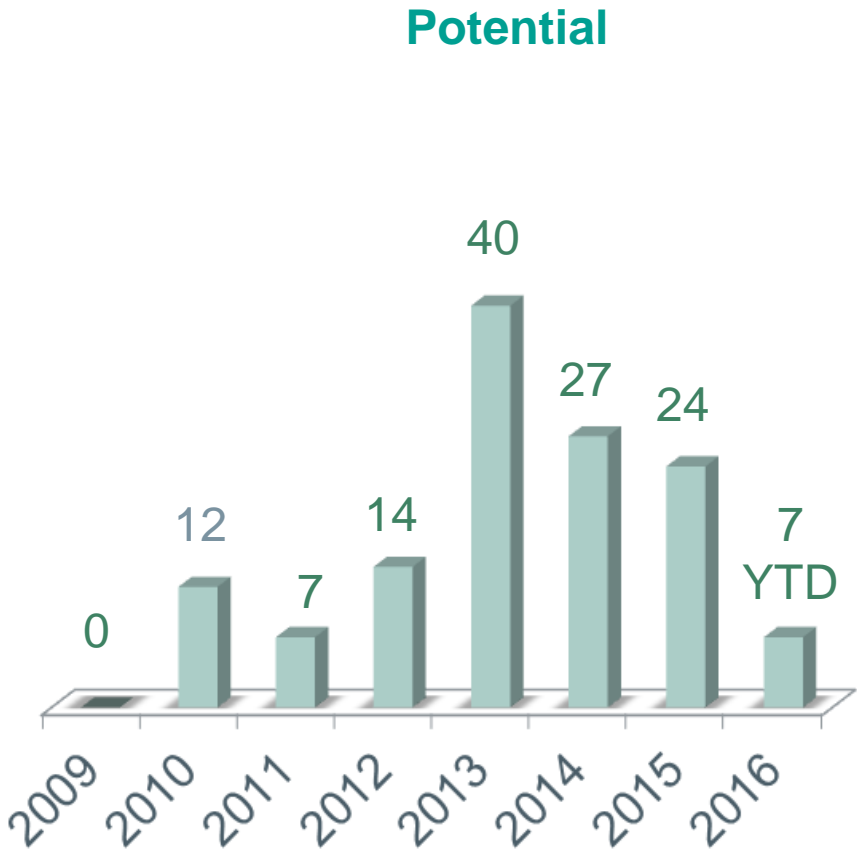
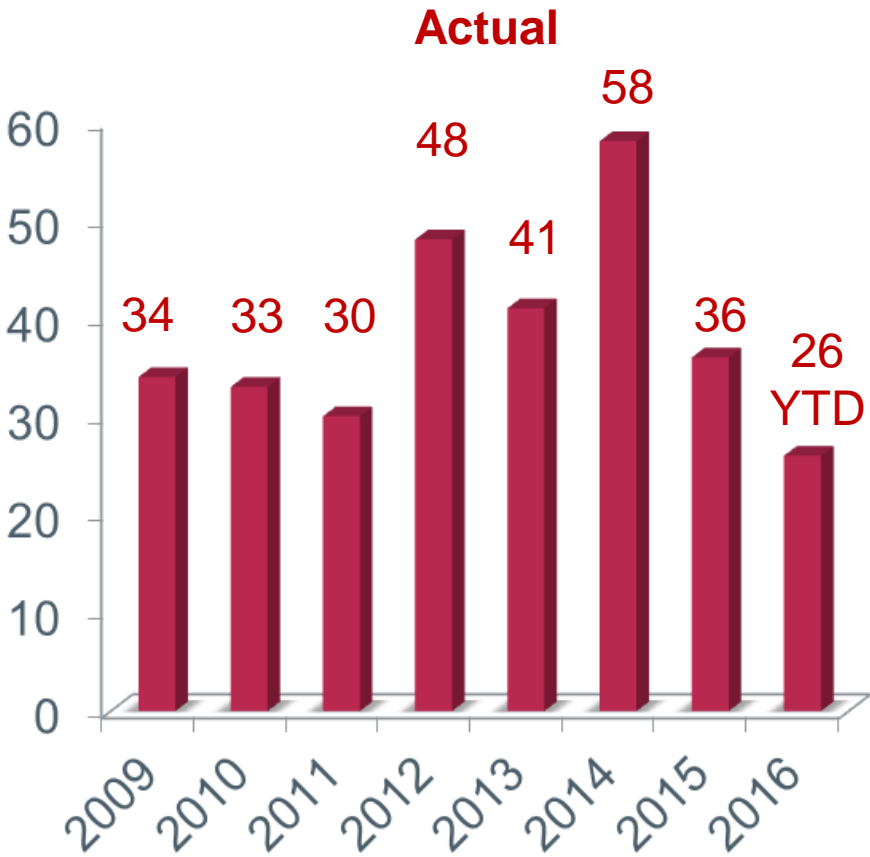


