



Safety Alert

From the International Association of Drilling Contractors

ALERT 01 – 31

NEAR MISS - OXYGEN BOTTLE DROPS FROM CRANE

WHAT HAPPENED:

While lifting an Oxygen/Acetylene assembly with a crane, an oxygen bottle came off the assembly and fell 7 feet. The fall damaged the cylinder valve. The equipment was secured and oxygen bottle was taken out of service. No injuries resulted.

WHAT CAUSED IT:

The bottle was not adequately secured in the Oxygen/Acetylene assembly. In addition, the assembly was not designed to be used to transport the bottles by hoisting with a crane.

CORRECTIVE ACTIONS: To address this incident, this company did the following:

- The following are bottle-handling procedures to be implemented on our rigs:
 - Personnel were instructed that when transporting compressed gas cylinders they must ensure that the bottles are secure, whether full or empty.
 - Compressed gas cylinders (bottles) are not to be lifted with a chain, rope, sling or web sling around bottle, but rather with proper carriage.
 - Do not lift bottles by the cap, valve or gauges.
 - Prior to moving compressed gas cylinders, remove regulators and install protective caps on the bottles.
 - Personnel were instructed that compressed gas cylinders are not to be dragged, rolled or slid.
 - Transporting compressed gas bottles must be by truck or barge. Transporting compressed gas bottles by fixed wing aircraft is ***not*** allowed. Compressed gas cylinders can be transported by helicopter when secured in a proper fly basket.
 - Bottle or Cylinder dollies are not designed to be pulled behind a vehicle.
 - There are many compressed gas cylinders (bottle) trucks or dollies in the field. Many of these are designed and manufactured (some are home built) to move bottles on wheels, rolling from point A to point B. There are also racks designed with fork pockets for transportation by a loader or forklift. These dollies are normally not designed to be tied onto and hoisted.
 - Whichever way compressed gas cylinders (bottles) are managed, -- they can be prevented from falling by having the bottle secured in an upright position, with the base of the bottle secured by some form of containment to prevent the bottom of the bottle from kicking out of the rack. When hoisted, solid retainer bars or solid containment should be employed to keep compressed gas cylinders (bottles) upright.

For additional information, refer to the IADC Accident Prevention Reference Guide or the IADC Five Minute Safety Topics Book.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.

This material is presented for information purposes only. Managers & Supervisors should evaluate this information to determine if it can be applied to their own situations and practices. Copyright © 2001 International Association of Drilling Contractors. All Rights Reserved

Issued August 2001