

IMCA Safety Flash 18/19

July 2019

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learnt 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 info@imca-int.com

Any actions, lessons learnt, recommendations and suggestions in IMCA safety flashes are generated by the submitting organisation. IMCA safety flashes provide, in good faith, safety information for the benefit of members and do not necessarily constitute IMCA guidance, nor represent the official view of the Association or its members.

1 Important Safety Notice for Users of Crosby S-1326 18/20mm Shur-Loc Hook with 16t WLL – PN 100434

IMPORTANT SAFETY NOTICE

USERS OF THE BELOW CROSBY PRODUCT:

S-1326 18/20 mm Shur-Loc Hook with 16t WLL, PN 1004349

With Production Identification Codes (PIC) of 9SB, 9SC, and 9SD as located on the latch

PLEASE CAREFULLY REVIEW AND ACT UPON THE FOLLOWING INSTRUCTIONS.

IMCA has received the following from Crosby:

July 19, 2019

Dear Valued User of Crosby Products:

THE CROSBY GROUP has determined the above listed hook assemblies may have a condition that can reduce the ultimate load capacity. Although the hooks have successfully passed proof load testing at the factory prior to shipment, the hook shank threads may have an issue that is exacerbated by corrosion, and continued use may result in loss of load, property damage, severe injury, or death.

By use of the Production Identification Code (PIC) symbols appearing on the product, we have determined the 18/20mm size of S-1326 Shur-Loc Hooks with PICs 9SB, 9SC, and 9SD shown on the latch may have this condition. See Figure 1 below indicating the position of the PIC on the hook latch. No other PICs are part of this Important Safety Notice.

Please identify any 18/20mm S-1326 Shur-Loc Hooks with PICs 9SB, 9SC, and 9SD on the latch, to have the nut removed for inspection of the latch external threads. These hook assemblies have a removable coiled spring pin nut retention device to allow periodic inspection of the load bearing threads. Below are instructions for nut removal, inspection, and reassembly. If there are no tools or resources available to perform the disassembly and inspection at the hook location, arrangements can be made to have the hooks returned to a Crosby Distributor for inspection. Any hooks with non-conforming threads are to be immediately removed from service and returned to Crosby, through a Crosby Distributor. Hooks with proper threads are acceptable for reassembly and continued service.

If it is determined during inspection that the hook threads are non-conforming, please make arrangements to return the hook for replacement. To return these products, please contact your Crosby Distributor. For more information concerning this Important Safety Notice, contact Technical Support at 1-800-772-1500.

Please inform your customer(s) of this Important Safety Notice, or if you know of other users of the 18/20mm S-1326 Shur-Loc Hooks, please pass this notice on to that user, company, or firm.

We regret the inconvenience this may cause you and your organization and thank you for your cooperation. We are committed to providing you with the absolute best in Crosby quality.

Sincerely,

THE CROSBY GROUP



Disassembly/Inspection/Assembly Instructions for 18/20mm S-1326 Shur-Loc Hooks

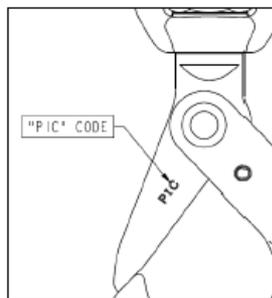


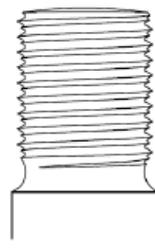
Figure 1 - PIC Location

Disassembly Instructions

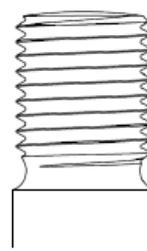
1. Using a punch, remove the 6mm coiled spring pin from the hex nut on the shank.
2. Unthread the hex nut from the shank.
3. If necessary, remove the bail and thrust washer from the shank.

Inspection Instructions

1. Inspect the shank thread for non-conforming thread form. The thread form is to be checked by a competent person, and is to conform to M36x4. See images below. Hooks found with non-conforming threads are to be immediately removed from service.
2. Reinstall the coiled spring pin. If the coiled spring pin requires replacement, contact Crosby for a replacement or replace with a 6mm diameter by 50mm long heavy duty coiled steel spring pin per ISO 8748 (Spring pin ISO 8748 – 6 x 50 St).



NON-CONFORMING
THREAD FORM



CONFORMING
THREAD FORM
M36x4

Assembly Instructions

1. Replace the bail and thrust washer onto the shank.
2. Install the nut onto the shank, in the same orientation as it was removed.
3. Thread the nut to the same location, to allow reinstallation of coiled spring pin.
4. Re-install the coiled spring pin into the existing hole in hook and nut.

