

## Workplace Health and Safety Queensland

## SAFETY ALERT

### Capstan and windlass style winches

#### Purpose

This safety alert highlights the hazards involved when operating unguarded capstan or windlass style winches on board commercial fishing vessels.



**Photograph 1** – Example of an unguarded windlass style winch

#### Background

Commonly referred to in the commercial fishing industry as a capstan winch (similar to windlass except mounted on a vertical axis), windlass style winches (mounted on a horizontal axis as shown above in photograph 1) are basically defined as a device for raising weights (e.g. anchors) upon which a cable or the like winds. In this instance the winches are designed and used to wind in large lengths of cables.

Workplace Health and Safety Queensland (WHSQ) are investigating a workplace incident where a worker suffered multiple fractures,

crushed vertebrae, lacerations and amputation

of the right arm. These injuries occurred when the corner of the worker's loosely fitted wet weather jacket caught in a rope loop attached to the unguarded rotating barrels of the winch. The worker was then dragged into and coiled around the rotating barrels of the windlass style winch until it was disengaged by a deck hand.

#### Risk

Investigations into the incident revealed that there is a likely risk of entanglement within the moving parts of the capstan or windlass style winch, especially the rotating barrels that have the potential to cause serious injury to workers or a fatality.

Inclement weather also affects the stability of the deck and the worker when operating the winch. These secondary considerations increase the likelihood of a worker falling or otherwise interacting with parts of the rotating barrels of the winch which are presently unguarded.

#### Control or prevention measures

- Engineering controls - obligation holders should consider:
  - installing appropriate guarding to prevent the risk of workers being caught in any of the moving parts
  - replacing the capstan or windlass style winch at deck level with a substitute plant item on the gantry level of the vessel to minimise human interaction
  - installing emergency stop buttons on or near the winch to immediately disengage the rotating parts.

- Administrative controls should include:
  - training and information based on the manufacturer's guidelines for safe operating procedures
  - consideration regarding the type of clothing worn when operating or working near these types of winches (e.g. wearing close fitting jackets with elasticised waist and sleeve cuffs to prevent entanglement).

### **Additional information and legislative requirements**

- [Modifying plant, machinery or equipment](#)
- [Managing risk](#)
- [Training staff](#)
- [Workplace Health and Safety Act 1995](#)
- [Plant Code of Practice 2005](#)
- [Risk Management of Practice 2007.](#)

### **More information**

For more information visit the WHSQ website at [www.worksafe.qld.gov.au](http://www.worksafe.qld.gov.au) or call the Workplace Health and Safety Infoline on 1300 369 915.

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