# IMCA Safety Flash 20/20

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 Leg entanglement from Tag Line during cargo operations

## What happened?

An AB got his leg entangled with a tag line during lifting operations. The incident occurred when a vessel was alongside a rig offloading cargo. The AB attached the aft tag line to a container, then laid out the tag line on deck and proceeded to inform the crane operator to lift the container. As the container was lifted from the deck, the tag line entangled the right leg of the AB and began to lift him from the deck. He was able to grab the tag line with both hands preventing it from constricting his thigh and so preventing a serious injury. Although he had a radio he was unable to use it as both hands were preventing the rope from tightening around his leg.

The other AB on the deck upon seeing the incident immediately radioed to the crane operator to lower the load and the AB was released.

## What were the causes? What went wrong?

- Clear deck policy was not considered in the risk assessment in the context of cargo operations;
- There was limited situational awareness.

#### Members may wish to refer to

- Lost time injury (LTI): Crewman injured foot during offshore renewables mooring operation
- High potential near miss: slip on tag line during crane operations
- Near-miss: Trapped tagline pins banksman against stanchion

Applicable Life Saving Rule:

Approximate location of AB (red oval)







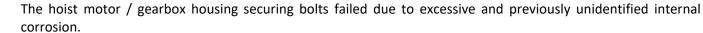
# 2 High potential incident: gantry hoist failure

## What happened?

An electrically powered gantry hoist failed whilst under load dropping cargo and lifting equipment to deck. The incident occurred during a lift of 500kg

of palletised provisions onto the vessel. The failure resulted in the provisions falling onto the deck. The gantry hoist housing included a chain box containing approximately 10m of 10mm chain weighing approximately 19 kg which dropped 4m (12ft) onto the deck.

There were no injuries. However, there was potential for serious or fatal injury.



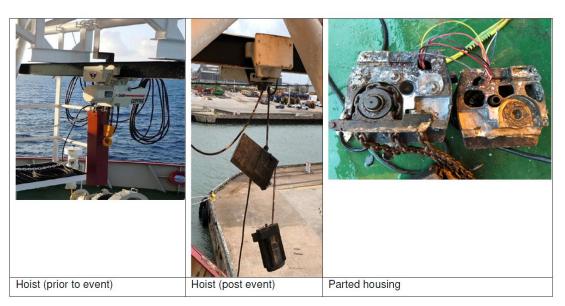
What were the causes? What went wrong?

## What actions were taken?

- Review and improvement of:
  - Procurement process to emphasise the importance of ensuring that equipment is selected by a competent person, is suitable for its intended purpose and operating environment;
  - Mechanical lifting equipment procedure modified to further emphasise the importance of complying with the procurement process and the manufacture's installation, use and maintenance requirements;
  - Enhanced arrangements for the management and control of equipment maintenance and inspection records and general record keeping;

## Members may wish to refer to

- IMCA SEL 019 Guidelines for lifting operations
- Two short "Are you prepared to work safely?" videos: Lifting operations, Lifting equipment
- Chain hoist failure resulting in a serious near miss
- Pallet Lifter Failure







# 3 Safe use of FIBC (Flexible Intermediate Bulk Container)

## What happened?

A FIBC (Flexible Intermediate Bulk Container) containing 36 sand bags weighing approx. 25kg each was being lifted from the quayside to the vessel.

As the load was lifted to approximately 1 metre, there was a routine inspection of the load to check the handle loops and that the base of the bag was ok before lifting. The FIBC was raised to 3–5 metres when a distinctive tearing / ripping sound was heard, it was then the FIBC handle and stitching tore and the 900kg of sand bags fell onto the quayside. There were no injuries.













## What actions were taken?

## Always

- Inspect prior to use ensuring they are:
  - free from damage that can compromise its strength;
  - free from any UV degradation (due to sunlight exposure);
  - free from chemical damage;
- Lift following manufacturer and supplier's instructions;
- Ensure the landing area is clear of sharp and protruding edges;
- Ensure the filled FIBC is stable and secure during transportation;
- Store in a suitable location protected from UV radiation and rain (long periods of storage);
- Pad out forklift forks when lifting through lift handles to eliminate sharp edges.