Prevention of Dropped Objects Crane Theme October 2016

By Lenny West



Overview of All Sites Dropped Objects Historical Incident Stats 2009 to 15th Sept 2016



HPI Dropped Object Incident

Animation



Focus on PDO on Site Cranes Industry Crane Dropped Object Safety Alerts



Focus on PDO on Site Cranes

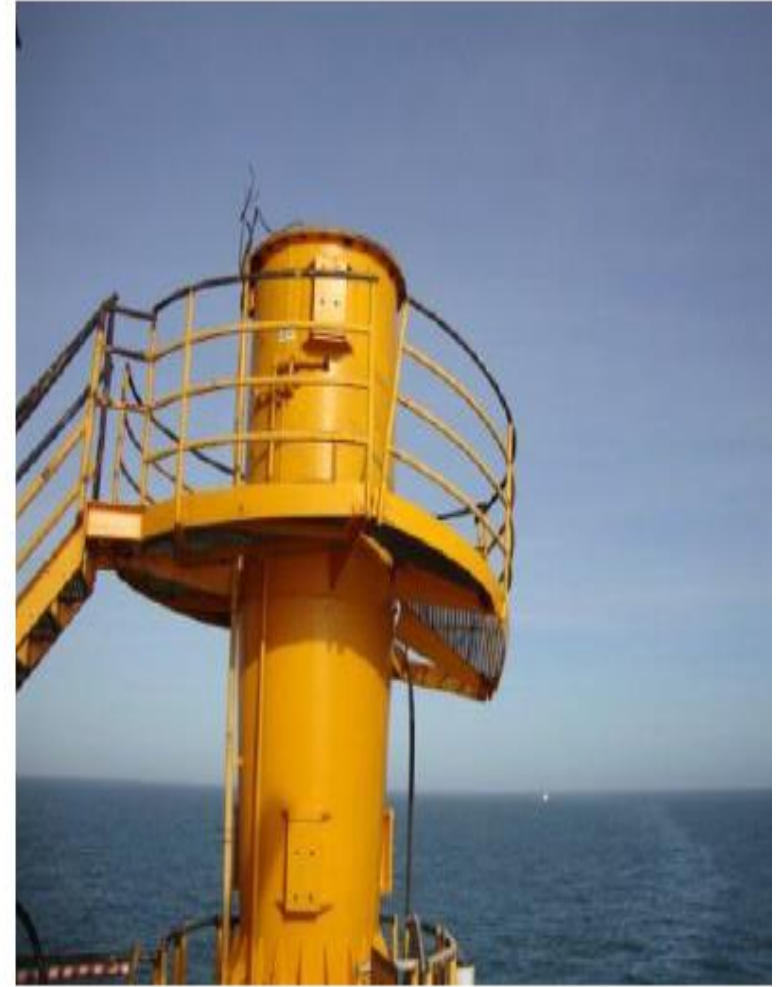
Industry Crane Dropped Object Safety Alerts



Focus on PDO on Site Cranes Industry Crane Dropped Object Safety Alerts



Focus on PDO on Site Cranes Industry Crane Dropped Object Safety Alerts



Focus on PDO on Site Cranes Industry Crane Dropped Object Safety Alerts



Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Socket Box)



