

# High Temperature Coriolis

Precise, reliable measurement for high temperature applications



high temperature

MVD<sup>TM</sup> technology



## Best-in-Class High Temperature Coriolis – only from Micro Motion®

With close to twenty years experience specifically in high temperature applications, you can count on Emerson's Micro Motion® Coriolis meters to handle the heat.

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### Micro Motion Measurement Benefits

#### High Quality Sensor Design

- Drainable sensors and custom-fit heat jackets to empty process lines and save energy costs
- Stainless Steel and Nickel Alloy compatibility with a range of process fluids
- Repeatable, accurate measurement regardless of environment

#### Sealed Electronics Extension for Transmitters

- Pre-assembled extensions to make installation a snap
- Transmitter protected for maximum reliability

#### High Temperature and Wide Flow Rates

- Measurement at high process temperatures
- Highly reliable performance and accuracy in extreme conditions
- Range of line sizes to deliver the widest breadth of flow rates up to 94,000 lb/min (2,550 tons/h)

#### Safety-Certified Coriolis

- Emerson's Micro Motion is the only Coriolis certified to IEC 61508
- Achieve SIL-2 with a single Micro Motion meter or SIL-3 with redundancy



Micro Motion Coriolis meters are perfect for a number of harsh applications and operating environments.

- Refining
- Upstream oil & gas
- Asphalt (Bitumen)
- Petrochemical
- Chemical
- Custody transfer
- Vacuum residuals



#### Inherent Advantages of Micro Motion Coriolis

- No moving parts result in no maintenance or repair
- Install anywhere with no flow conditioning or straight pipe run required
- Accuracy over a wide flow range from a single meter to optimize plant efficiency
- Repeatable, direct mass flow measurement to eliminate problems of volume measurement

**MVD**™ Technology

# Extreme Benefits

# Exceptional Performance

perfect for *tough applications*



## Designed for Challenging Process Conditions

Mechanical and DP meters have been the only option for extreme temperature environments and applications – until now.

Emerson introduces a complete range of Micro Motion Coriolis meters to handle high process temperatures with the accuracy and performance only Micro Motion technology can provide.

- Designed and tested for process temperatures up to up to 662°F (350°C)
- Measurement of mass flow, volume flow, density and temperature
- Sensor construction available in 316L Stainless Steel or Nickel Alloy
- Smart Meter Verification is available for safety checks of electronics and sensing element structural integrity – without the need for tools or down-time



Complete range of high temperature sensors and electronics for all applications

## Key Specifications Summary

Coriolis meters sizes for 1/4" (6mm) to 10" (250mm) nominal lines up to 94,000 lb/min (2,550 tons/h) (based upon liquid water flow rates)

Liquid flow accuracy:	±0.10% to ±0.15% of rate
Gas flow accuracy:	±0.35% to ±0.65% of rate
Volume flow accuracy	±0.10% to ±0.15% of rate
Liquid density accuracy:	±0.0005 g/cc (±0.5 kg/m <sup>3</sup> ) to ±0.001 g/cc (±1.0 kg/m <sup>3</sup> )
Wetted parts:	316L Stainless Steel or Nickel Alloy
Temperature ratings:	-400°F (-240°C) to 662°F (350°C)
Options:	Purge fittings, insulation and heat jacket

### 1500/2500

DIN Rail Mount for control room space savings



### 1700/2700

Field Mount for easy-to-operate display



### 3000

Advanced platform for batching or concentration measurements



### 2400

Compact, direct mount available with or without display





*Micro Motion, a division of Emerson Process Management, is known globally in over 85 countries for its quality and reliability. As part of the Emerson PlantWeb® digital plant architecture, Micro Motion enables increased plant availability, decreased costs and enhanced safety. With over 600,000 meters installed around the world, Micro Motion delivers application expertise, service and technical support not available elsewhere.*



### Benefit from the wide range of Micro Motion solutions available

- In-line meter verification of electronics and sensor – without the need for tools or down-time
- Exceptional measurement and operating performance in entrained gas conditions
- World-leading dedicated density measurement devices
- Solutions for high and extreme temperature applications
- Best-in-class compact and drainable Coriolis
- Exida Safety-certified Coriolis for SIL-2 and SIL-3 applications



[www.micromotion.com](http://www.micromotion.com)

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