

BEST PRACTICE

LOCATION: **ARTICLE YEAR:** 2010
ACTIVITY: Manual handling and storage **COMPANY:** CEMEX UK
SUB ACTIVITY: N/A **COMPANY LOCATION:** Marine
BEST PRACTICE No: BP737 **COMPANY TEL:** 02380 720236

TITLE

Acetylene bottle cabinet dowsing system

ARTICLE

Description

Fires involving oxyacetylene bottles have resulted in many fatalities or serious injuries. When ruptured, compressed acetylene bottles and their components can be propelled some distance at high speed. A fire involving acetylene cylinders causes major disruption, and the risk of explosion remains for up to 24 hours, unlike all other gases which are safe once the initial fire has been extinguished. Because of these risks an exclusion zone of up to 200 metres radius will be set up around the incident every time these cylinders are in danger of exploding at a fire.

At sea, the potential hazard from an oxyacetylene cylinder is greater as the crew may need to deal with a fire without the assistance of the emergency services.

CEMEX Marine has developed a simple but effective acetylene bottle dowsing system using sprinklers in the acetylene bottle storage cabinets.

Benefits

The fitting of a simple sprinkler dowsing system into each acetylene bottle cabinet provides the following benefits:

1. Enables a quick response by the crew or emergency fire services and allows effective cooling to be activated and maintained locally at each location where these cabinets are situated.
2. Enables the crew/emergency services to respond and provide effective cooling of the bottles in a fire Incident, reducing the risk of injury to workers/emergency fire officers and the public in the workplace.
3. Enables the crew emergency fire services to remain at a safe distance from the cabinets involved in the incident, yet still provide effective cooling of the compressed gas bottles.
4. Allows the crew/emergency services more time to evacuate the incident location and immediate area, in the event of a serious fire incident involving acetylene bottles.

ARTICLE IMAGES