

ITT Goulds Pumps Provides Out Of The Box Solution to a Pipeline Company Request

Lone Star NGL, a natural gas liquid pipeline company headquartered in Texas, requested two Ethane injection pumps of different sizes and capacities to run in parallel. ITT Goulds Pumps responded with a creative proposal that generated a range of savings and operational benefits for the company.

The Problem

The customer initially requested a “small” pump sized for 2,500 BPH at 2,100 psi discharge pressure and a “large” pump sized for 7,500 BPH at 2,100 psi discharge pressure running in parallel. While Goulds Pumps could have supplied the smaller pump, the large pump would have required the development of a new Model 3600 10x12-17” pump and entail additional cost and a longer execution time.

The Solution

Goulds Pumps proposed two identical 3600/6x8-14BD “medium” size pumps, each delivering 5,000 BPH, to achieve all sets of duty conditions. We suggested running the pumps with an advanced ITT PumpSmart® Variable Frequency Drive to allow the pumps to operate very close to their Best Efficiency Point (BEP) at all times on a year-around basis.

The Benefits

This solution allowed two identical pumps running in parallel to deliver flows over a wider range of operation than dissimilar pumps with different shut off heads and unequal load sharing. The developed pumps offered a 19% price advantage with a shorter timeline. In addition, foundation work was simplified. The control panel, VFD and cabling were less expensive, which resulted in additional upfront savings. And, because the pumps are identical, they utilize common parts, including seals, bearings and rotors, which reduces the size and cost of the company’s spare parts inventory. Best of all, because of synergy of the pump with a PumpSmart drive, the pumps can be operated very close to their BEP. This means that the energy costs to transport the liquids, always a pipeline company’s biggest expense, were substantially reduced—while MTBF increased. Clearly, this solution proved to be a win-win for everyone.

