



Application Note







Product **Application** Industry

1100 Magnetic Level Indicator Slug Catcher/Separator Level Measurement Oil & Gas (Upstream)

Challenge

An Oil & Gas Midstream Company was using a Magnetic Level Indicator with an instrument bridle from another supplier that had an ongoing problem with floats collapsing. Even though the float was rated for a high pressure, (about 1000 PSI), after a period-of-time it would collapse. The customer blamed the situation on sudden level changes causing the float to be damaged when it fell to the lowest level or rose to the top too fast.

The delivery time of the other supplier was also way too long and they had considerable problems with supplying the same Magnetic Level Indicator even though they typically had supplied the exact same two sizes (72" and 84") before. The cost was also higher than SOR.

The Magnetic Level Indicator is used to measure liquids (water and volatile petrochemical condensates) that travel from natural gas well-sites to the initial natural gas gathering compressor station. The liquids accumulate in the slug catcher/separator and the level bridle is the measuring instrument that provides the control signal that operates the dump valves to maintain a minimum liquid level.

Solution

The Oil & Gas Midstream Company came to a Kansas City Engineering Design/Build Company to see if they could help find a new supplier for their Magnetic Level Indicator. One of the Engineering Design/Build employees had worked with Static O Ring (SOR) since the 1980's. He had experience with SOR products during his time at Kansas City Phillips 66 Refinery and then at the Panhandle Eastern Pipeline where the company standardized the entire pipeline on SOR pressure and temperature switches for compressor shutdowns. This employee was also aware of the SOR reputation for quality products and the willingness to custom design instrumentation and meet a tight delivery schedule with excellent customer service.

"SOR built a prototype for testing and with a few minor adjustments it has satisfied our needs. We have now taken the SOR 1100 Series Magnetic Level Indicator line to some of our other clients and are in the process of purchasing and installing them for several of our customers. The SOR 1100 Series Magnetic Level Indicator and a shutdown float switch with volume chamber are supplied by SOR for dependable level measuring instrument from a single source." Kansas City Engineering Design/Build Company employee.