www.oilreview.me

UK £10, USA $16.50

Oil Review

Oil · Gas · Petrochemicals

Middle East

VOLUME 24 | ISSUE 5 2021

ts

y

e

- Keeping oilfields safe and secure
- The benefits of sealless pumps
- Prospects for the MENA pipeline market
- Effective wellbore cleanup
- A new drilling services model

SEE US AT
OTC 2021

24 Years

Serving the regional oil & gas sector since 1997

Think twice – think sealless

Charlie St Laurence, business development manager, HMD Kontro, outlines the benefits of sealless pumps and why they should be considered as an alternative to conventional mechanical seal pumps.

THE OIL AND GAS industry is subject to the most stringent requirements when it comes to employee health and safety concerns, as well as protecting the environment against accidental emissions. Breaches of compliance not only have a human and environmental cost but could also affect the company's reputation. From an operational standpoint, any disruption of production may also incur unexpected costs and losses, with potentially damaging financial implications where the loss of high value product or business continuity are involved.

Sealless safety

Mechanical seals are widely regarded as the weakest point in any system using them, accounting for up to up to 85% of unexpected pump failures. A magnetic drive, sealless pump has no seals or seal support system and so provides total liquid containment, eliminating potentially dangerous and costly leaks from the outset. This ensures the integrity of the pumping system, even at high temperatures and pressures, protecting and extending equipment as well as component life.

Thanks to the complete containment of liquids, sealless pumps are suitable for most liquid types, minimising safety risks across a wide duty and application base. In the oil and gas sector, this includes offshore oil and gas pumps, for example process pumps to move and handle oil and water, pressure and HTF pumps and refinery applications such as the handling of hydrocarbon condensates, anhydrous HF and other complex processes involving caustic or toxic chemicals.

Sealless savings

Specifying sealless, magnetic drive pumps can also offer other clear advantages before, during and after installation, resulting in considerable time and cost savings and associated productivity gains, all issues at the forefront of consideration for specifiers.

Initial upfront purchase and installation costs can be a barrier to modernisation and replacement programmes. The simpler and leakage free design of magnetic drive sealless pumps helps reduce the financial outlay. With no need for seal support systems and reduced instrument wiring and configuration requirements, lead times are substantially reduced, and project build costs minimised. Associated system costs in the form of utility installations and water- or air-cooling systems can also be bypassed; this can include many of the lengthy HazOps (Hazard and Operability) and SIL (Safety Integrity Level) studies.

Image Credit : HMD Kontro

A magnetic drive, sealless pump has no seals or seal support systems, providing total liquid containment and ensuring the integrity of the pumping system.

> "Mechanical seals are widely regarded as the weakest point in any system using them."

Lifetime efficiencies

Once up and running, sealless pumps really come into their own. The simplicity of design of a magnetic drive pump, together with a proven track record, provides a 'fit and forget' advantage, particularly when it comes to the latest systems.

HMD Kontro, pioneer of magnetic drive sealless pumps technology, has developed the CSA/CSI range of pumps which are based on proven technology with a new approach. A modular format has simplified systems designs, streamlining the selection process and standardising the range, while still offering a wide range of pump options.

With greater interchangeability of parts, servicing is minimised, and on-site replacement of components can be