

Highest process safety with a Sulzer OHX standard upgrade at half the cost of new equipment

Our customer was facing legacy issues with seal leakage and environmental impacts. They addressed the requirement to upgrade their OH2 pumps for reliability improvement and HSE issues. Their old style OH2 process pump designed to API 6th edition with outdated technology required to be upgraded.



The OHx solution provided a cost effective solution to improving the site process safety requirement whilst minimizing the overall capital cost to the plant. All completed in the local workshop for the customer to witness.

Talwar, Manish



The challenge

The customer addressed the requirement to turn the pumps around during a short shut down period. Given that this was a non Sulzer pump there were challenges with dimensions that were not known.

The solution

Sulzer specialists suggested upgrade and overhaul of the existing OH2 pump with OHX back pull-out program vs. replacement with a new pump.

Along with the service center being close to the customer we were able to take the dimensions, match the back pullout kit and conduct the retrofit upgrade within the specified turnaround time for the customer. Leveraging our global engineering team allowed us to work to the schedule with drawings produced ready for the manufacture finished the next day.

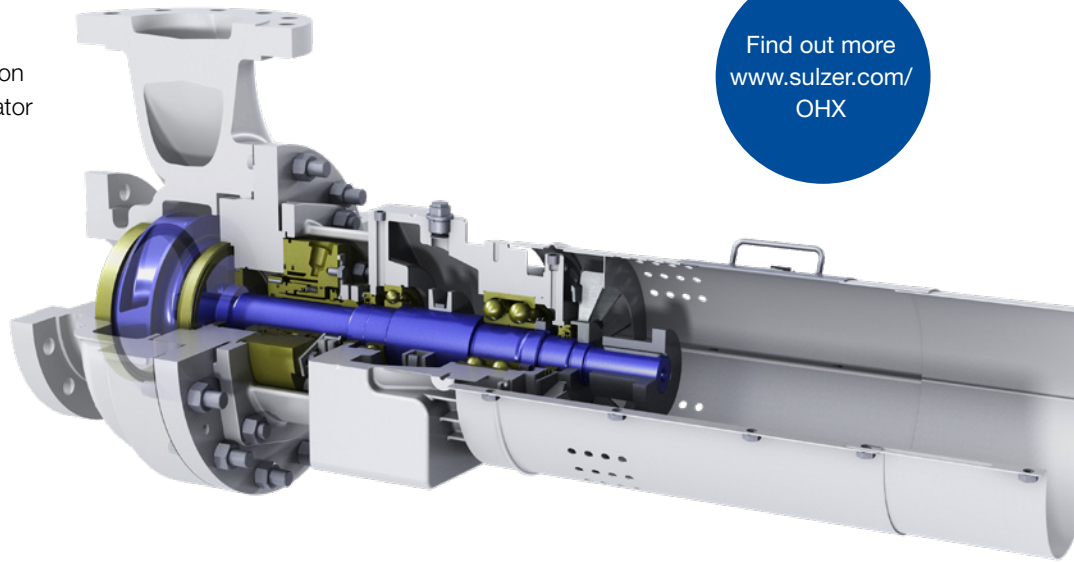
Customer benefit

- Maintained existing ancillary equipment – base plate, motor and coupling with no mods to site interfaces (suction and discharge pipework remained the same).
- Vibration reduction through the new thicker shaft design providing increased shaft stiffness (L3/D4) and larger bearings.
- Enlarge stuffing box to accommodate a latest standard double seal arrangement for process safety and leakage elimination and resolve HSE issues.
- Lower bearing temperature with fin cooling tube and improved bearing housing design.
- Vespel wear rings for efficiency improvements through tighter wear ring clearances and elimination of seizure during transient and start-up conditions.

Project data

- Third party OH2 pump (Shin Nippon HNN-153) for de-sulphur fractionator reflux application
- Retrofit type OHX
- Construction material S-6
- Speed 2'980rpm

Find out more
www.sulzer.com/OHX



Comparison of the two shafts – top OHX, bottom HNN



Machined ribs for cooling features to stop conduction of heat from the casing into the bearing housing

Contact

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