Process industries face ever tighter regulation of pollutants such as nitrogen oxide and sulphur dioxide. Plants have responded with heavy investment in instrumentation and control systems to monitor and control burner efficiency and emission levels.

**CHALLENGE**

Such efforts, however, are quickly undermined through a failure to position air and fuel dampers accurately in process heaters, furnaces and boilers throughout the plant. Such dampers may move more than 2000 times a day to maintain steady state excess oxygen and draft at the burners for efficient operation and low emissions. Precise damper positioning is crucial to this process, but is complicated by pneumatic actuators due to stick and slip problems and the compressibility of instrument air. Furthermore, while new dampers may open and close smoothly and quickly, ageing can affect their performance.

**SOLUTION**

Honeywell’s HercuLine electric actuators provide precise, resilient damper positioning, and accurate position feedback.

Able to operate under direct digital control, they require minimal maintenance and provide sufficient torque to overcome any problems with sticky movement.

Features include precise damper positioning with high repeatability and minimum deadband; high temperature ratings and a robust design; accurate indication of damper position; and actuator health diagnostics.
The result is an efficient solution for controlling excess air and draft for maximum fuel efficiency and reliable compliance with Clean Air Act requirements.

The actuators allow plants to reduce emissions at startup, shutdown and during upset conditions, while also reducing maintenance costs. Where work is required, they enable predictive maintenance for better service scheduling.

**THE HONEYWELL ADVANTAGE**

Honeywell’s HercuLine actuators offer precision and high reliability to ensure processes operate at maximum efficiency with minimal downtime and the lowest lifetime cost. Users benefit from reduced costs, as well as accurate and repeatable performance over the lifetime of the product.