Case Study: OFFSHORE

Large Scale Project - EVOLUTION®

PROBLEM

A global oil and gas operator was seeking a gasket solution for a new offshore platform that was to operate in the Gulf of Mexico. The large-scale offshore platform which was being built in Asia required a lightweight high-pressure gasket for multiple sizes and pressure classes for various applications. Fundamental to their requirements was a solution that didn't leave the core of the gasket exposed to the media, crude Oil, and sea water.

SIGNIFICANCE

Originally, the client had planned to use either a tandem seal or sealing design that offered an ID seal. Following extensive stress analysis evaluations and scenario modelling it was found that a gasket with a lightweight design and metallic core would be optimal for an offshore platform. Microbiologically influenced corrosion (MIC) was also a factor that had to be accounted for, due to the location and environmental factors the sealing solution would experience. Due to the scale of the project, traceability and product identification was vital to aid in the planning and execution process.

OPERATING CONDITIONS

Temperature:	Multiple Temperatures -20 to 400 ºC
Pressure:	150, 300, 600 ANSI
Media:	Crude Oil & Sea Water
Size:	Multiple sizes ranging from 1" - 24"

SOLUTIONS

After extensive technical advice and guidance offered by GPT, the solution identified was EVOLUTION ®. EVOLUTION ® provided the ID seal design needed, while also providing the product identification markings needed for such a large project. The elimination of GRE in the design reduced the weight significantly. EVOLUTION ® also provided the client a Fire-Safe solution. EVOLUTION ® was used extensively throughout the platform for isolation and non-isolation applications in over 1000 locations. This installation has been a total success.

For more information, please visit: http://www.gptindustries.com

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