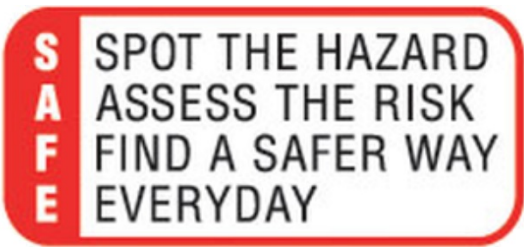


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## Risk Element

- Spread of fire;
- Exposure to fumes;
- Eye injury;
- Burn injury;
- Danger to third parties;
- False alarm trips.

## Precautions to Eliminate/Reduce Risk

- Use of heat shields;
- Removal of combustibles;
- Fire extinguisher present;
- Second person present;
- Ventilate work area;
- Removal of refrigerant gas. (Purge with nitrogen when necessary);
- Wear eye protection;
- Wear fire retardant clothing, heat resistant gloves and suitable safety shoes;
- Effectively cordon off working area;
- Isolation or protection of sensors;
- Ensure Acetylene cylinders are kept upright and secured;
- Two checks, the first after 30 minute interval at the end of the operation.  
All hot works to stop 1 hour prior to end of shift, with a thorough inspection carried out before leaving site for any smouldering materials.

## Action in an Emergency

- Switch off and isolate brazing equipment;
- Attempt to extinguish fire if appropriate;
- Remove injured person(s) from danger area (if without risk);
- Render first aid.

## Safe Working Method

This is one of the most common methods of joining non-ferrous materials and involves heating the components with a naked flame and applying brazing material to form a sound joint. When two dissimilar metals are joined then the process usually requires the application of a suitable flux.

- Contact customer's management to gain permission and to advise of work to be carried out;
- Where required, complete Hot Work Permit and adhere to any rules printed thereon, over and above these procedures;
- All Health & Safety rules must be obeyed;
- A fire extinguisher of the correct type must be present and within reach;
- Arrange for isolation of any fire alarms, i.e. smoke detectors and heat sensors if in the vicinity of the working area;
- Cordon off area within which work is being carried out, to prevent the entrance of unauthorised personnel;
- If work is to be carried out in a confined space, then adequate ventilation must be made;
- If there is a possibility of refrigerant gas being present or flux is being used when joining dissimilar metals in a confined space, then a respirator must be used or adequate ventilation provided. (always, purge system with nitrogen before starting, and during work);
- Eye protection must be used at all times;
- Flame resistant clothing must be worn;
- Heat resistant gloves must be worn;
- Before commencing work, check all brazing equipment;
- A second person must be present at all times whilst carrying out brazing;
- Heat shields must be used to protect any surrounding material.

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