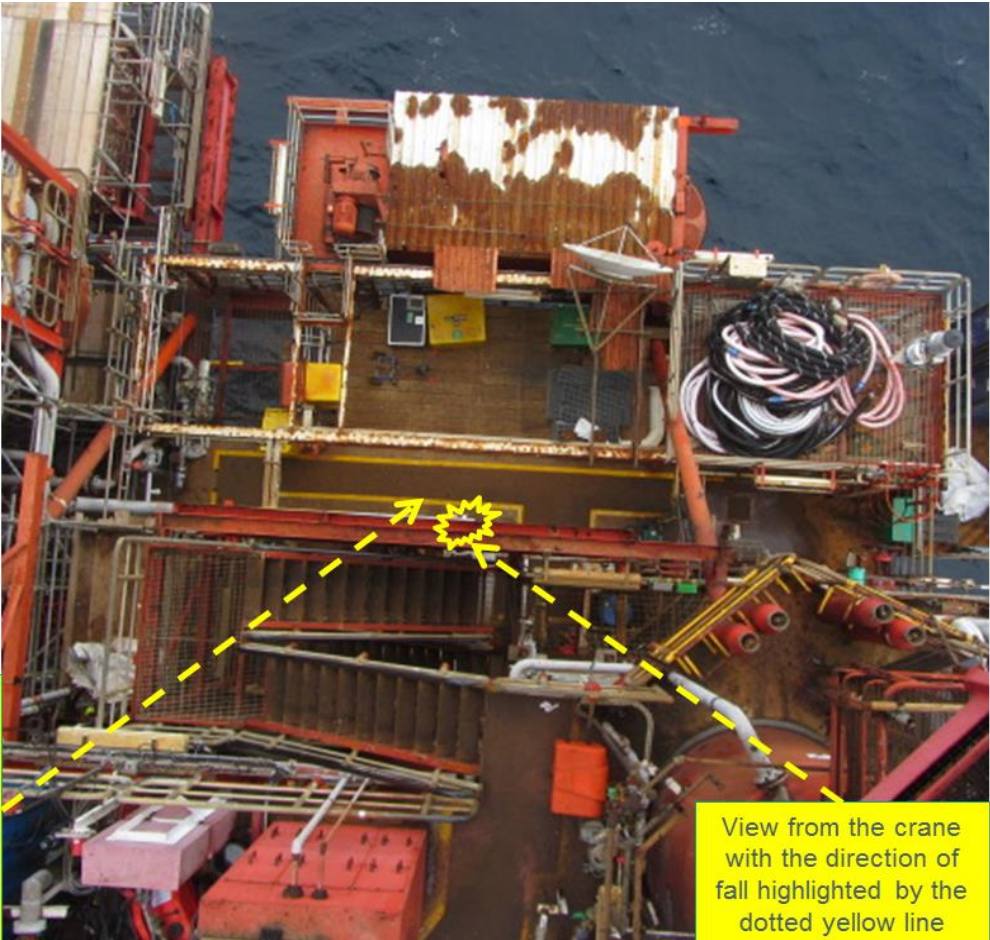
Socket set dimensions
45cm long
19cm deep
5cm high

Weight 6kg (box & contents)

The box opened on first impact,
spilling the contents.

The box itself was the heaviest
item at 1.6kg.

