

## Crane anti-two block securing wire failure

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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.

### IOGP Life Saving Rules:



Safe mechanical lifting

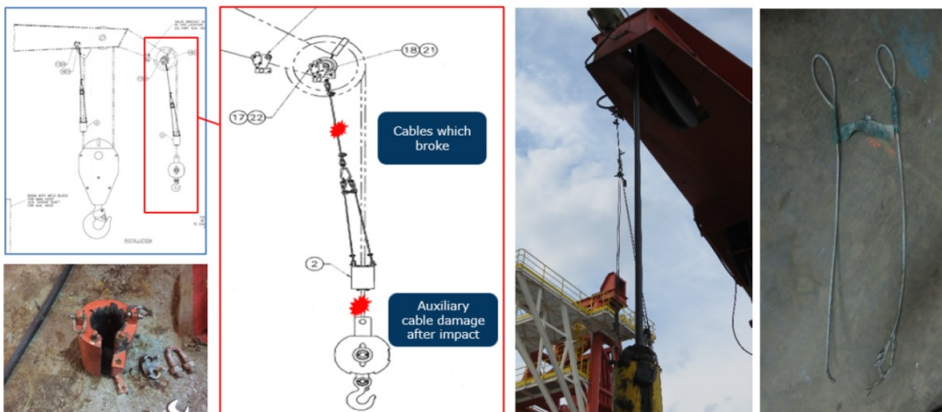
### What happened?

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 learned? 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:

- [IMCA HSS019](#) - Guidelines for lifting operations
- [IMCA safety promotional video](#): Be prepared to work safely - Lifting operations
- [IMCA safety promotional video](#): Be prepared to work safely - Lifting equipment

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