High potential near-miss incident: 440v cable damaged by grinder

Safety Flash Published on **3 October 2016** Generated on **18 February 2026** IMCA SF 25/16

A Member has reported an incident in which live 440v cables were damaged by a grinder.

What happened?

The incident occurred during a vessel mobilisation, when a rigger/welder was tasked with fitting cable protection covers over a bundle of 4 x cables which had been run across the aft deck. They were routed across the deck from the on-board Reel Drive System. Rubber cable protection covers had originally been fixed in place, but these fixings had dislodged. The rigger/welder advised that more robust covers could be fabricated (out of aluminium), which he proceeded to do in a designated hot work area. Whilst the vessel was alongside, the rigger/welder proceeded to install the newly fabricated covers.

During this time the angle on the covers had to be altered so they would neatly butt up against each other. On several occasions the rigger/welder removed the covers to a more suitable location on deck to modify or improve the fit. On the last modification the cable protection covers were left in place and the rigger/welder proceeded to grind over the bundle of cables, making contact with the live 440v, 250A cable.

When he realised that cable had been damaged, the rigger/welder immediately stopped the job and applied insulating tape to the cable, to prevent any ingress from the damp conditions. He was not aware that the cable was live. He then reported the incident. Around two hours later, the power to the damaged cable was isolated at the supplying junction box and a pad-lock put in place as a lock-out mechanism, as per company procedures.

Our member's investigation revealed the following:

- The task was not properly planned or risk assessed:
  - The Permit to Work did not cover this specific task (it covered Hot Work/Welding/Grinding only)
  - The Job Risk Assessment (JRA) did not cover grinding in vicinity of live electric cables or the requirement for electrical isolations of the cables
- The toolbox talk was not specific to the task being undertaken by the rigger/welder.
- There were no isolations in place whilst working next to live electric cables.
- Electrical isolation was not applied immediately after the incident, and did not occur until 2.5 hours later, posing further risks to other crew members working on deck/in the vicinity.

IMCA Safety Flashes summarise key safety matters and incidents, allowing lessons to be more easily learnt for the benefit of the entire offshore industry.

The effectiveness of the IMCA Safety Flash system depends on the industry sharing information and so avoiding repeat incidents. Incidents are classified according to IOGP's Life Saving Rules.

All information is anonymised or sanitised, as appropriate, and warnings for graphic content included where possible.

IMCA makes every effort to ensure both the accuracy and reliability of the information shared, but is not be liable for any guidance and/or recommendation and/or statement herein contained.

The information contained in this document does not fulfil or replace any individual's or Member's legal, regulatory or other duties or obligations in respect of their operations. Individuals and Members remain solely responsible for the safe, lawful and proper conduct of their operations.

Share your safety incidents with IMCA online. Sign-up to receive Safety Flashes straight to your email.