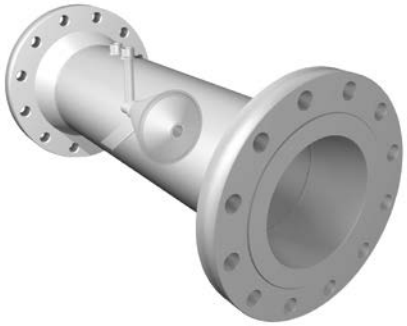
McCROMETER



Robust Flow Measurement Solutions for Wet Gas Applications

The V-Cone® flow meter is a proven, low-maintenance technology taking differential pressure flow measurement for wet gas to a new level

ROBUST

The V-Cone flow meter assures long-term performance. It has no moving parts to replace and maintain. In addition, damage tests indicate that the V-Cone can withstand up to 60% damages with only a 0.005% shift in the Cd value.

PROVEN

Designed for mild to harsh operating environments, the V-Cone consistently outperforms other flow technologies. The V-Cone technology complies with ISO 5167 Part 5 and boasts an average life span of +25 years.

FLEXIBLE

Because the V-Cone flow meter can accurately measure disturbed flow, it doesn't require the upstream or downstream straight pipe runs of other flow meters. This means the V-Cone flow meter can be installed virtually anywhere.

Offshore Platform Applications

- ✓ LVF change detection
- ✓ Production wellhead flowline
- ✓ Production manifold outlet
- ✓ Gas well flowline
- ✓ Well production fluid

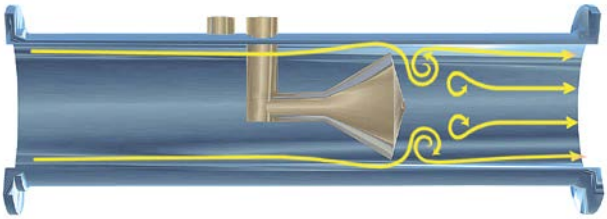
VCONE®

Singapore Sales Enquiry:
Email: sales@pipeline.com.sg
Tel: (65) 6570 0310

Myanmar Sales Enquiry:
Email: sales@pipeline-mm.com
Tel: (95) 9509 5758

PipeLine Quality SINGAPORE

As the flow approaches the cone, the flow profile "flattens" toward the shape of a well developed profile – even in extreme wet gas conditions.



The cone forms very short vortices as the flow passes the cone. These short vortices create a low amplitude, high frequency signal for excellent signal stability.

Ideal for Wet Gas

Due to proprietary flow equations, the V-Cone flow meter's ability to measure wet gas is unique in the industry. In side-by-side tests with other dP technologies, only the V-Cone flow meter provided accurate measurement of challenging wet gas flow regimes.

Low Installed Cost

Because it does not require long straight pipe runs or flow conditioning devices, the V-Cone flow meter can fit into tight spaces. When retrofitting existing applications, the V-Cone flow meter typically fits right in place without having to re-engineer the piping layout. This installation flexibility saves cost, space and minimizes weight penalty problems without compromising the accuracy of the measurements. Future changes to upstream or downstream piping configurations will not affect the performance of the V-Cone flow meter.

Superior Performance

The V-Cone flow meter delivers an accuracy to ±2-4% of rate (depending Lockhart-Martinelli <0.3 and Froude number <4.0). It also handles turndowns of 10:1 and greater, without loss of accuracy. In addition, the V-Cone flow meter for wet gas has an unprecedented long life of twenty-five years or more.

CALL FOR A QUOTE
800-220-2279

McCROMETER
3255 W. Stetson Ave. Hemet, CA 92545 USA

30123-90, Rev. 1.1
10-5-18

Specifications for Wet Gas

Standard Accuracy for Wet Gas:	From ± 2-4% (accuracy dependent on Lockhart-Martinelli <0.3 and Froude number <4.0)
Operating Range:	95-100% GVF
Design Pressure:	Up to 10,000 psi
Temperature Range:	Up to 150°C (302°F)
Repeatability:	±0.1% or better
Flow Ranges:	10:1 and greater
Standard Beta Ratios:	0.45 through 0.80, special betas available
Head Loss:	Varies with beta ratio and DP
Installation Piping Requirements:	Typically 0-3 diameters upstream and 0-1 diameters downstream of the cone are required, depending on fittings or valves in the adjacent pipeline
Materials of Construction Include:	Duplex, 304, or 316 stainless steel, Hastelloy C-276, 6MO, carbon steels. Other materials on request
Meter Line Size:	2" to 12"
End Fittings:	ANSI, API compact flange, hub connectors. Others on request
Configurations:	Precision flow tube and wafer-type • Calibrated for customer application • ASME B31.3 construction standard
Approvals for the V-Cone Flow Meter:	• Canadian custody transfer approved • Meters in compliance with PED97/23/EC are available upon request • ISO 9001:2015 certified quality management system
Performance Verification Testing:	Tested at an API Registered MPMS Test Facility according to the requirements of API MPMS Chapter 22.2