

Damper Control for Paper Products Facilities

Application Challenge: In paper products manufacturing facilities, regulating the humidity in the plant is a key procedure due to the effect it has on the quality of the final product, as well as the amount of energy used in the paper making process. Too much moisture in the manufacturing environment can result in poor drying or curling of the paper rendering it unusable. In addition, if the humidity levels are too high, energy costs can rise by way of increased dryer usage. To properly regulate the humidity in these facilities, precise control of the dampers is required to ensure excess moisture is kept out of the manufacturing environment.

Exlar Solution: In order to improve damper control, engineers are replacing their pneumatic actuator solutions with more precise and reliable Exlar electric actuators. With Exlar's Tritex II AC actuators, control of the dampers is instantaneous, with small incremental moves possible for precise positioning and ultimate control. The Exlar Tritex II actuators also offer feedback options such as damper position or current draw (for diagnostics). In addition, engineers can monitor the position of the damper remotely, in real time, significantly improving the control of moisture in the manufacturing environment as well as reducing maintenance costs.

It is common for these dampers to be located on the roofs of buildings, or in other unpleasant environments where they could encounter very hot or cold temperatures. In these environments, pneumatic actuators may experience problems such as air line condensation, freezing or leaks. Exlar's Tritex II AC actuators are rated to perform from -40 degrees C to +65 degrees C with IP65 sealing, reducing any risks of failures due to environmental causes.

Additionally, Exlar's all electric Tritex II AC actuators reduce installation and maintenance costs associated with pneumatic actuators by eliminating the long air line runs, and providing a drop-in replacement for the existing actuators.



Before: Pneumatic actuator installed on damper application

After: Exlar's Tritex II AC actuator installed on damper application



Tritex II AC Actuator Characteristics

- 90 and 115mm frame sizes
- Continuous forces up to 3,600 pounds (16 kN) and peak forces up to 7,200 pounds (32 kN)
- Multiple feedback options: Analog Hall, Incremental encoder, Absolute Feedback
- Various communication networks: Modbus TCP, Ethernet/IP, ProfiNet
- Available for applications requiring Class 1 Division 2 certification

Call us Today!

Contact us toll free at 855-620-6200 to discuss your application. You may also visit www.exlar.com to locate the sales rep nearest you.

Courtesy of Steven Engineering, Inc. - 230 Ryan Way, South San Francisco, CA 94080-5370 - Main Office: (650) 588-9200 - Outside Local Area: (800) 258-9200 - www.stevenengineering.com

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