

Quantitative Gas Measurement System

Extracts consistent gas samples from returning mud to enable accurate gas-in-mud measurement while drilling

Applications

- Gas detection
- Mud degassing

Safety Notices

- The quantitative gas measurement system (QGM) is UL listed for 790 A hazardous locations in Class I, Group D and Class II, Group F and G.

Features

- The pyramid-shaped agitator and agitator-rod seal maintain a stable gas-trap response.
- The mud-exit tube has a 90-degree bend to shield gas from wind effects as it is drawn back to the analysis equipment.
- Internal baffles help control mud flow and prevent splashing.
- A constant-speed, high-torque electric motor helps obtain consistent, repeatable results.
- In applications where the fluid level in the possum belly fluctuates, a constant volume trap can be incorporated to control mud flow.
- The Weatherford QGM system is constructed according to industry best practices for quantitative gas measurement.

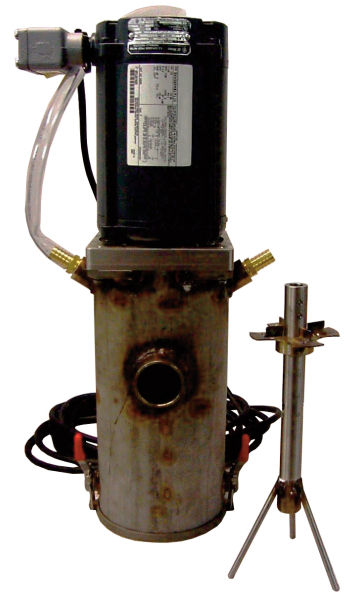
Benefits

- Enables consistent dilution of the sampled gas, which enhances the accuracy of gas-in-mud measurements
- Fits into small possum bellies

Tool Description

Located in the possum belly, the QGM system extracts sample gas from returning drilling fluid, which can then be analyzed using gas-detection equipment. By calibrating the QGM system to actual gas-in-mud values, the user can obtain accurate, consistent gas-in-mud measurements for meaningful analysis and well-to-well correlations.

In a typical gas trap, the gas volume can fluctuate as the mud level changes. The QGM system uses internal baffles and a pyramidal agitator to maintain a stable gas-trap response when the fluid-immersion level varies by approximately 4 in. (10 cm) during drilling.



The QGM system extracts gas at a constant rate for improved stability and accuracy of gas-in-mud measurements.



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Specifications

QGM Gas Trap

Brand	Gas Research Institute
Model	QGM
Dimensions (L × W × D)	21.75 × 6 × 6 in. (55.25 × 15.25 × 15.25 cm)
Weight	55 lb (25 kg)

QGM Motor

Brand	Baldor
Model	VL5001A
Operating voltage	115/208 to 230 Vac, 60 Hz
Single speed	1,725 rpm
Full load torque	1.0 lb/ft (1.4 N·m)
Motor output power	0.33 hp (0.69 kW)

