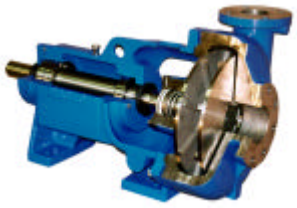
CASE STUDY

Crude Oil Tanker Transfer

Flying J Refinery, Salt Lake City, Utah



The Challenge

Cavitation from entrained air

MTBF of 2-3 weeks

Excessive parts costs

The Discflo Solution

Saved up to $40,000 in pump parts costs, plus labor

Eliminated pump failure

Discflo pump handles up to 80% entrained air without cavitating

Pumping crude oil from tanker trucks into the stage trucks was an expensive and frustrating experience for Flying J Refinery of Utah. There are a couple of reasons why the application was problematic. The viscosity of the crude varied depending on where from in the tanker it was being pumped. Secondly, as the crude level neared the bottom of the tank, the pumps would start pumping air and run dry, creating major cavitation problem.

The company had gone through many pumps in this application - centrifugal, gear pumps, screw pumps, and sliding vane pumps. Each had a poor performance record that included excessive maintenance requirements and expensive spare parts purchases. In one particular case, the cavitation was so severe that the pump's vibration caused the flowmeters a couple of hundred feet down the line to break.

Flying J learned about the Discflo pump technology in 1998. The first Discflo pump was installed in August of that year, a 402-14-2HHDH. It was so successful that two more pumps were added later.

According to the maintenance supervisor the lowest annual expenditure for pump parts alone before the Discflo was installed had been $40,000. This figure excluded the costs of downtime and labor. The Disc pump in stark contrast has yet to need a replacement part (as of May 2003).

Since start-up, Flying J has not only saved $30,000 to $40,000 per year in parts, but the company has also eliminated the costs of labor and lost production due to downtime. Plus, the problems of frequent breakdown and cavitation have been solved, saving the cost of replacing expensive flowmeters.

DISCFLO
INTELLIGENT. SUSTAINABLE. SOLUTIONS

Call Discflo now to find out how our pumps can solve your problems.