

Safety Tip of the Month

Leaking Acetylene Cylinders

Since acetylene and air mixtures are flammable and explosive in almost all proportions, precautions must be taken to prevent and detect acetylene leakage. All connections must be kept tight and hoses maintained in good working condition. If leakage is suspected, brush or spray the suspected leakage area with soapy water or with a leak detection solution. Bubbles of escaping acetylene through the soap film will indicate a leak.

Acetylene cylinders are equipped with fusible metal plugs having a melting point between 208° F and 220°F, which may be located in the top and bottom heads of the cylinders, or in the cylinder valve on 10 ft³ and 40ft³ cylinders. Although these fuse plugs are tested for leakage, there are occasions where they begin to leak due to rough handling.

If an acetylene cylinder begins to leak from any metal pressure relief device or from the valve, even when the valve is closed, move the cylinder outdoors away from any possible source of ignition and plainly tag the cylinder as having an unserviceable valve or fusible plug relief device. Place a sign in close proximity to the cylinder warning persons against approaching the cylinder with cigarettes or other open flames.

Notify the supplier immediately giving the particulars of the defect, as far as known, and follow their instructions.