

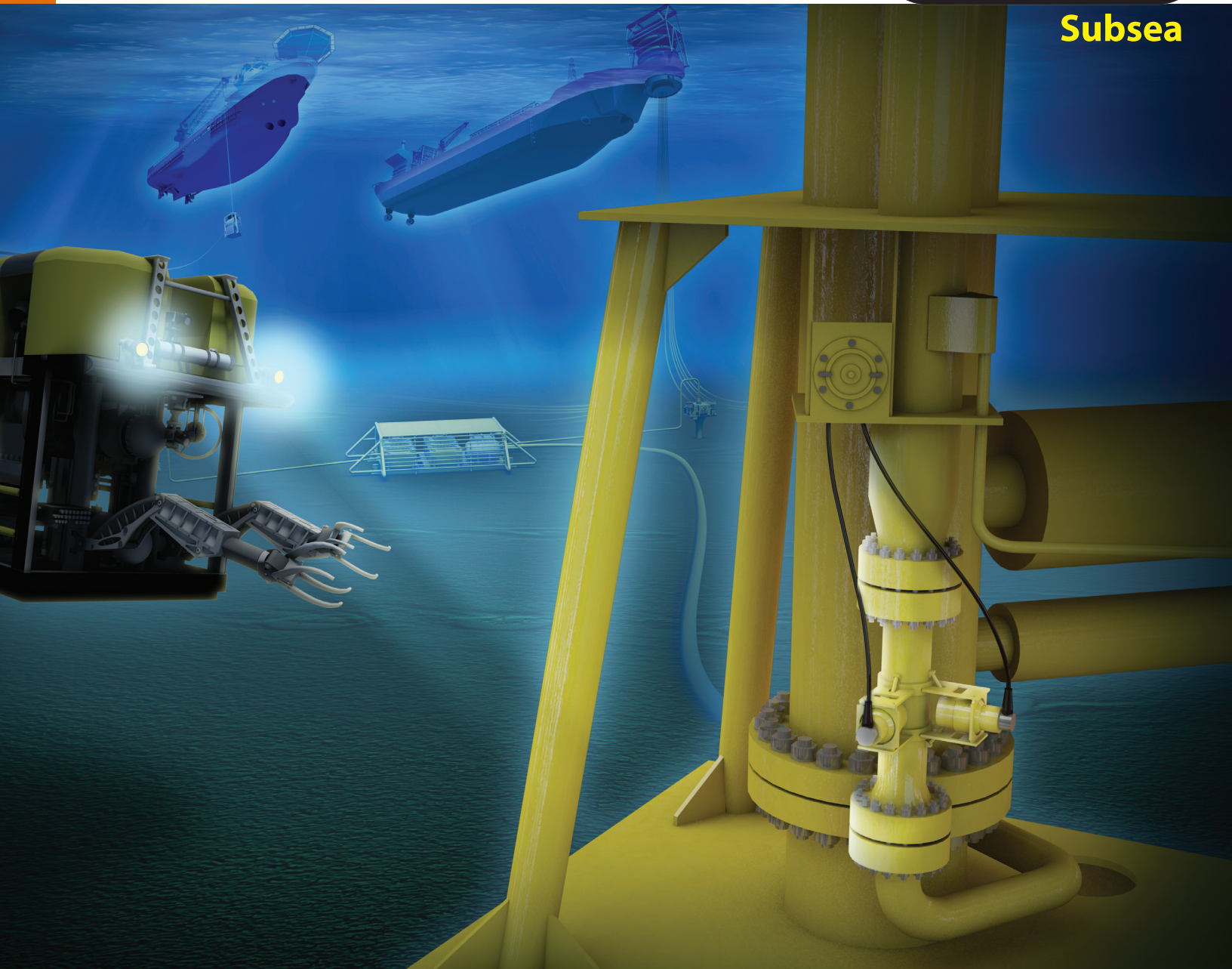


McCrometer

there from the start



Subsea



Subsea flow measurement

The V-Cone® Subsea flow meter has been in operation from the North Sea to the Gulf of Mexico over decades, built to stand the test of time.

earning your **trust** through years of experience

When a flow meter is specified for service thousands of meters below the ocean in pressures up to 15,000 psi, there are no second chances. Working with a vendor with a proven track record, third-party performance testing and experience manufacturing to the most stringent international standards is a must. McCrometer V-Cone Subsea offers all of this and more for your peace of mind.

