CASE STUDY

Devil's Creek Gas Plant, Hydro-cyclone Feed Pumps



Existing Progressive Cavity Pumps



New Sulzer MBN centrifugal pumps

Contact

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Applicable markets
O&G Downstream

Applicable products
MBN Multistage, Ring-Section

The challenge

Sulzer replaced two Progressive Cavity pumps operating on Produced Water Service at Apache/Quadrant Energy Devils Creek Gas Plant, North Western Australia. The existing Progressive Cavity Pumps were required to be replaced with Centrifugal Pumps due to the aromatic gases in the Produced Water causing the internal rubber stator to swell and pumps to seize when in standby mode.

The solution

Sulzer MBN centrifugal pumps were supplied with Kalrez O Rings for high resistance to aromatic gases, in Duplex (41) MOC for Produce Water and slow speed for 'low shear' operation due to oil in the fluid. The customer had the options of API 610 BB5 design pump or ISO 5199 Design (Ring-Section) and due to application, budget and short delivery period; the Sulzer MBN pump was selected.

Customer benefit

The MBN pumps have reduced maintenance and increased availability as well as providing a smaller foot print for maintenance maneuverability. The Quadrant Facilities Engineer stated, "The pumps are operating satisfactorily. They are only run about once every three weeks for a shift at the moment until the water rate increases years down the track. Based on this short period of operation, the Production team on-site is very happy with the upgrade."