## Never

- Drag or push FIBCs;
- Stop/start suddenly when lifting (shock loading);
- Allow suspended load to swing uncontrollably;
- Lift by steel wires or similar devices which may present sharp edges or rough surfaces;
- Use an FIBC which has exceeded 2 years from the date of manufacture;
- Lift over personnel.





Safe Mechanical Lifting Note: If there is any doubt over the integrity of the FIBC, replace the FIBC or use a metal transfer basket/half height

Members may wish to refer to

- Lifting Operation Resulting In Dropped Objects From Flexible Intermediate Bulk Container
- "Are you prepared to work safely?" videos: Lifting equipment Lifting operations
- IMCA SEL 019 Guidelines for lifting operations

## 4 MSF: Potential dropped objects – nets or tarps to cover cargo?

#### What happened?

Marine Safety Forum Safety Alert 20-04 describes a potential dropped object (PDO) during cargo operations. A wooden baton of the type often used to support covers attached to open topped Cargo Carrying Units (CCUs), was discovered jammed against the underside of a cargo basket.

Finding this PDO prompted the operator to carry out an assessment of the suitability and need for wooden batons on open top CCUs. Some of the assessment findings are noted here:

#### What were the causes? What went wrong?

- Wooden batons are normally used to support the tarpaulin cover used on open top CCUs;
- Wooden batons are only held in place by being jammed against the sides of the open top;
- There is generally no securing mechanism holding the wooden batons in place;
- Batons need to be 'knocked out' before heavy cargo is lifted from the CCU by crane;
- Knocking out batons from high sided CCUs can result in the baton falling onto the persons removing it.

These findings prompted another assessment comparing the use of tarpaulins versus the use of nets as top covers for CCU's, below are some of the assessment findings:

Net Covers	Tarpaulin Covers
No significant weight	Much heavier than nets to manhandle
Multiple tie down points	Limited tie down points (eyelets)
Less prone to ripping and tearing	Unusable if ripped or torn
Easily and cheaply repaired if ripped or torn	Disposed of when ripped or torn
Doesn't hold water	Holds water (extra weight when lifting)
Doesn't require wooden batons for support	Requires wooden batons for support (PDO)
Doesn't catch in the wind	Catches in the wind, potential to tear off
No protection from the environment	Provides protection from the environment

The MSF safety alert concluded: Tarpaulins and batons do have their uses when required for covering cargo, but their use should always be risk assessed and evaluated against other cover types which may be readily available. The risk assessment should include but not be limited to:

- The type of cargo and the effects of its exposure to the environment;
- The manual handling issues that may be encountered by the end user;
- Consider the use of 'cord strap' or similar instead of wooden batons to support covers. (particularly on high sided open top units)

Applicable Life Saving Rule:





See here for full Marine Safety Forum Safety Alert 20-04.

## 5 Manhole opened and not correctly closed

#### What happened?

During a safety round on deck prior to cargo operations it was noticed that a manhole had been opened in order to pump out ballast water to replace a faulty valve.





#### What went wrong?

The manhole cover or hatch nuts had been completely removed and the cover was only placed back on top and was left completely unsecured. There was no barrier tape nor any warnings placed to indicate that the cover was open and unsecured.

- Bypassing safety controls:
  - Crew did not follow company procedures;
  - No warnings were posted;
  - It did not occur to the crew doing this work to consider the potential risks of persons falling inside or slipping from standing on the manhole cover while so placed and not secure.

#### Members may wish to refer to

- LTI: step into open deck hatch causes fall [causal factor: the forward hatch was left open when the lifting operations started. There were no barriers around the hatch.]
- Near-miss: Open hatches left without barriers [10 hatches were left open for ventilation without any protection/control measures or any barriers for each hatch.]
- Near miss: engine room hatch left open without barriers [The hatch was not closed when not in use if the hatch was required to be left open, suitable barricades and warning communication should have been in place.]