

End suction single stage high pressure pumps for hydrogenation plant operating at 180°C

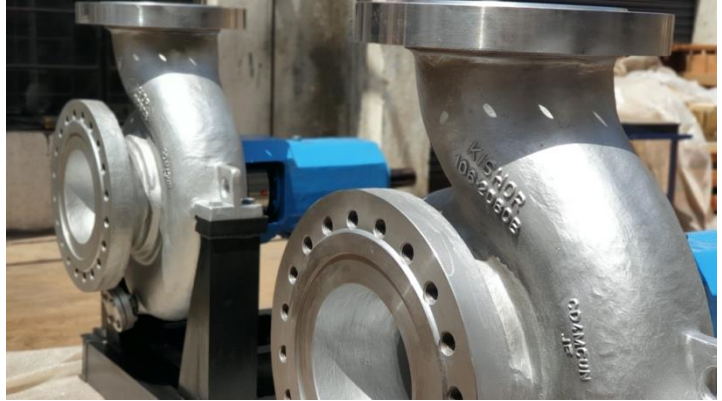
History:

KISHOR PUMPS received enquiry in the year 2004 from Aarti Industries Vapi who are the leaders in Specialty Chemicals based in Gujarat for an import substitution of high pressure pumps.

Process :

This process is possible when Hydrogen gas is abundant. The Hydrogen gas is passed through the loop reactor in which catalysts are used. This is a closed loop system. There are 3 distinct benefits for the customer by going for this process.

- Increase the productivity.
- Increase the purity.
- By slight change in the catalyst, one can go for different new chemicals.



Execution :

A visit was planned to study the site conditions and the entire process. We took the dimensions of the existing old imported pump to match the foundation so as to have fewer modifications at site. There were 3 major aspects in the process which were important to be considered while giving the proposal

- Suction pressure of 30 kg/cm².
- Selection of mechanical seal and API PLAN since the operating temperature of the pumping liquid was 180°C and high pressure.
- Casting source should be reliable from the point of view that there should not be any thermal expansion in the material at any point due to high temperature and pressure.

After studying the process and the application, KISHOR PUMPS quoted for the high pressure import substitute pump and bagged the order in the year 2005.

The pump was commissioned successfully under the guidance of competent service team of KISHOR PUMPS. Since then KISHOR PUMPS got repeat order from Aarti Industries for high pressure pumps at their different locations. Aarti Industries is satisfied with the performance of pumps.

Benefit to Aarti Industries

- Saving in price of pump and spares against international pump manufacturer.
- Lesser delivery time of pump and spares compared to international pump manufacturer.
- Being a local manufacturer, after sales service can be given much faster compared to international pump manufacturer.