

Load chain failure owing to corrosion

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UK Step Change in Safety has published a bulletin regarding two incidents in which there were failures of load chains owing to corrosion.

What happened?

These occurred during the installation operations of primary steel under deck. The load chain failures occurred on 10 tonne chain hoists within a 10-day period. These chain hoists had been used during installation of the primary steel sections and on completion of the lifting part of the operation 4 x 12 tonne turnbuckles were attached to each section as fixed rigging.

Upon discovery of the chain failures the offshore team stopped the job, made the work site safe and reported the failures to the respective supervisor immediately. The 12Te turnbuckles remained secure at all time through the operation. Extensive investigation attributed the failures to stress corrosion cracking (SCC) due to hydrogen embrittlement.

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