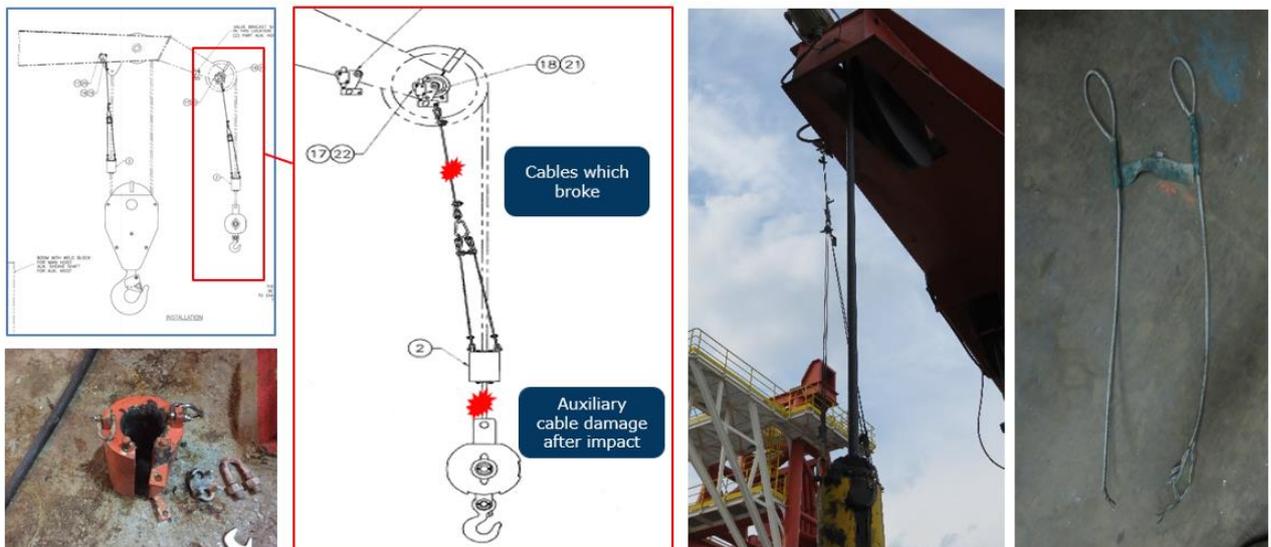
2 Crane Anti-Two Block Securing Wire Failure

What happened?

During routine lifting activities, a vessel crane's (auxiliary) anti-two block (A2B) suspension wires failed, causing the A2B weight assembly to fall along the crane wire to the crane block. Lifting operations were suspended and an inspection was conducted on the auxiliary crane wire and A2B system. No injuries to personnel were sustained as result of the incident.

What were the causes?

- ◆ During inspection and function test of the A2B system, the actuation lever was found seized;
- ◆ Testing and inspection had not been carried out in accordance with equipment operating instructions;
- ◆ The crane operator's daily checklist noted 'testing' of the A2B system. However, it was found that only visual inspections were performed;
- ◆ The upper A2B suspension wires had parted at a position and in a fashion which suggested that the wires were severed by contact with the crane sheave and/or auxiliary wire. It is probable that the seized actuation lever prevented the A2B system from functioning correctly, allowing the crane block to pay-in past the 'cut off point', causing slack in the suspension wires and contact with the sheave.



A2B weight assembly

Crane auxiliary A2B system and components involved

Crane auxiliary A2B system near the sheave

Parted A2B suspension wires

What lessons were learnt? What actions were taken?

- ◆ Full and thorough inspection of crane A2B systems to confirm that they are maintained, functioning correctly and free of potential seizing (of the actuation level);
- ◆ Inspection of equipment holdbacks/retention wires to identify potential for slack and/or entanglement with moving parts. Consider replacing wires with larger diameter;
- ◆ Always comply with equipment pre-start checklist requirements, including function testing of equipment where specified;
- ◆ Inspections should be appropriately documented to record subsequent findings/corrective actions, and records reviewed appropriately on a regular basis to verify effectiveness.

Members may wish to refer to

- ◆ [Catastrophic failure of vessel main crane wire](#)
- ◆ [BSEE: Potentially Catastrophic Crane and lifting incidents](#)

- ◆ [Guidelines for lifting operations](#) (IMCA SEL 019)
- ◆ [Lifting operations](#) (safety promotional video 'Be prepared to work safely')
- ◆ [Lifting equipment](#) (safety promotional video 'Be prepared to work safely')
- ◆ [Risk assessment](#) (classic safety video, IMCA SEL 021)

3 Mattress Beam Landed Very Close to Divers

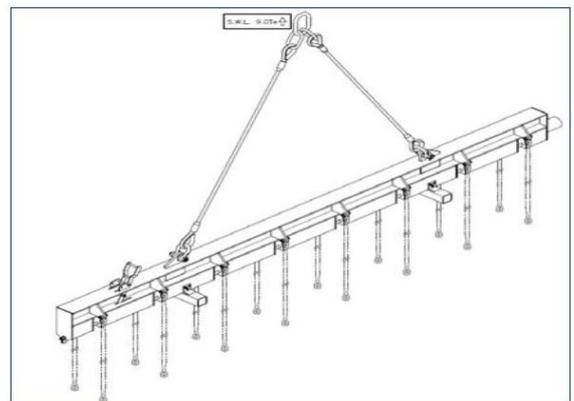
What happened?

