

## THE DRIVE FOR GREATER COMBUSTION SYSTEM EFFICIENCIES



Greater efficiencies in combustion processes are achieved every year through system and operation improvements. Examples include thermal oxidizers fed from engine test stands which are being enhanced to operate beyond their original intent and small boilers re-engineered to improve performance across wider load requirements. Generation facilities that were top-of-the-line ten years ago are under pressure to be more cost efficient and produce fewer emissions. Flexible fueling is a major contributor to these improvements. With flexible fueling, operators can take advantage of cost variances in the fuel markets while using clean burning fuels to feed their plant.

Flexible fuel operation relies on measurement instrumentation to determine the most efficient levels for the combustion process. Fuel flow rate, combustion air flow, and exhaust O2 measurements give vital information needed to maximize performance for any condition or load. Understanding the load range under which the system operates allows adaptation of fuel curves to optimize performance. However, it is clear that changing process variables and fuel BTU

content makes efficient operation of combustion systems a challenge.

Coriolis flow meters are the best solution to accurately measure multiple fuel types with one common flow meter.

## CORIOLIS METERS OFFER THE FOLLOWING ADVANTAGES:

- > Ability to measure any type of fuel in one flow sensor body.
- > Wide turndown flow measurement capability
- High accuracy and repeatability over a wide range of conditions
- No straight run requirement and short lay length for easy installation in both retro fits and new installations
- > Temperature and density measurement available from the same point of measurement
- Long lifespan due to sensor design and no moving parts to fail





## MEASUREMENT SOLUTIONS FOR EVEN THE MOST CHALLENGING APPLICATIONS



For any upgrade to a combustion process that includes flexible fueling, Coriolis flowmeters offer the best solution for the fuel flow measurement. Coriolis flow meters accurately and reliably measure the flow and density of liquid fuels, even when the fuel feed is switched from one liquid to another.

Rheonik is a leading manufacturer of Coriolis mass flow meters with an excellent reputation throughout the industry for high quality, reliable flow products utilizing an Omega-shaped Coriolis sensor. This unique patented design is renowned for its incredible stability and performance in the most difficult of applications, while still being one of the simplest to install, configure, and operate. Coupled with Coriolis flow sensors using the Omega tube design, Rheonik offers a variety of state-of-the-art electronic transmitters to suit every application.