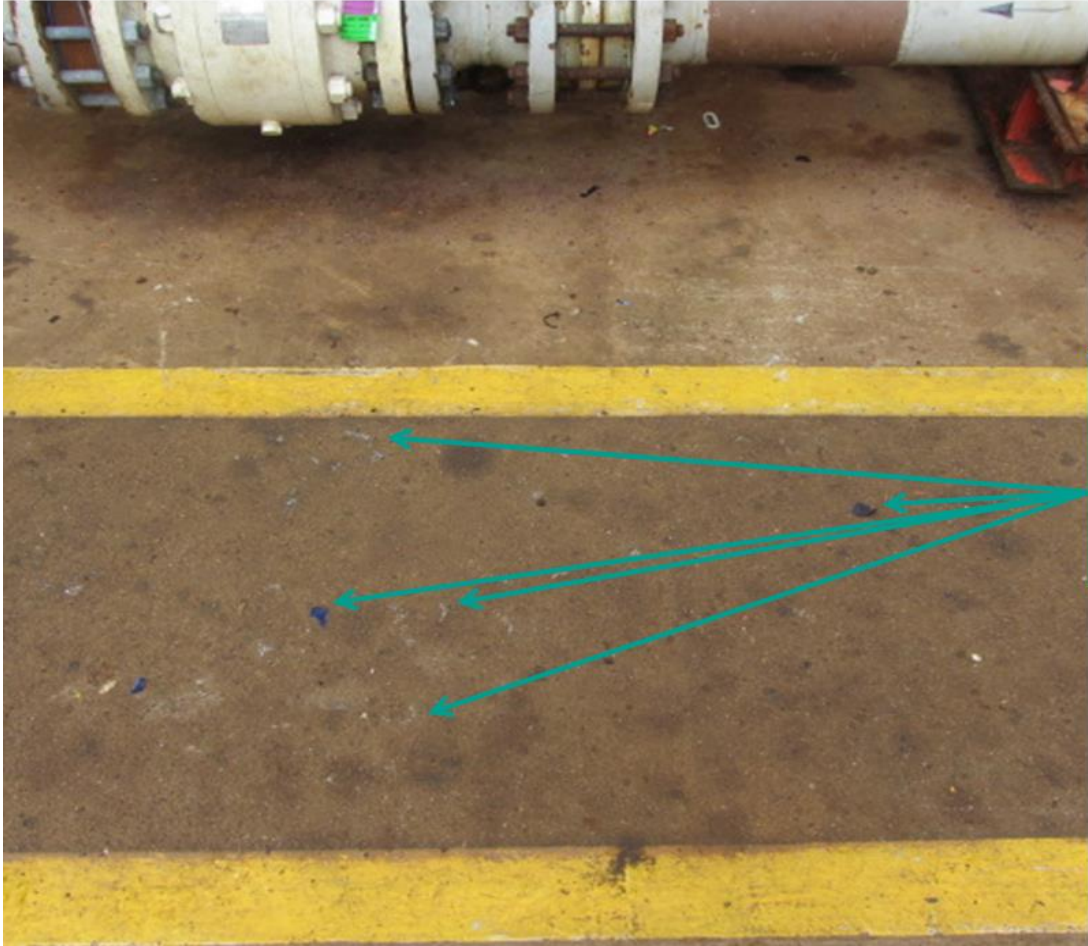
Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Socket Box)



Final impact and resting place of socket set on the cellar deck walkway 7.5mtrs below where the toolbox impacted on its descent

View from the crane with the direction of fall highlighted by the dotted yellow line

Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Socket Box)



Several half socket shaped impact marks and pieces of the blue plastic inner tray on the walkway of the cellar deck

