



POWER ENGINEERING CORPORATION

Valve live loading

Client: Qatar Petroleum, Qatar

Industry: Oil and gas

Date :2003



CHALLENGE

Issue:

Oil refinery was facing frequent readjustment for valves' gland which end by leaking at some of its critical valves which ended by shut down every 6 months.

Application:

The media being sealed was hot oil. The pressure was up to 10 Bars, with temperature 200 °C.

Goals:

1. Leakage Free operation.
2. Extend the packing change interval more than 6 months.
3. Prevent any undesired shutdown as a result of critical leakage.

SOLUTION

Recommendation:

CHESTERTON 5150 VALVE LIVE LOADING

1. A Self-lubricating, low friction 3-ring CHESTERTON 5300 die formed inhibited graphite rings set was installed with combination of 2 CI braided graphite rings from above and below.
2. The spring-loaded CHESTERTON 5150 VALVE LIVE LOADING system helps prevent any particles from entering the stuffing box and maintains a constant sealing force.

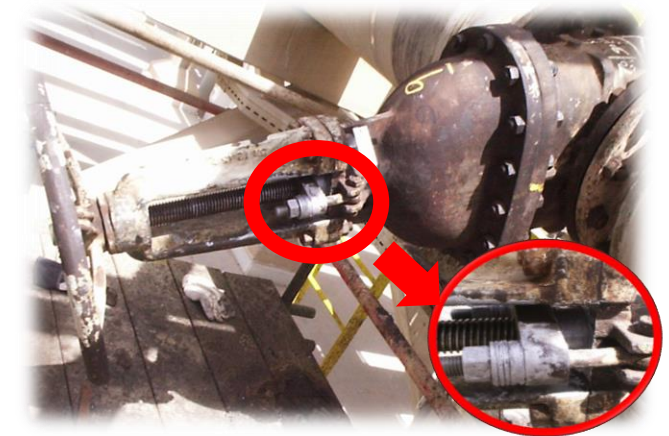


CHESTERTON 5150 VALVE LIVE LOADING system used to eliminate leakage and prevent emissions of hazardous gases at critical valves.

RESULTS

Increased Reliability & lowered Cost

1. The CHESTERTON 5150 VALVE LIVE LOADING system has eliminated leakage.
2. CHESTERTON 5150 VALVE LIVE LOADING had been installed on 32 critical Valves.
3. The solution has been running for 17 years without problems.
4. No more gland readjustments were required.



CHESTERTON 5150 ROTARY LIVE LOADING system avoids leakage by automatically maintaining the correct sealing force on the packing set.

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