

Welding, Cutting, Burning and Soldering

It is important to recognize the hazards associated with welding and allied processes to determine whether you are equipped for the task at hand or should hire a certified individual for the job. All equipment must be used, serviced and maintained by a competent individual, in accordance to manufacturer's specifications.

Regulators and connecting hoses must be tested to ensure there are no leaks immediately after connecting it to a gas cylinder. Do not perform this test using oil, fat or grease-based substances.

If a leak develops:

- Shut off gas supply.
- Do not resume work until leak is repaired.
- Affix a lock-out tag to ensure others are aware of the problem if it is not to be remedied immediately.

Inspect the surrounding area before performing any welding or allied process to ensure:

- Removal of all hazardous material or process that produce combustible, flammable or explosive material.
- Prevention of fire or explosion.

An employer must ensure that where there is a gas welder or allied process:

- A flashback arrestor is used.
- Hose lines or pipelines for conveying gases and the couplings are clearly identified.
- Torches are ignited by an appropriate lighting device.

Employers must ensure:

- Compressed gas hose lines and welding cables are protected from damage.
- Operator must remove welding rod (electrode) before leaving machine unattended.
- Appropriate welding and ground leads are used to fasten electric supply cable, ensuring inner wires are not exposed, and cable cannot be separated from the fittings.

Work on Containers

Do not perform any welding or allied process on any containers, pipes, valves or fittings that holds or has held explosive, flammable or hazardous substances, unless a **written work procedure** has been established.

If unable to meet the requirements of the written work procedure, a certified individual should be hired for the job.

Written work procedure requirements:

- Provisions for disconnecting or locking out
- Ensure area to be worked on is free of residue
- Test air samples to ensure the hazardous gas or vapours have been adequately reduced
- Post certificate including:
 - Signature of competent person
 - Date and time of tests performed
 - Type of work allowed to be performed and those banned
 - Means by which work is performed
 - Expiry date and time of certificate
 - Records of all test results

(Note: The certificate is valid for only 24 hours.)

DISCLAIMER:

This fact sheet is a general overview for information purposes only. Farmers must reference legislation to ensure compliance.