Saving Space and Weight

The advanced differential pressure V-Cone Subsea flow meter technology naturally conditions the flow reducing pipe requirements to fit into tight spaces. The V-Cone Subsea flow meter has a smaller footprint on modules, manifolds and Christmas trees than any other subsea flow meter technology.

Proven Performance

Extensive third-party testing such as API 22.2 testing protocol proves the technology's accuracy and repeatability. Long-term field testing in subsea applications has proven reliable performance to end users.

Designed for **Long life**

The V-Cone Subsea has no need for maintenance or re-calibration offering unattended, long-term reliable performance. This is due to the contour-shaped cone that directs flow towards the outside wall, so the beta edge is not subject to wear.

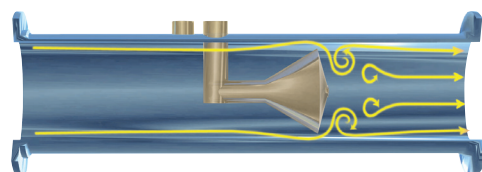




Principle of Operation



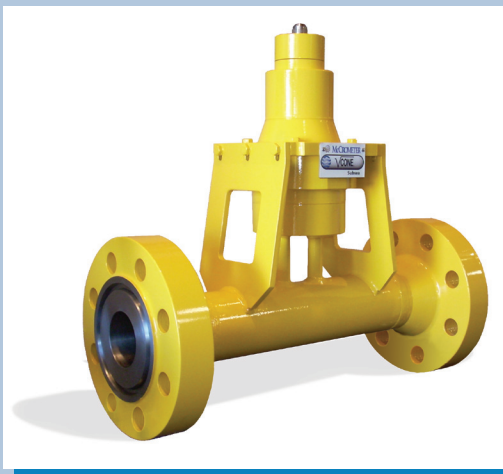
As the flow approaches the cone, the flow profile “flattens” toward the shape of a well developed profile—even in extreme flow conditions.



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. The clean signal enables a wide measurement range and quick response time for control.

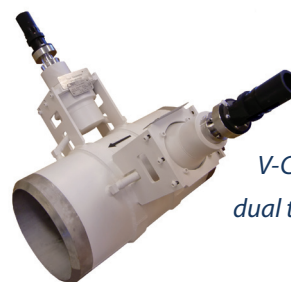
applications

Well Stream
Produced Gas
Gas Injection
Gas Lift
MEG
Water Injection
Pump Control
WAG



Subsea

- Saves Space
- Proven Performance
- Long Life
- Experienced Manufacturing



V-Cone Subsea with dual transmitters

Ask about our worldwide reference list with hundreds of installations

V-CONE SUBSEA SPECIFICATIONS

Line Size: 2" through 16"

Primary Device: V-Cone Flow Element

System Accuracy: Up to +/-1.0%

Beta Ratio: 0.45 to 0.85

Range of Operation: Re 1,000 and higher

Electrical Connector: Tronic, Omnitec and ODI Standard

Flow Turndown: Up to 50:1

Maximum Internal Pressure: Up to API 6A 15000psi Class

Operating Temperature Limits: -20 to +80C

Design Depth: Down to 5000m

Design Life: >25 Years

Instrument Connection: 100% Welded to flow element

Body Materials: 2205 Duplex, 2507 Super Duplex, Inconel 6Mo, X65/F65 with Inconel 625 Clad, Inconel 625, Other material by request

Process Connections: Flanged (API 5K, 10K and 15K; ANSI up to 2500#; NORSOK L-005 Compact up to 4500#), Hub, Butt-Weld

Design and Manufacturing Standards:

API 6A

API 17D

ASME B31.3

ASME B31.8

ASME Sec. VIII

ASME Sec. IX

EN 15614

EN 15156

NORSOK M-601

Third-Party Reports and Qualifications:

API 22.2

ISO 9001:2018

PED 2014/68/EU

Represented by:



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