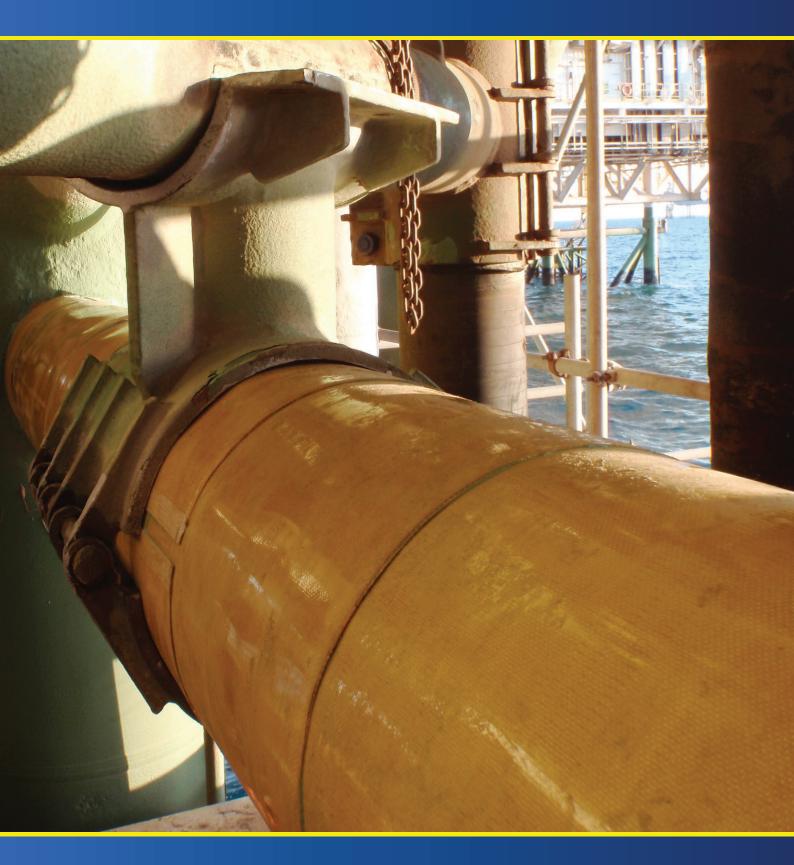


## **Case Study**

14" Structural Reinforcement using Clock Spring® Extended Snap Wrap



## 14" Structural Reinforcement using Clock Spring® Extended Snap Wrap

Defect area

An offshore 14" structural beam supporting 4x8" risers was found to have high corrosion spread across the whole structure and on all orientations. This required immediate structural reinforcement either by welding or "Extended Clock Spring Snap Wrap". Since welding was a hazard to the operation, a composite solution was engineered. All 4 clamps where removed and the surface was prepared to SA 2½.



2 Clock Spring® Snap Wrap Application

The structure after being repaired using the "Extended Clock Spring Snap Wrap".



3 Clock Spring® Snap Wrap Application

SKPS designed the repair and applied 8 layers. The final repair designed to be a permanent repair for the expected lifetime of the structure and will permanently arrest any future corrosion thus marking another success for SKPS" Engineered Composite Repairs".



4 Design Criteria

Actual Wall Thickeness: 19.05mm

Minimum Remaining

Wall Thickness

: 9.1mm

Defect Type

: External Corrosion

Size

: 14"

Material

: Carbon Steel Structural Beam

Riser Support

**Defect Analysis** 

: Maximum Wall loss of 58% Average Wall loss of 28%

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