



GAS WELDING AND CUTTING EQUIPMENT



- **RISQ 4.17:** Is welding and gas burning equipment in good order and properly stored?
- **SIRE 2.0 Q 10.3.7** – “Was gas welding and cutting equipment in good order, and spare oxygen and acetylene cylinders stored apart in a well-ventilated location outside of the accommodation and engine room?”.
- **BCGA Code of practice CP7** - “The safe use of oxy-fuel gas equipment (individual portable or mobile cylinder supply)”.
- **BCGA Guidance Note GN2** – “Guidance for the storage of gas cylinders in the workplace.”

FINDING

During an Engineering audit, the PAS auditor found the vessel's gas cutting/ welding equipment in poor condition. The gas cylinders had bends and deep scratches, while the manometers were damaged, obstructing clear visibility of pressure readings. Senior officers did not have maintenance records for the equipment available at the time of inspection.

IMPORTANCE

Proper maintenance and inspection of gas welding and cutting equipment are crucial for enhancing safety and ensuring compliance with industry's requirements. Regular checks prevent gas leaks, fires and equipment failures, ensuring smooth operations and regulatory adherence. Proper maintenance of equipment extends its lifespan, reduces the risk of incidents and ensures accurate pressure readings, thereby minimizing fire hazards and preventing operational delays.

BEST PRACTICES FOR THE VESSEL

- Check the Acetylene (AC)/Oxygen (OX) twin hose for cracks in the outer rubber and leaks before each use.
- The equipment components must be fully compatible and in accordance with applicable regulations and industry best practices for onboard use.
- Test the gas regulators and flashback arrestors annually.
- Replace gas regulators and flashback arrestors every 5 years.
- Ensure that a non-return valve is attached to the shank.
- Never try to overtight any nut of regulator connection or cylinder valve spindle to stop the leak.

ACTIONS FOR THE OFFICE

- Verify that all safety equipment is procured from approved suppliers and accompanied by the necessary certifications.
- Develop guidelines for the onboard personnel on how to perform proper inspection and maintenance of all equipment parts.
- Run safety awareness campaigns to highlight the risks of using a poorly maintained gas welding/cutting equipment.

Note: Tip of the month is circulated by P@S monthly in an effort to inform the industry of the red flags raised from the implementation of our onshore and onboard HELMET risk assessment program to meet highest standards, carried out by H.EL.M.E.T. Assessors.

PREVENTION AT SEA

5 Artemidos Avenue, 6th Floor,
6020, Larnaca, Cyprus
Tel: +357 24819800

PREVESEA

91 Akti Miaouli Str., 3rd Floor,
185 38 Piraeus, Greece
Tel: +30 210 6437637

✉ sales@preventionatsea.com
🌐 www.preventionatsea.com

