Know-How *in Action*

élite series

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BELZONA STRENGTHENS LAYDOWN DECK

CUSTOMER
UK North Sea

APPLICATION DATE
2004

APPLICATION SITUATION
Offshore Oil Platform Laydown Deck

PROBLEM
The deck had become weakened through daily operation (lowering/ removal of containers) and weather. The original 8mm steel deck was corroded through wall in many locations. welding was not an option due to the installed underr-deck passive fire protection.

PRODUCTS
Belzona® 1111 (Super Metal)
Belzona® 5811 (Immersion Grade)

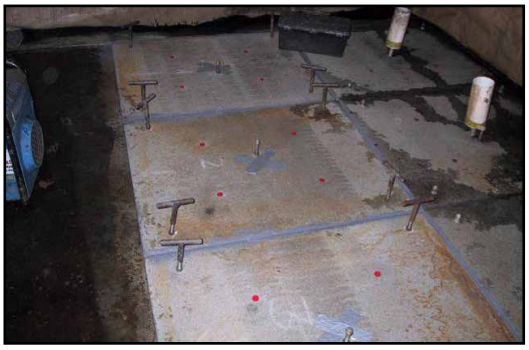
SUBSTRATE
Carbon Steel

APPLICATION METHOD
A modified version of Belzona System Leaflet GSS-9 was employed. 5mm steel plates, drilled to accept jacking bolts and injection ports, were prepared by gritblasting and positioned onto the gritblasted deck. The jacking bolts were used to obtain accurate levels. The circumference of the plates were sealed using Belzona® 1111. Belzona® 5811 was injected into the void using an airless pump to seal and bond the reinforcement plate to the deck with 100% contact area being achieved.

BELZONA FACTS
Independent testing showed that the Belzona bonding method in this case was equivalent in strength to a welded plate, stiffer AND more elastic than the original 8mm plate, good resistance to impact loading, and considered by the independent engineering designers to be "robust enough to withstand the rigours of laydown area operations. The key benefits were that daily operations were not interrupted and that the passive fire protection in the machinery space below would not be affected. This work has been inspected annually and has resulted in other deck strengthening projects being undertaken. Last feedback and inspection image received in 2015, engineers are still delighted with the work.

PICTURES
1. Condition of deck prior to starting work
2. Installation of deck reinforcement
3. Completed works
4. Inspection in 2015

1.


2.


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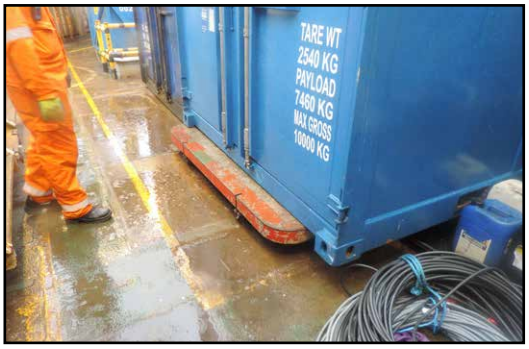

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ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

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