------------------|
| Do means for connecting cable lengths have adequate insulation? | | | | |
| When the object to be welded cannot be moved and fire hazards cannot be removed, are shields used to confine heat, sparks and slag? | | | | |
| Are fire watchers assigned when welding or cutting is performed in locations where a serious fire might develop? | | | | |
| Are combustible floors kept wet, covered by damp sand, or protected by fire-resistant shields? | | | | |
| When floors are wet down, are personnel protected from possible electrical shock? | | | | |
| When welding is done on metal walls, are precautions taken to protect combustibles on the other side? | | | | |
| Before hot work is begun, are used drums, barrels, tanks and other containers so thoroughly cleaned that no substances remain that could explode, ignite or produce toxic vapors? | | | | |
| Is it required that eye protection, helmets, hand shields, and goggles meet appropriate standards? | | | | |
| Are employees exposed to the hazards created by welding, cutting or brazing operations protected with personal protective equipment and clothing? | | | | |
| Is a check made for adequate ventilation where welding or cutting is performed? | | | | |
| Are employees exposed to the hazards created by welding, cutting or brazing operations protected with personal protective equipment and clothing? | | | | |
| When working in confined places, are environmental monitoring tests taken, and means provided for quick removal of welders in case of an emergency? | | | | |
| Are facilities/equipment available to secure compressed gas cylinders? | | | | |