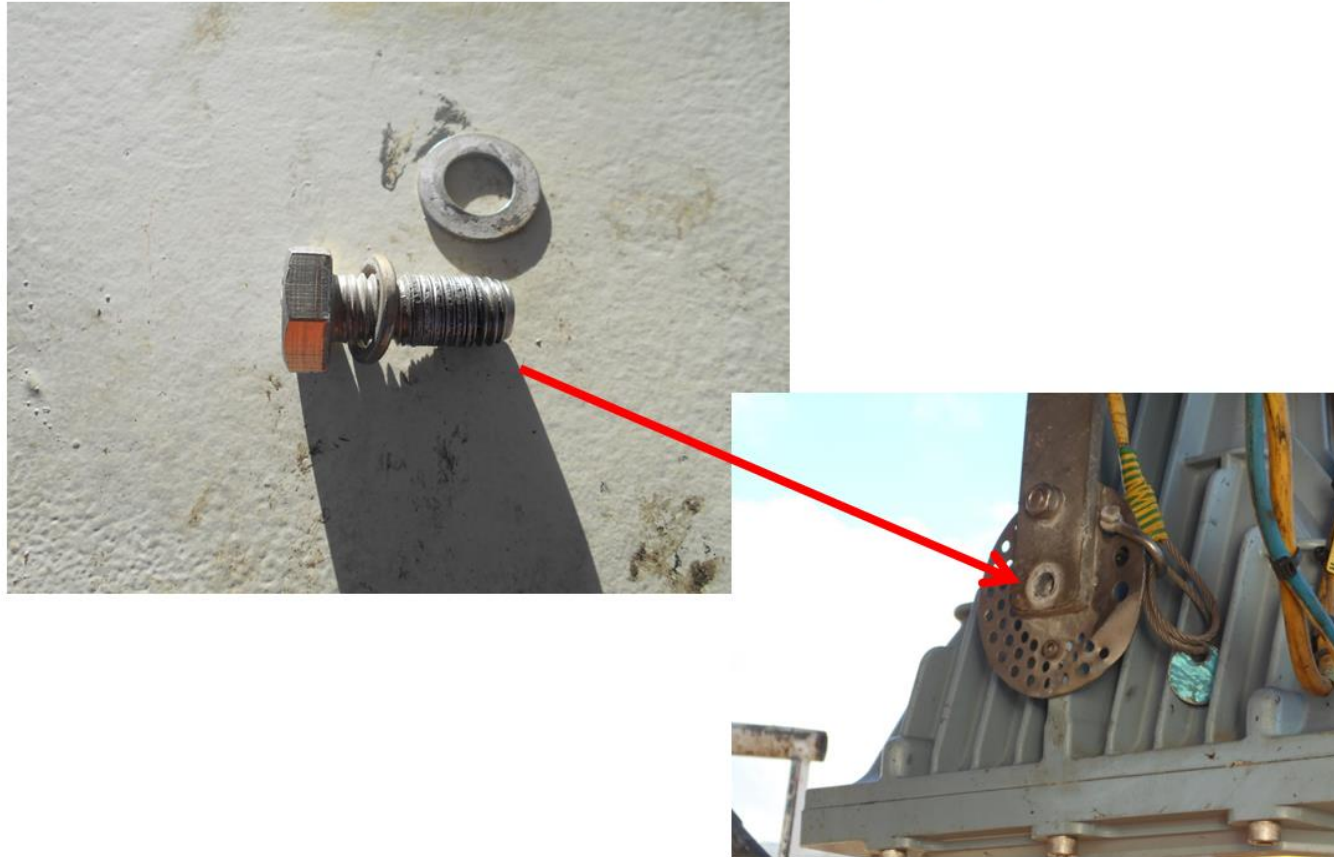
Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Floodlight)

Position of floodlights fitted to AFT crane Boom tip



Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Floodlight)

Example of missing bolt, which was the same as from the adjacent floodlight which threads stripped on tightening.



Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Light Fittina)



The light fitting became detached from one end and the weight caused the other bolt and earth strap to fail in a pendulum effect with the fitting coming to rest against the gantry below the fitting and suspended from the supply cable.

Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Air Intake Louvre)