During subsea lifting operations with divers in the water, a large mattress lifting beam was lowered inappropriately close to the divers. The two saturation divers were deployed on the seabed at 156 msw, assisting with concrete mattress recovery using a mattress lifting beam attached to the vessel main crane. The beam weighed 696kg in seawater.

What went wrong?

Investigation showed:

- ◆ Dive Team lost sight of the beam during descent, due to:
 - lack of due care and attention to load coming down
 - ROV was on seabed, and did not provide eyes on load from established short mark
 - poor visibility;
- ◆ Failure to stop the job:
 - acceptance of risk and failure to reassess the situation post-incident
 - failure to properly record and report events to management onboard at the time of the incident.



What actions were taken?

Our member undertook to check that company procedures were being properly followed with regard to ensuring that:

- ◆ Divers are clear of moving loads and maintain a safe distance at all times – not under the load nor in the 'DROPS cone of exposure';
- ◆ The divers can see the mattress beam and are in a position to control the lowering of the load by relaying instructions to the crane operator via the dive supervisor;
- ◆ There is an ROV to determine water depth and height of subsea assets, locate the mattress beam and confirm its status;
- ◆ The crane wire/lifting beam is fitted with mini beacon, light sticks, strobes etc as appropriate and is lowered to the 'short mark' above the assets or the seabed;
- ◆ The beam deployment is conducted at a minimum distance offset from client assets;
- ◆ The crane line out meter is zeroed when loads pass through waterline.
- ◆ Reaffirm requirements of company incident reporting process.

Members may wish to refer to the following IMCA guidance documents:

- ◆ [Guidelines for lifting operations](#) (IMCA SEL 019, IMCA D 060, IMCA LR 006, IMCA M 187)
- ◆ [Guidance on operational communications](#) (IMCA D 046, IMCA M 205)
- ◆ [IMCA international code of practice for offshore diving](#) (IMCA D 014).

The following incidents may be of interest:

- ♦ Diver injured during subsea lifting operations
- ♦ Near Miss: Dropped Taut Wire Clump Weight
- ♦ Diver struck by lifting frame while installing concrete mattresses (2004)

4 Near Miss – Two Dropped Objects (MSF)

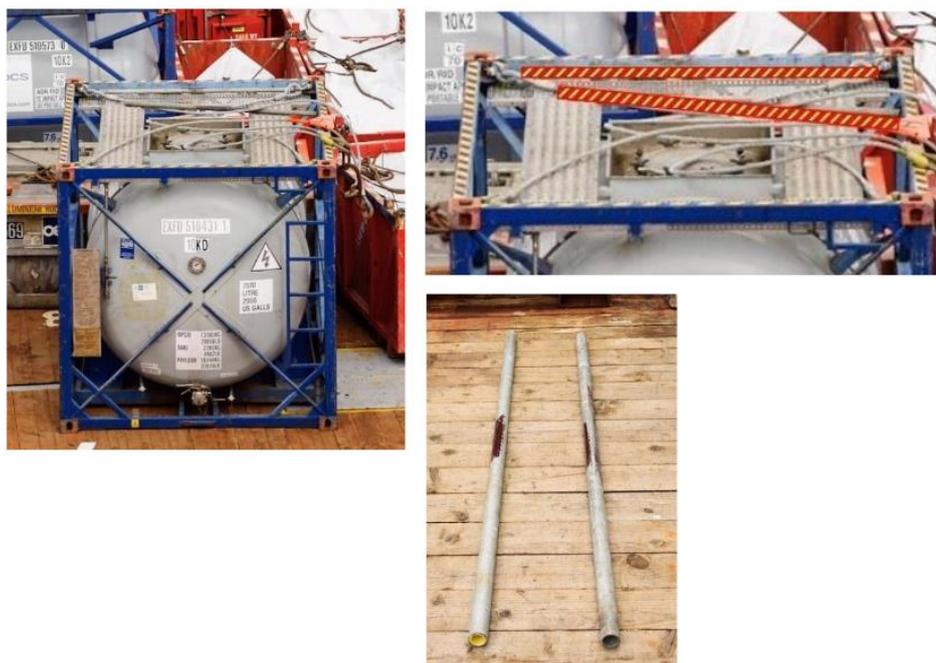
What happened?

The Marine Safety Forum (MSF) has published [Safety Alert 19-08](#) relating to two dropped object incidents on the same vessel. Both events had the potential to cause major or fatal injuries to vessel deck or installation crew involved in lifting operations.

In the first incident, on a vessel engaged in offshore backloading operations, the lifted load came into contact with an adjacent lifted load on the same vessel. A part weighing 3kg detached from the load and fell to the deck.



In the second incident on the same vessel at a different offshore installation, the crane operator noticed something on top of the lift after it had landing. He decided to retrieve the lift for further investigation but as it was hoisted, the movement caused one of the pieces to fall off the lift onto the deck. The vessel deck crew identified two scaffolding poles approximately 1.9m in length and weighing 10kg each.



Dropped objects from cargo can be searched for in the IMCA safety incident database by browsing to <https://www.imca-int.com/alerts/search-safety-flash> and entering search terms such as 'dropped, cargo'.