



Metering Systems Solutions

Optimized turnkey measurement solutions and services

As an OEM, Cameron offers single-sourced, customer-driven solutions for the transfer of ownership of hydrocarbons throughout the oil and gas industry. With an unrivaled dedication to engineering excellence, Cameron provides field-proven, precise, and reliable measurement for some of the most challenging applications around the world.





Measurement Metering Systems

Applications

- Metering of various hydrocarbons
 - liquids from light condensates to heavy crude oils
 - natural gas
 - natural gas liquid (NGL)
 - liquefied petroleum gas (LPG)
 - liquefied natural gas (LNG)
- Liquid and gas measurement systems for custody transfer and fiscal allocation
 - FPSO production to storage and offload
 - Onshore terminals
 - Transmission, gas storage, and distribution
 - Continuous pipeline and batching

Benefits

- Measurement systems that meet or exceed customer uncertainty and repeatability requirements
- Full compliance with international standards and local metrology regulations
- Project management expertise from design to startup
- System designs to minimize operational costs associated with pressure loss, user intervention, and maintenance and reverification
- Product expertise enabling further system optimization
- Diverse portfolio of measurement and sampling equipment to optimize the system, manage obsolescence, and provide service throughout the life of the station

Features

- Custody transfer and allocation metering designs with the highest degree of accuracy, even in the most complex systems
- Prefabricated, modular, or onsite-built systems with proven technologies for single or multiple measurements and configurations
- Quality manufactured metering systems high reliability, availability, and low uncertainty
- Global reach with ability to fabricate and manage projects locally
- Flexibility to integrate third-party products

Schlumberger is the world's leading provider of technology for reservoir characterization, drilling, production, and processing to the oil and gas industry. Working in more than 85 countries and employing approximately 100,000 people who represent over 140 nationalities, Schlumberger supplies the industry's most comprehensive range of products and services, from exploration through production and integrated pore-to-pipeline solutions for hydrocarbon recovery that optimize reservoir performance.

Cameron designs and manufactures flow and pressure control technologies for the oil and gas industry worldwide and brings more than 50 years' experience and complete knowledge of flow measurement to ensure metering systems are correctly engineered to maximize performance and reliability while optimizing results with the lowest cost of ownership.



Standard and custom metering systems

Flowmetering is one of the most important process measurements, and Cameron is committed to providing global standard or custom metering systems to serve our customers' needs. Cameron metering systems deliver a rapid return on investment through reduced measurement uncertainty, rapid project execution, compact footprint, and significantly reduced operating costs.

For many years, Cameron has been a market leader in technology development pioneering various products such as the first high accuracy 8 path chordal ultrasonic flowmeter, custody transfer ultrasonic flowmeters for high viscosity/low Reynolds Number crude oil meeting OIML Class 0.3, the first 8 path ultrasonic flowmeter with fully isolated transducers and innovations in sampling such as the Co-Jetix and Jetline sampling systems. These and other Cameron advancements can be incorporated into an optimized metering system.

In addition, our diverse knowledge and expertise means each solution is fully compliant with local regulations and will optimize and protect hydrocarbon flow with minimal environmental impact.

Complete measurement solutions

Our experience in metering covers a wide range of process fluids—from light condensates to heavy crude oils, natural gas, and LNG covering a range of traditional and modern primary flow elements depending on the application requirements. Our engineers' broad knowledge of metering systems, including proving, master metering, valves, and sampling and quality measurement systems, enables Cameron to offer the highest-accuracy systems for all customer needs.

Cameron is a member of key international standards organizations, including ISO and API, and participates on technical committees with industry professionals. Cameron was the first company to develop an ultrasonic flowmeter for dynamic custody transfer of LNG. Our cryogenic liquid CALDON LEFM 280CiLT-R* eight-path ultrasonic flowmeter received a 2010 Innovation Award from Flow Control.



As the OEM, Cameron has the technology expertise to optimize the system design and configuration for cost, performance, accuracy, and reliability.



High-performance products

Cameron flow measurement products are founded on our expertise to deliver market-leading performance and value for our customers. As the OEM, we have an extensive portfolio of products that are key components of a standard or customized metering system, including CALDON ultrasonic flowmeters, CAMCOR Coriolis flowmeters, JISKOOT* sampling and blending products, flow computers, and valves. We ensure that the system design and configuration is optimized for performance, accuracy, and reliability and provides the lowest total cost of ownership.

Site services

We provide specialist technicians and value-added site services, including installation, commissioning, training, service, and scheduled maintenance to optimize operations. Meter calibration and witnessing, measurement audits, certified water draws, troubleshooting for difficult measurement problems, and field maintenance and health checks at the system and component level are among support functions from design conception to life extension.



Whether designing bespoke systems or integrating standardized equipment, Cameron delivers measurement metering solutions that enable cost-effective, reliable operations in a range of applications.

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