Dropped Object



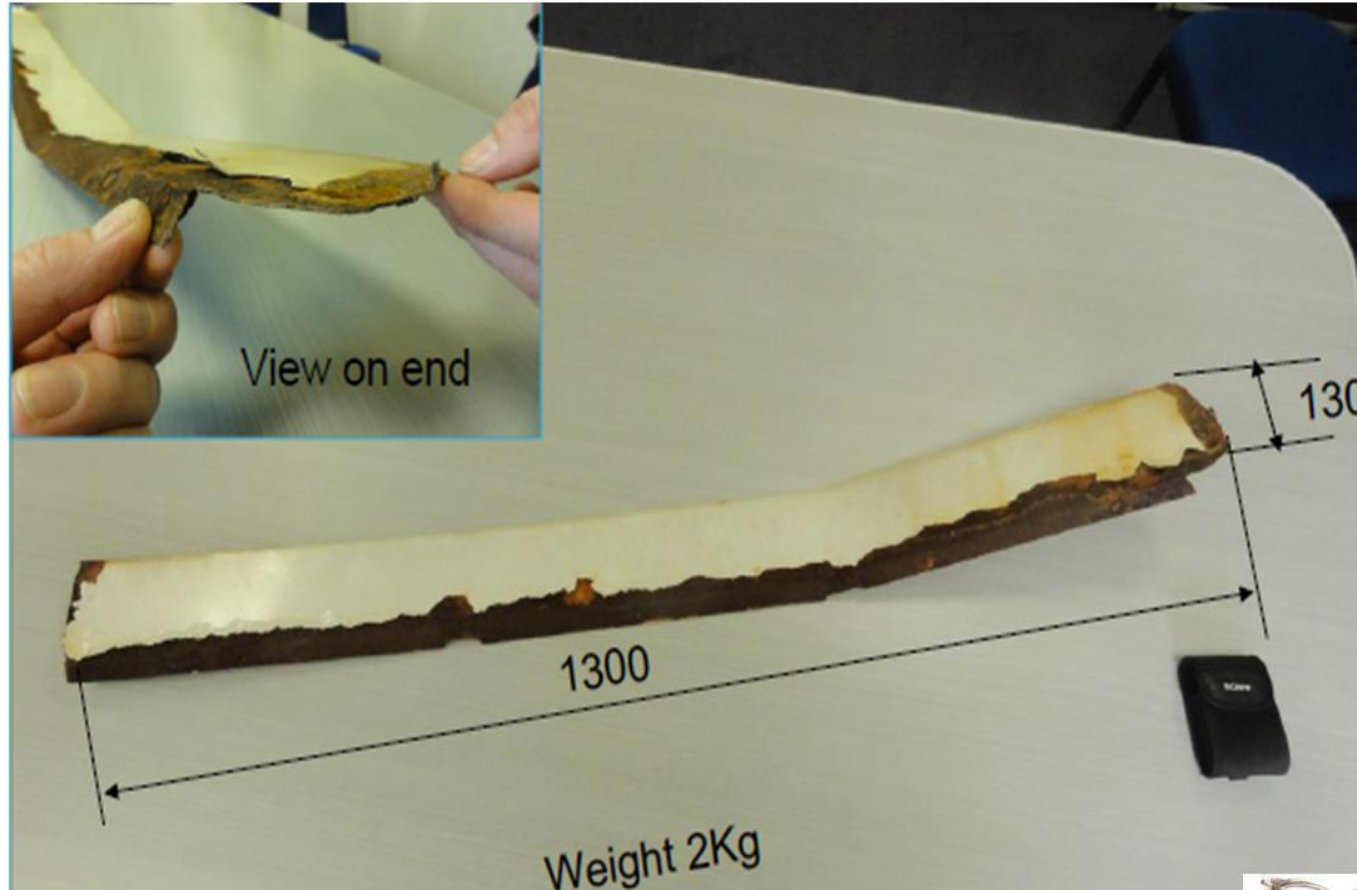
Engine air intake
Louvre landed on
the helideck

Missing Louvre



Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Air Intake Louvre)

Dropped Object



Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016



As found condition of the 4th Plank

Inspection team removed loose area of plank as a short term measure. The plank is still supported in the centre and the opposite end and is secure in this condition.



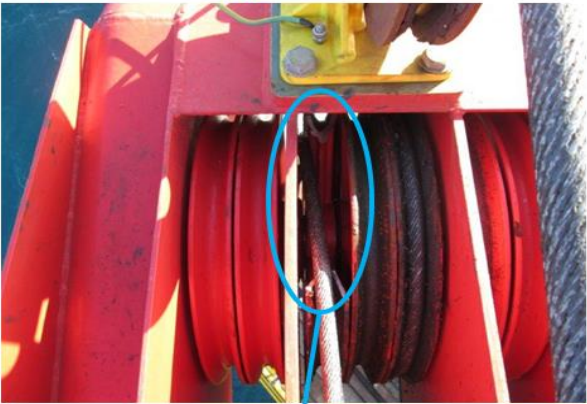
Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Whip Line Sheave)



Crane boom from below



Main block Whip line



Missing / damaged section of main block cluster sheave

Crane boom from above



Keeper bar Whip line sheave

Whip line slipped out of whip line sheave and riding on top of main block sheave.



Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Whip Line Sheave)



Initial impact point on top of Optima workshop container (starboard aft main deck)



Final resting place (starboard aft pipe deck walkway)



Dropped Object – Weight 1.9Kg, Size 38cm x 6cm x 5cm

Crane Boom Safety Wire and Bracket Assembly



Broken Bracket
Weight 44.16 grams

Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Inclinometer)



Final position of inclinometer on pipe deck



Sheared screwed rod as found on Pipe Deck

Dropped Object from Repsol Sinopec Resources Cranes 2013 -2016 (Inclinometer)



Inclinometer in position on West Crane, for reference



Inclinometer pointer and bracket East Crane, post incident

Action required by all Sites

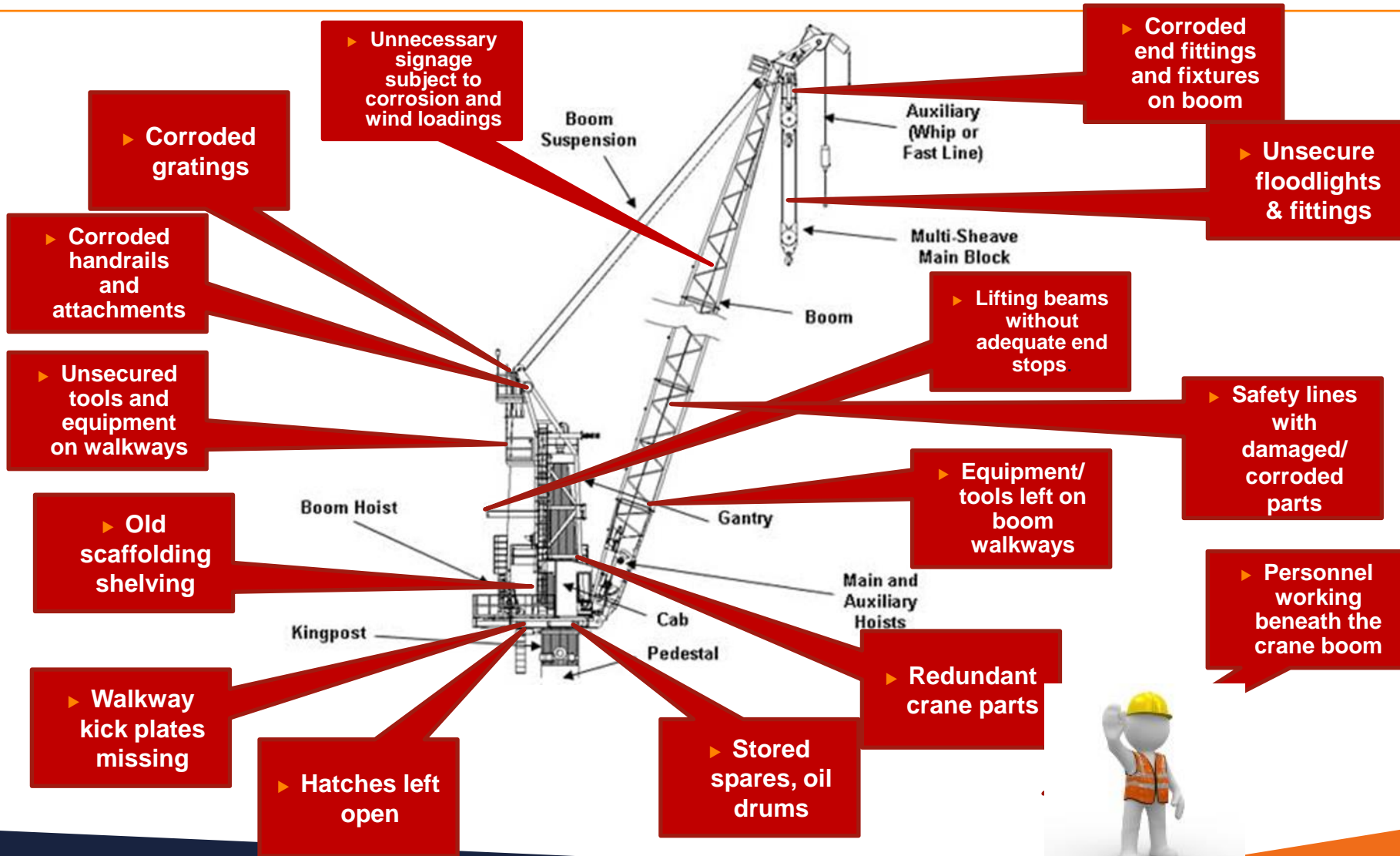
- ▶ Time for a health check on your Crane
- ▶ Winter is on it way lets check before the bad weather arrives.
- ▶ Get someone that is independent too the Crane Ops/Tech to go up and check
(Site HSEA to Delegate)
- ▶ Recorded findings in the Site DROPS register.
- ▶ Findings to be Risk Assessed.
- ▶ Relevant Work Orders to be Raised
- ▶ Synergi Case to be Raised
As per requirements of the
Drops Procedure HSE-PRO-TLM-080

