



revention of Dropped Objects
Drops Forum 19th Sept 2017
By Lenny West

Overview



To the end of Aug 2017across our 12
Assets we have had <u>46</u> dropped objects =

3 reportable drops object incidents including 1 HPI dropped object incident, (no injuries)

Trends

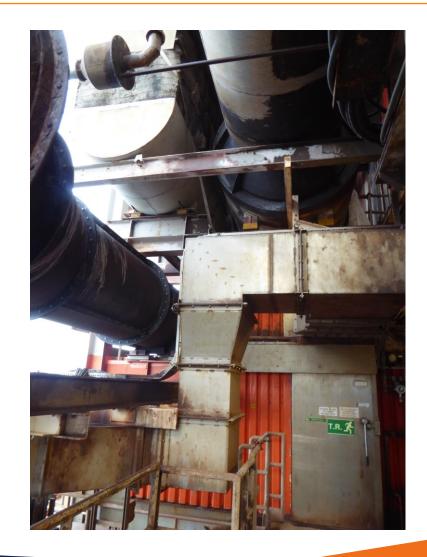
- 8 Dropped Cable tray/Unistrut
- 4 Dropped Insulation Panels/Cladding



Dropped Cladding High winds Jan 2017



Panel weight 5 kg



Emergency Generator exhaust ducting dropped 9mtrs to deck. HPI

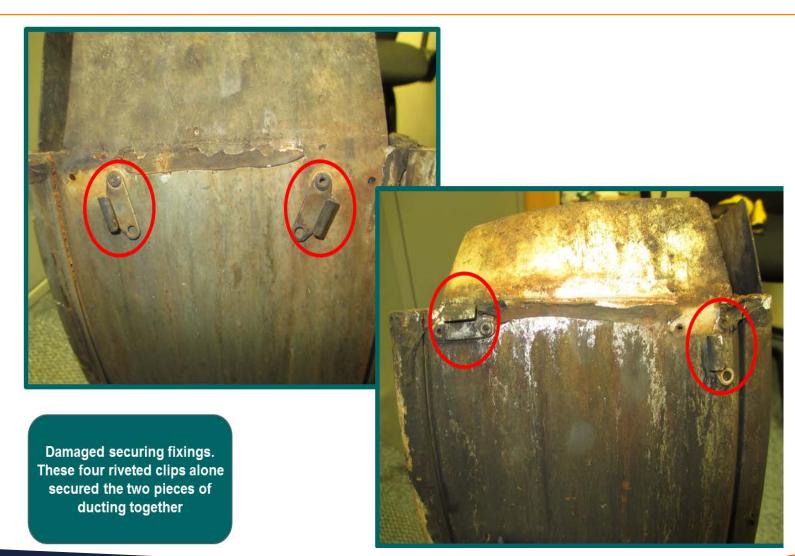




Root Cause:

The insulation collar & clips have been place for 20+ years. Also due to exposure regarding vibration during start-ups of the emergency generator, insulation being exposed to environment elements e.g. wind, rain, and various temperatures this has been a root cause.

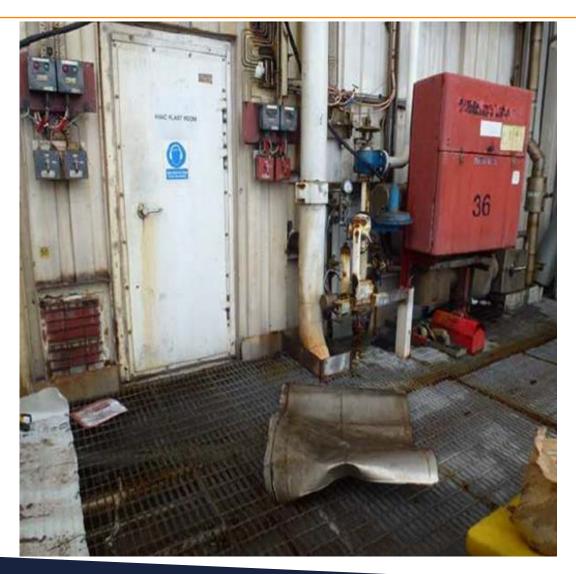




Repsol Sinopec Resources UK

High Potential Incident Dropped Cladding





Root Cause



- Incorrect banding material used for cladding retention
 - 304 grade material instead of 316 material
 - 304 not recommended in marine environments due to low resistance to chloride induced corrosion.

- Metallurgy testing
 - No manufacturing anomalies
 - · Complete mechanical failure
 - Process of chloride pitting
- Accelerating factor
 - Wind direction and speed
 - 25 kts 138deg (southerly)



Examples of Cable tray/Unistrut drops



Both pieces of unistrut; combined weight of 15 kgs





The top 5 causes of dropped objects at our Sites during 2017.



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



Summary



- Over the last couple of years our dropped objects are on the increase
- We have now a Drops Focus Group that meet monthly
 Chaired by an Operations Manager, with members from Drilling, Integrity, HSE &
 Control of Work with the objective to support our Assets in all aspects of
 the prevention of dropped objects.
 (e.g. Inspections, review drops incidents & potentials, worksites drops hazard
 management compliance to procedure).

We would like to share with you a 3 minute animation on a dropped object ESDV Plate



Any questions on the presentation?

Thank you