

Marine Safety Flash

A14-03 (3rd June)



Sling failure while lifting Yokohama fender

Incident Overview

Whilst preparing to move the barge closer to the Jetty work site, it was identified that 3 Yokohama fenders required relocation from the water on starboard side of the barge to their holding cradles on the barge deck. The fenders had a pre-rigged sling arrangement fitted. This consisted of a wire sling shackled to each end of the fender running to a central hammerlock shackle with a 3 tonne SWL, 3 metre long 'Superflex' sling rigged for the crane hook off this.



During the lifting of the 2nd fender, while the fender was between 2 and 5 metres above the holding cradle, the Superflex sling failed, causing the fender to fall, contacting a vertical post on the fender holder. The fender's structural integrity was compromised, causing the fender to deflate. The fender came to rest in the holding frame.



Key Findings

The weight of the fender exceeded 3 tonnes.

- The failed wire sling did not have the required identifying marks, test dates or SWL stamped on it
- The wire sling was in a poor state visually
- There was no record of sling inspections located
- The rigging set up for the lift was not an approved method of rigging: - the main sling and the 2 Superflex slings were joined by a hammerlock fitting.
- The failed rigging gear was left 'in situ' on the floating Yokohama fenders, making inspection and preventative maintenance difficult.
- Riggers had failed to identify the poor condition of the sling and that the weight of the load exceeded the SWL of the sling

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Lessons Learned

- The importance of visual inspections and prestart checks on all equipment cannot be underestimated
- Quarterly inspection of equipment may have prevented this event from occurring.
- The importance of all rigging gear being inspected before commissioning for compliant identification markings and the registration of all gear may have prevented this event from occurring.
- Maintenance and Quality control systems effectiveness is driven by operational discipline. The loss of this discipline allowed the breakdown in recording and inspections and allowed a non-compliant sling to be used on the project.
- The use of slings with a SWL below that of the loads being lifted and non-compliant sling set up points to a lack of supervision and competence among lifting personnel.
- Employers and supervisors need to ensure they have robust systems in place for confirming qualifications, competency and experience of rigging personnel.

Recommendations

- Leaving slings fitted to equipment, where inspections of those slings is difficult shall be avoided
- Contactors to audit all lifting gear at regular intervals to ensure it is on a register, compliant with project requirements and discard all rigging gear that is not compliant or damaged
- Rigging personnel are re- tested to ensure competence with inspection and with rigging techniques.
- Company rigging and lifting personnel conduct regular inspections of rigging registers and rigging gear at worksites
- The roles and responsibilities of Supervisors in relation to supervising their personnel must be clearly stated and enforced