



GRAPHALLOY® - The Solution For Off-Shore Platform Firewater Pumps

GRAPHALLOY nickel-grade bearings have been successfully used in offshore firewater pumps for many years. The non-galling, self-lubricating features of GRAPHALLOY allow pumps to continue working even when they encounter a run dry situation.

This particular firewater pump is installed on an offshore gas platform in the southern North Sea. The platform is an integral part of a pipeline system that delivers gas through a 36" pipeline to a processing terminal.

The OEM-specified bushings were simple cut-to-size PTFE/Glass Tape Bearings like those normally found in hydraulic cylinders. High vibration and noise were identified as operational issues. In addition, the compounded PTFE material had little or no dry running capability. This was considered a health and safety issue because the pump was for emergency firefighting service and had to start when needed.

The repair facility had successfully performed several GRAPHALLOY® upgrades to firewater pumps for other customers and thus proposed a similar upgrade to this oil and gas company. This upgrade would provide the dry running capability that these pumps lacked.

The engineers at Graphite Metallizing worked closely with the repair facility's engineering team to define pump modifications required and specify nickel-grade, GM 111.3, GRAPHALLOY bushings.

The upgrade to GRAPHALLOY GM 111.3 bushings was successfully completed. The oil and gas company also completed all required approval tests on the pump successfully. Their personnel observed and recorded that the use of GRAPHALLOY significantly reduced noise and vibration levels.

The oil and gas company is now assured that they have an emergency firewater pumping system that has run dry capability and is fully certified.

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