

Dropped Object Due to Corroded Deluge Flange

SAFETY ALERT

Description of incident:

After landing a lower completion assembly on the drill floor and while retracting the deck crane whip line and twin hook stinger back through the v-door, the twin hook stinger swung to starboard causing one of the hooks to strike a blanking flange on the drill floor deluge line.

The 4.95kg blanking flange detached and fell 4.5 metres to the drill floor, landing approximately 1.5 metres from the nearest person. This incident was classified as potential for fatality as per the industry DROPs Calculator.

Contributing Factors:

The dropped object incident was primarily caused by severe corrosion in the drill floor deluge pipework, exacerbated by a missing support bracket that led to pipe sagging and water accumulation. This corrosion weakened the flange, making it susceptible to impact from the stinger hook. Additionally, the stinger was released in an uncontrolled manner—hooks were not secured or safely guided out—further contributing to the incident.



Figure 1. Drill Floor Deluge Line



Figure 2. Deluge Line Blanking Plate



Figure 3. Location of Drop

Good Practice:

1. Regular inspection and maintenance of deluge pipework is essential to prevent corrosion-related failures. Ensuring pipework is suitably supported to avoid sagging and water traps, and that planned maintenance activities remain robust enough to identify where the potential for corrosion exists is essential (consideration should be given to aging assets). Corrosion and missing supports can weaken the system and increase the likelihood of dropped objects.
2. Lifting equipment, such as stingers, must be handled in a controlled manner. Twin hooks should be secured to prevent swinging and guided out through the V-door or another safe route to avoid striking nearby equipment. Poor handling increases the risk of dropped objects and damage.

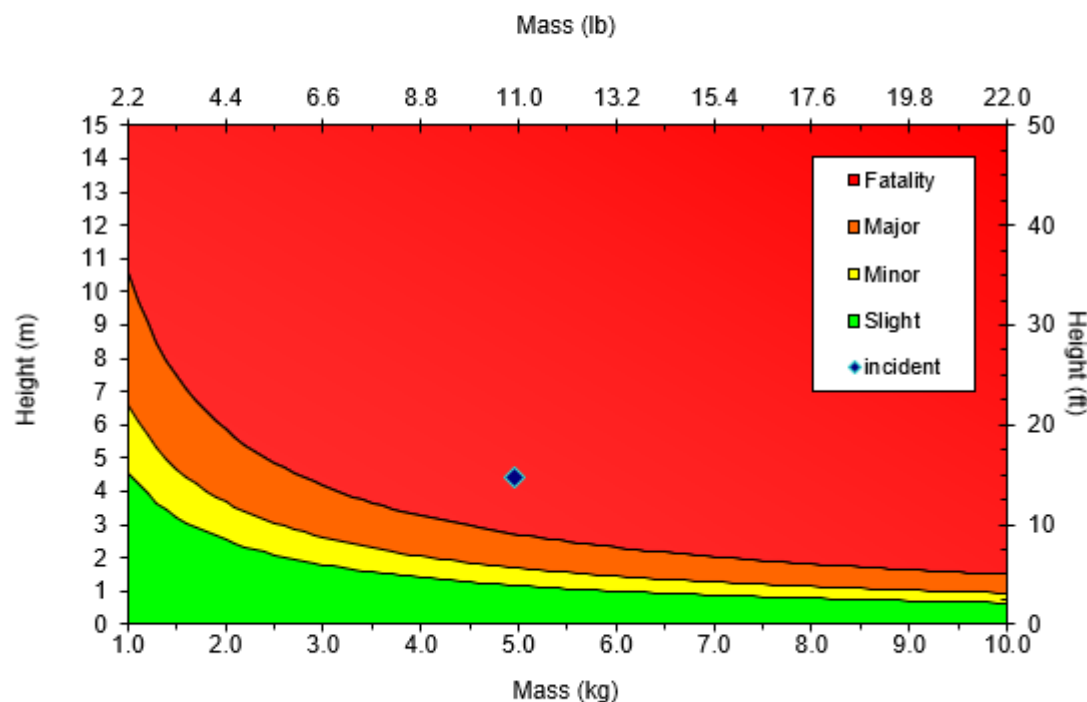
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Outcome Calculator

Height	4.5	m
Mass	4.95	kg
Outcome	Fatality	218.44 Joules



NOTE: The graph above displays an 'incident' icon for visual purposes only and the axis is restricted to 15m / 10kg. The **OUTCOME CALCULATOR** panel at the top of the page displays an accurate outcome for all input values

Important information for Users

GRAPH FUNCTIONALITY: For full functionality, please Enable Content where prompted. For information, a single Macro is employed in this workbook to rescale the top Mass(lb) axis where applicable.

CALCULATOR ASSUMPTIONS: The Calculator assumes that full PPE is being worn and that the object is blunt (no sharp edges - outcome would be worse).

CALCULATOR ACCURACY: The DROPS Calculator is a guide only and is intended to give a general idea of the potential severity of a dropped object. A detailed and specific risk assessment will always deliver a more accurate calculation of potential severity.

KEY DESCRIPTION

- FATALITY:** Death resulting from an injury or trauma.
- MAJOR:** A Lost Time Incident (LTI). Non-fatal traumatic injury that causes any loss of time from work beyond the day or shift it occurred. Also referred to as Day Away From Work Case (DAFWC).
- MINOR:** A Medical Treatment Case (MTC). A Work-related injury that does not involve death, day(s) away from work, restricted work or job transfer, and where the employee receives medical treatment beyond first aid.
- SLIGHT:** A First Aid Case (FAC). Limited or no injury. Treatment may be limited to first aid.