

COS SAFETY SHARE

WHAT WILL WE DO TO PREVENT THIS FROM HAPPENING HERE?

HI-PO: WORKER FALLS THROUGH GRATING OVER CAISSON

What happened?

While the Crane Operator was lowering tools, two Construction Crew Members were on the Plus-Ten Deck to assist with tool movement. The load was stopped for transfer of direction. At that time, the Individual Involved decided to move to the opposite side of the load to hold the second tagline and help steady the load. To stay out of the line of fire underneath the load, he tested the grating in the port side caisson with one foot, and then he fully stepped onto the grating.

What went wrong?

Upon placing his full weight on the grating, the 2 sections of angle iron securing the grating to the inside of the caisson gave way on the side where he stepped. The Individual Involved fell back but was able to catch the top of the caisson with his arms while partially being supported by the angled grating still attached on the opposite side of the caisson. He held himself in place by pushing his back against one side of the caisson with one foot pushing against the partially attached grating. The 2nd Crew Member heard the event and was immediately able to grab the Individual Involved by the harness.

The Individual Involved pushed off the partially attached grating, and, with the assistance of the 2nd Crew Member, he exited the caisson and rolled onto the Plus-Ten Deck.

No one was injured.

Why did it happen?

- Pre-job planning did not identify risks associated with personnel positioning when receiving the load.
- Grating inside caisson was not designed for human occupancy; however, there were no barricades or indications not to enter the caisson.
- It was determined that an underlying cause of this incident was excessive corrosion at grating support welds and support structures, and that multiple inspections either missed or excluded the caisson grating, or only visual surface inspections were performed.

What areas were identified for improvement?

- Design and install a barrier around the open caissons to prevent personnel access. Remove existing grating inside caissons.
- Review existing grating inspection program for frequency, scope, location identification, evaluation methodology, documentation, and corrective action/resolution. Identify and correct gaps to ensure that the grating inspection program is comprehensive, prevents future grating failures, and identifies any needed modifications for safety and accessibility.
- Review the Work Requirement for crane operations to ensure requirements are sufficient to cover blind lifts, limited access locations, taglines, and push poles – specifically around hazard recognition, pre-planning, and personnel positioning for proper load stabilization.
- Evaluate the need to write separate permits/JSAs for activities involving blind lifts, restricted access, or non-routine activities.

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