EXLAR® ACTUATOR PROVIDES SUCTION CONTROL IMPROVEMENT FOR THE EXTERRAN® COMPRESSOR

Improved Suction Control

CUSTOMER

Oil & gas producer located in the East Texas Basin in Kilgore, Texas

APPLICATION

Control the operating pressure on a compressor using a four inch Kimray®suction pressure reducing valve and an Exlar® electric actuator.

CUSTOMER CHALLENGE

The producer was using suction throttling for capacity control of a compressor from Exterran. The original control was through a high bleed high pressure control valve that was gas actuated. To better control the compressor at lower capacities, the producer needed better suction pressure accuracy, and preferred a solution that also eliminated all methane emissions. They wanted to keep the original Kimray valve, but eliminate the pneumatic actuator and controls.

SOLUTION

The existing four inch high pressure Kimray valve was retrofitted using an Exlar® Tritex II™ actuator. The 12 VDC Tritex II was able to be placed onto the Kimray valve in the field in a short amount of time. A 4-20 mA signal from the Altronic compressor controls replaced the original pneumatic controller allowing precise position control by the new actuator. All pneumatic piping and regulators were also eliminated. While other electric actuators were considered, the Tritex II was chosen for its speed of response, high turndown capability, and its proven record in oil & gas production applications.

RESULTS

The retrofit of a Tritex II electric actuator provided much better pressure ratio control of the compressor. In addition, all methane emissions were eliminated and the natural gas that used to be vented is now used put back into the revenue stream.