

## Corrosion of hollow section members on offshore drilling structures

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IMCA's attention has been brought to instances of potentially serious corrosion on certain types of derricks on jack-up offshore drilling rigs.

### What happened?

During the periodical inspection of drilling structures, a significant structural integrity issue has been identified. The derricks affected are mostly all 1.2-1.3m hook load or GNC derricks built in the early 1980s.

The issue discovered is advanced corrosion of load bearing members within hollow section members on certain models of drilling derrick. This corrosion on the derrick members has been shown to be serious enough to affect the performance and therefore the load bearing capacity of these derricks. In the worst case scenario, there is the potential for member failure which could in turn overload other structural members or create a significant structural failure and/or DROPS incident.

Corrosion-related failure of materials as an immediate cause of near misses or even actual incidents is something that has come to the attention of IMCA on a number of occasions recently. members may wish to look into this, particularly where corrosion may be hidden, difficult to access or otherwise likely to be overlooked.

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