# IMCA Safety Flash 09/06

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.

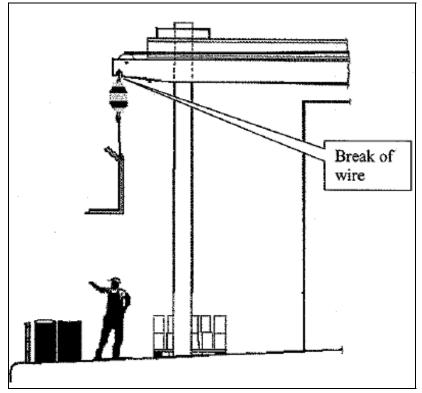
A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links Additional links should be submitted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

#### I Near-Miss Involving Hyfex Fire Extinguisher Refill Kits

IMCA has received the attached Divex HSE alert, which members should be aware of.

#### 2 Fatal Accident with Lifting Appliance

IMCA has received a reports on a fatal incident during a lifting operation. A provisions crane was loading pallets onto a vessel using a pallet fork. After landing a pallet on the deck, the pallet fork was pulled clear and the crane operator moved the crane outward to pick up the next load. During this operation, the crane winch wire snapped. The pallet fork fell onto the deck, landing on a member of the crew, who subsequently died of his injuries.



Sketch of lifting equipment

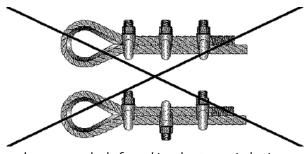
The company noted the following causes to the incident:

- a malfunctioning or missing 'upper limit switch';
- the wire end at the hook side was terminated by means of three incorrectly-applied U-bolt clamps instead of a ferrule and swage (see figures overleaf).

The following lessons were drawn from the incident:

• Limit switches are important safety equipment that should be tested regularly to confirm their proper operation

- Winch wire end terminations should be correctly performed.
- Cranes should be inspected before lifting operations, using an approved check-list
- Procedures should be established to ensure personnel are properly informed of the hazards involved in crane operations, and do not stand underneath loads



Incorrect method of attaching clamps to winch wires.



Example of a correctly prepared ferrule lock. Other techniques acceptable to classification societies and/or the crane manufacturer may be used.

#### 3 Small Fire Caused by Toaster in Mess Room

IMCA has received a report on a small fire which occurred in the mess room of a production platform.

A plastic tray had been left on top of a conveyor toaster. A member of the crew entered the mess room, plugged in and turned on the toaster. The tray was not taken off of the top of the toaster. The person then left the mess room without turning off the toaster. Subsequently the plastic tray holding the bread melted and caught fire.



The fire was successfully extinguished with a dry powder extinguisher and there were no injuries.

The following lessons were drawn from the incident:

- Ensure that no items are placed on top of this type of toaster even when not in use;
- Consider the use of guards and/or signs;
- When this type of toaster is in use, the user should remain in attendance and switch it off before leaving;
- Consider the suitability of certain types of toaster for a given location;
- Crew should be reminded about the need for basic safety awareness even when engaged in everyday domestic tasks.

<b>DIVEX HSE ALERT</b>						
HSE Alert No. <u>HSE001-2006</u> Hyfex Fire Extinguisher Refill Kits Part No's SE4816 and SE4817						<b>Divex Ltd.</b> Enterprise Drive Westhill, Aberdeen AB32 6TQ, United Kingdom Telephone +44 (0)1224 740145 Facsimile +44 (0)1224 740172
DATE	05/05/06	COUNTRY:	EGYPT	LOCAT		e-mail info@divex.co.uk

### DESCRIPTION

An installed Hyfex Hyperbaric Fire Extinguisher has recently catastrophically ruptured inside a decompression chamber. Fortunately no personnel were injured as a result of the incident and only minor damage occurred to the interior of the decompression chamber. The photographs below indicate the potential severity of the failure:



## **INVESTIGATION FINDINGS**

Investigation has revealed that the interior wall of the fire extinguisher was badly corroded, in places the wall thickness was only approximately **2mm thick**. Typically wall thickness should be approximately **4.2mm and 6.3mm thick based on the type of cylinder**.

The users' contract for maintenance had recently been awarded to a local service company in the country of operation and the maintenance and servicing process was not carried out as per Divex requirements. It was obvious that the Servicing Company did not fully understand what was required of them.

The contents of the ruptured extinguisher seem to indicate that the wrong type of foaming agent has been used and that it has had a significant influence on the high levels of corrosion. Initial appearances are that a "protein based" foam agent such as "bulls blood" with a high level of iron content may have been used. This is difficult to quantify at present.

## LESSONS LEARNED

- Servicing and tests were not carried out as per Divex requirements;
- Divex refill packs were not used in performing refill process;
- The sub-contractors were not fully aware of technical requirements and did not hold the necessary factory / manufacturers training and qualifications;
- Had divers been inside the chamber at the time there would have been a high potential for people to be injured.

## **CORRECTIVE ACTION**

- Divex have performed an incident investigation, including discussions with the Diving Company involved:
- Informed IMCA of our intention to issue an HSE Alert to the industry;

### RECOMMENDATIONS

- Clients (users) need to refill Hyfex Extinguishers with Divex AFFF Refill Packs (SE4816 (3Ltr) and • SE4817 (7.5 Ltr);
- Users must ensure their sub-contractors are fully aware of technical requirements and hold the • necessary factory / manufacturers training.
- Issue Divex HSE Alert to all trade associations (e.g. IMCA, ADC (UK) and ADC (USA); •
- Issue Divex HSE Alert to all known purchasers of Divex Hyfex Extinguishers;
- Distribute Divex HSE Alert to all Divex locations. •

NAME: Kevin Smith

**JOB TITLE:** General Manager - QHSE

DATE: 05/07/06

### for and on behalf of Divex Ltd.