

IMCA Safety Flash 01/07

February 2007

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learned from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links. Additional links should be submitted to webmaster@imca-int.com

1 Subsea Chain Lever Hoist Failure

IMCA has received a report of a near-miss resulting from a failure of a chain lever hoist being used in a subsea operation.

The hoist had a safe working load (SWL) of 3 tonnes and was in use for the first time underwater. It was reported to be in correct usage, loaded correctly and rigged such that it was inverted, with a load of about 2 tonnes suspended from the hook on the block casing. The weight was subsequently removed from the hook and the unit left in hoist mode.

Subsequently, a load was again hung off the unit and a diver later attempted to lower it. He switched the hoist to lowering mode and started to move the lever. As he did so the load dropped, the free chain running through the unit; and the brake eventually engaging, but not before it had dropped about 0.75 metres. It then operated satisfactorily in hoist mode.

All usual safety procedures had been followed and there were no injuries or significant damage to equipment.

The unit was immediately withdrawn from service and is currently undergoing extensive tests along with other similar chain lever hoists.

The company involved reminded users of its safety procedures, the importance of risk assessments, lift plans, not working under suspended loads, avoiding single point failures and the use of secondary back-up rigging.

Members are warned that no certain cause for this failure has yet been identified and to take great care when using chain lever hoists.

Investigation continues and, while no conclusions have as yet been made, orientation of the lever hoist has not been discounted as a contributory factor. Therefore, in addition to the previous precautions, another company has also instructed its employees that lever hoists should not be used in the inverted position during lifting operations; that loads should not be transferred from a lever hoist direct to a crane hook or vice versa without the load first being laid down in a suitable safe and stable location; and that particular attention should be paid to the slack chain to ensure that the chain does not bind or catch on any part of the lever hoist or adjacent equipment, during either lifting or pulling operations.

A DVD showing the incident is available from IMCA on request.

2 Pipe Under Tension on a Reel

A member has relayed a report of an incident involving a reel containing pipe under tension at a third party's onshore facility. An employee, unaware that the pipe was under tension, removed the ratchet strap securing the pipe on the reel. When the tension was released, the pipe sprang out and struck the employee above the left eye, causing a wound which required subsequent medical treatment.

There was a caution label warning that the pipe was under tension. However, this was on the flange of the reel and not clearly visible.

The following actions were recommended:

- ◆ Tensioned pipes should be tied off/secured using either a mechanical 'U' clamp or pipe clamp with a ratchet strap (or rigging) being used as a back up.
- ◆ Any warning signs should be attached to the pipe end or near the securing mechanism such that they are clearly visible to all personnel who will be handling the reel and pipe.

Photographs relating to this incident are shown on the following page.



How the pipe was secured on the reel using a ratchet strap.



The unwound reel after the ratchet strap was removed and the stored energy released.



The warning label that was on the flange of the reel.