hi.lo° Gas Welding & Cutting Equipment

Health & Safety Procedures

The operator should read and understand these procedures before commencing work. He should wear protective clothing and shaded goggles to protect his skin, eyes and hands from heat, light and sparks and respiratory protection where dangerous fumes may be given off and/or adequate ventilation is not possible. When working he should observe the procedures listed below:

- Ensure the immediate area around the welding position is free of combustible material and well
 ventilated.
- 2. Ensure the gas cylinders are properly secure in the upright position.
- 3. The regulator must be correct for the type of gas, and inlet and outlet pressure required.
- 4. The regulator should be examined for leaks and any sign of mechanical damage particularly to the gauges, or the bull-nose fittings.
- 5. The cylinder outlets must be free of dirt and the threads undamaged.
- Hose connections must be in good condition, dirt free and properly tightened and the hoses free of cuts, abrasions and signs of perishing.
- New hoses must be blown through to remove any dirt before attaching the fittings, including hose
 check valve, and after fitting they must be individually purged with gas (away from any flame)
 before the torch is lit.
- Oil and/or grease must never be used with Oxygen equipment since this can give rise to spontaneous combustion or even explosion.
- The regulator pressure adjusting screw must be in the unscrewed (zero pressure) position before opening the cylinder valve and blowpipe (torch) valves must be in the closed position.
- 10. A properly fitting cylinder key or combination spanner must be used to slowly open the cylinder valve and should be left on the spindle to allow immediate closure in an emergency.
- 11. The regulator must be set to the pressure recommended for the torch nozzle being used. Setting should ideally be done in the flow condition.
- Always examine the torch for damage or leaks before igniting which should be done by lighting the fuel gas first and then opening the oxygen valve to the required extend.
- 13. To extinguish the torch, close the oxygen valve first then followed by the fuel gas.
- After using the torch the cylinder valves should be closed firmly and pressure in the hoses released by opening each torch valve in turn.
- 15. Finally, the regulator pressure adjusting screw must be unscrewed to the zero pressure position.
- 16. For additional safety, Flashback Arrestors should always be used with gas equipment.