

Sluggish Pneumatics Replaced on Cracking Furnace

Texas U.S.A.

Sluggish Air Actuation

The responsiveness of an air operated actuator was tested on a Cracking Furnace ID damper. The pneumatic actuator responded inconsistently. The actuator has a full stroke speed rating of 10 seconds over 90 degree travel with 50 psi. The actual air supply pressure was 85 psi, but it took 20 seconds to open the damper, and 120 seconds to close! A lag of up to 5 seconds was observed when performing a “bump test” to check for the response to small changes in demand.

A Beck model 11E-309 was installed as a replacement. This haz-loc rated actuator contains integral electronics greatly simplifying wiring and installation. A factory supplied transition pedestal and linkage streamlined the retrofit. The Beck is capable of 0.10% step changes, consistently. Position changes are initiated within 25 milliseconds of the change in demand, without being affected by varying frictional forces in the valve or damper.

Replace Them All!

The excellent results of the first installation resulted in subsequent replacement of the

ID damper actuators with Beck on all fifteen Cracking Furnaces at this facility.

BECK - The solution to poor pneumatic control!

The compressibility of air leaves pneumatic actuators susceptible to sticking, overshoot, and poor control. Beck actuators have proven the ideal upgrade in thousands of applications.

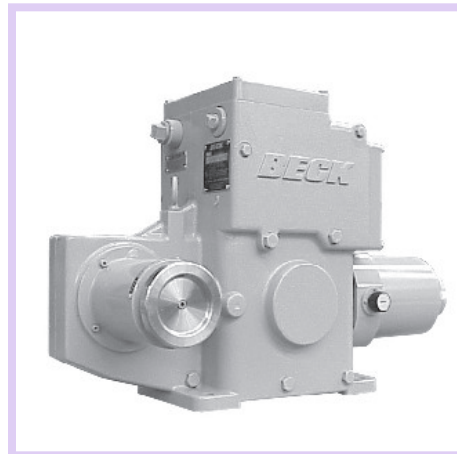


Figure 1

11E-309 with Class I, Div 2, Groups C & D Certification



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