

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

I Pipe Stacking Fatality

The following incident occurred at an onshore fabrication facility, but provides an important reminder of areas that must be considered when planning for situations where loads and stacks have the potential to become unstable.

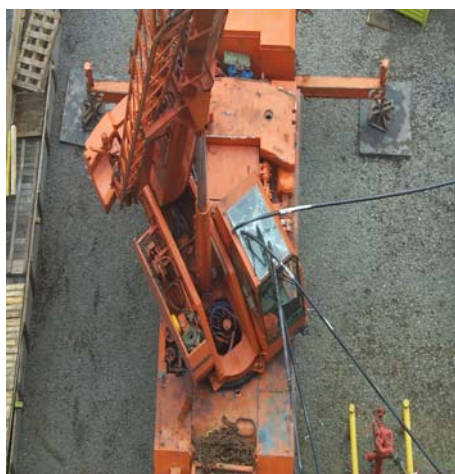
A rigging crew, made up of one crane operator and two riggers, had been assigned to removal several 24-inch diameter steel tubulars from a random stack in a warehouse stock yard. The pipes had been stacked and chocked to be no more than three layers high. During the operation, a tubular in the middle of the bottom layer needed to be retrieved. To gain access, the crew began rearranging the other tubulars. The two riggers were positioned on each end of the stack to assist the crane operator with hook-up and to guide the tubulars out using tag lines.

When the required tubular had been removed, it left an open slot with two unstable stacks either side of it. For reasons that cannot be verified, one of the riggers then stepped into the slot – it is believed he was either placing chocks or following the tag line on the tubular just removed from the slot.

While his foot was in the slot, the force of a tubular on the second row pushed down, causing the tubular to one side of the slot to roll into the slot. The rigger was caught between the two pipes and received severe crushing injuries to his pelvic area. He was transported to the local hospital, but later died from the injuries he had sustained.

The following investigation identified the following areas for concern:

- ◆ The warehouse stockyard, not being an area of regular production activity, had not been regularly inspected to ensure the proper storage of tubulars;
- ◆ On the day of the incident, the entire rigging crew, including those involved in this incident, had met to conduct a pre-shift 'toolbox talk' meeting and job safety analysis (JSA), but the JSA had only covered work being done at a project site in another part of the yard, which at the time had been considered a higher risk – this task had been considered routine;
- ◆ Best industry practice is to remove all pipe from upper layers before removing a tubular from the bottom. This had not been routine at the yard prior to this incident.



The company involved has noted the following action points resulting from its investigations:

- ◆ All areas are to ensure that detailed rigging procedures, coupled with a comprehensive rigging training programme, are developed and implemented, to cover best industry practices of handling, stacking and storage of materials;
- ◆ Existing field safety assessment programmes are to be reviewed to ensure all areas of the yard (and of vessels) are covered, including non-production areas such as warehouses and stock yards;
- ◆ All areas are to ensure, through proper training, that employees (particularly supervisors) know how to conduct task risk assessments/JSA's for all of their daily jobs, including inspections of work areas as part of the JSA and identification of adequate controls for lowering risk to as low as reasonably practicable;
- ◆ Each area's management is to stress to its employees the company's expectations that any unsafe work be stopped immediately.

2 Dangers from Insecure Crane Loads

This crane incident also occurred onshore, but the lessons to be learnt are equally applicable to members' lifting operations.

During a major turn-around, fan tubes were being lifted using a tube tray. During the lift and while the tube tray was directly over the crane operator's cab, the tube tray deviated from horizontal, causing the fan tubes to slide off. They plunged like arrows into the operator's cab, piercing the back and seat of the operator's chair. Amazingly the operator suffered only minor scratches to one leg.

This is a reminder that all 'lifts' must be taken seriously, from the lightest and least complex to the heaviest and most complex. Proper rigging and securing of loads is of vital importance and saves lives.

3 Securing of Office Equipment on Vessels

A member has reported the following incident which occurred onboard one of its vessels. The vessel was in heavy seas when it was hit by several 20-25' swells, causing the vessel to heel over to 35°. This resulted in serious disruption throughout the accommodation areas, with the Office being among the worst effected. While an employee tried to prevent a computer from falling off of a desk, he was hit by filing cabinets and a photocopier which had broken loose from the opposite side of the Office. He turned to protect himself, but was struck on the chin by one of the cabinets, resulting in a minor laceration and also in jarring to the chin.

The company involved has issued a reminder of the importance of ensuring all fittings, items and equipment in accommodation areas and on deck are sufficiently secured to prevent movement in heavy weather, thereby minimising the risk of injury to personnel and/or damage to equipment.

4 Near Miss – Broken High Pressure Oxygen Fitting

A member has reported that while recovering an inflated lift bag over the bow bulwarks on one of its vessels, a regulator attached to an oxygen pack was broken off at the bottle nipple on the high pressure side of the regulator. The king valve was quickly closed and there was no harm to personnel or equipment. Nevertheless, the potential hazard from a high pressure oxygen escape is obvious.

In its investigations, the company noted that the regulator and associated piping and hose had extended beyond the framework of the oxygen pack and into the work area.

The company has issued the following recommendations as a result of its investigations:

- ◆ Ensure fittings used are suitable for the task involved. Where such fittings extend the overall length before the regulator, they add leverage and therefore increase the likelihood of breakage;
- ◆ Plumb in such a way that the regulator, its associated fittings, gauges and hose reside within protective framework – ideally that of the bottle rack or quad skid. An appropriately rated brass pipe street elbow should be used after the bottle nipple if necessary, to keep the regulator and fittings within the protective framing;
- ◆ Wherever possible, bottle racks and quad skids should be positioned in such a way that regulators are away from work areas and walkways;
- ◆ If high pressure bottles must be located in a work area, it must be ensured that job safety analyses associated with the tasks in that area include the potential hazards associated with working around high pressure bottles.