The next slide provides a good starting block for what to look for!



Pedestal Crane PDO

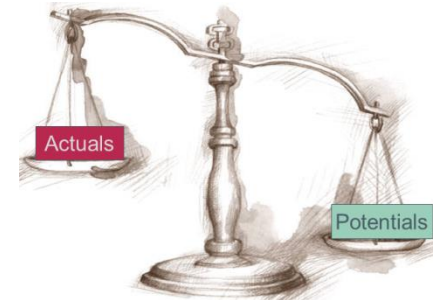
Potential hazards taken from Site cranes reports



What are the top 5 causes of dropped objects at our Sites during 2016 YTD



1. Inadequate Securing
2. Poor Hazard ID and Risk Assessment
3. Inadequate Maintenance
4. Corrosion
5. Failed Fixtures & Fittings



Summary

Find it and secure it before it falls !

DROPPED OBJECTS POTENTIAL KILLERS

FACT:

Dropped objects are a common problem for everyone in the Oil & Gas and Marine industries

FACT:

The number of dropped objects within our industry is intolerably high

FACT:

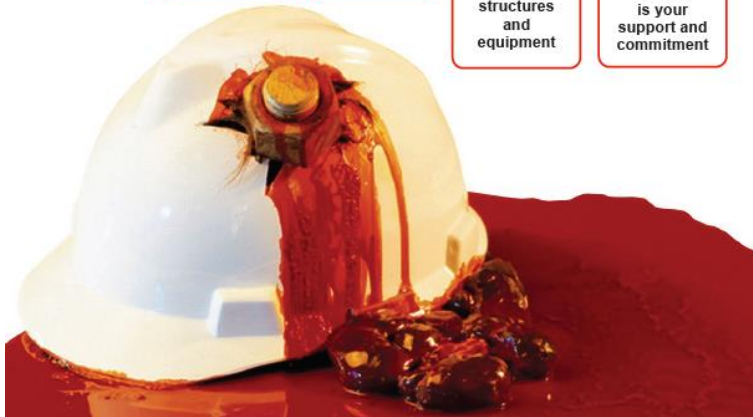
Serious injuries and fatalities occur all too regularly as a result of dropped objects

FACT:

The DROPS scheme is a common solution to eliminating injury and damage to people, structures and equipment

FACT:

The one ingredient critical to the success of DROPS is your support and commitment



Golden Rule #8

8 PREVENT DROPPED OBJECTS

We prevent dropped objects by:

1. ensuring all tools, equipment and materials are secured;
2. taking measures to prevent dropped objects when working at height or over grating;
3. erecting barriers over drop zones below worksites;
4. removing all tools, equipment and materials from the worksite on completion of work; and
5. inspecting structures and equipment at risk from falling.

Thank you
Any Questions

