

Section 13

WELDING, CUTTING AND SOLDERING

13.1 General Precautions

- (a) Local regulations or contract requirements may require a permit or license before using portable cutting or welding equipment.
- (b) Move combustible material to a safe area. If combustible material can't be moved, cover completely with fire-retardant material.
- (c) Provide a fire watch to make sure fires do not start. Have a fire extinguisher readily accessible where employees are working. Extinguishers shall be of ABC type, minimum 2A:20BC rating.
- (d) Never burn or weld over other workers.
- (e) After completing a burning or welding operation, monitor the scene of work for fires. Inspect adjacent areas as well.
- (f) Use only non-flammable PVC glue to bond in-ground PVC hydraulic jack liners to prevent explosion hazard resulting from welding or burning operations. **NEVER WELD OR BURN IN OR OVER AREAS WHERE FLAMMABLE AGENTS ARE PRESENT.**
- (g) Do not use cutting or welding equipment near flammable liquids. Do not cut or weld on closed tanks which have held flammable liquids or other combustibles.
- (h) Ensure there is sufficient ventilation to remove potentially toxic fumes in areas of concern.

- (i) Never use empty containers such as drums as a work station. They may contain potentially hazardous fumes. Consideration should be given for air monitoring by qualified personnel.
- (j) Keep cutting and welding equipment in good operating condition at all times. Equipment found to be defective shall be tagged immediately and returned to the shop for repair.
- (k) Operators shall never wear oil-stained clothing.
- (l) Always hold lighted acetylene and propane torches – do not lay them down or hang them on beams or planks. A safe area shall be selected for resting a live electrode holder before striking an arc.
- (m) Do not burn or weld in hoistways, where rails or other equipment are covered with oil or lint.
- (n) Assure proper ventilation is provided for gas welders.
- (o) Torch valves should be opened to vent pressure from the line and shut again.
- (p) Use proper eye protection when welding, cutting and chipping. Reference Personal Protection Equipment – see Section 3.
- (q) Wear a leather jacket or equivalent material to protect your skin from burns due to metal splatter and UV radiation.
- (r) Use welding gloves to protect your hands
- (s) Leather chaps are recommended to protect your legs and vital parts.
- (t) When welding and cutting be aware of other people in the area. Advise them to look away when welding.
- (u) Be aware of falling splatter, hot slag and sparks.