PIPELINE SAMPLING
Pipeline sampling enables monitoring of pipeline flow content for safety reasons as well as previewing crude oil content prior to arrival at the processing plant. By removing samples from gasoline and oil pipelines for content analysis owners can safely preview crude oil prior to processing. The samples are drawn via a bypass loop for sample isolation.

The sampled fluids are usually either oil or gasoline, at ambient temperature. Pipeline pressures can be as high as 1500 psi (103 bar). Pump differential pressure is low, and flow rate must be accurate to achieve proper sampling.

MICROPUMP SOLUTION

Micropump pumps can handle the potential high system pressures and offer enhanced abrasion resistance for handled products. Additionally, our pumps handle the sample with accuracy regarding differential pressures and flow rates necessary to achieve proper sampling.
Flow Rate
- 11 to 19 L/min (180 to 300 USG/hr) flow rates
- Variable speed pumps with flows from 1.74 to 26.6 L/min (27.6 to 421 USG/hr)

Max System Pressure
- Operate up to 1500 psi (103 bar) max system pressure

Abrasion Resistance For Gritty Crude Oils
- Construction materials maintain long life in abrasive environments

Controlled, Pulseless Flow
- Positive displacement gear pumps for precise, pulseless flow for sample extraction

Leak Free
- Magnetic drives eliminate dynamic shaft seals, keeping the oil and gas securely inside the pump and potential contaminants out

Maintainability
- Service Kits for easy field serviceability

MICROPUMP PRODUCTS OPTIMIZED FOR THIS APPLICATION
Micropump Series GD is primarily used as a sampling pump. With A10 steel gears the GD Series should be used to increase pump life when sampling gritty crude oil. The GL H Series pumps with PEEK gears are used for higher flow rates and when sampling clean oil and gasoline.

GD Specifications
- Displacement: 3.48 ml/rev (M35)
- Min Flow Rate: 0.6 GPM (2,270 mL/min) at 500 rpm
- Max Flow Rate: 7.0 GPM (26,565 mL/min) at 3,450 rpm
- Max Differential Pressure: 125 psi (8.6 bar) [50 psi with PTFE gears]
- Max System Pressure: 1,500 psi (103.4 bar)
- Temp Range: -46° C - 204° C (50 to 399 °F)

GLH Specifications
- Displacement: 4.6 ml/rev (H21) | 6.2 ml/rev (H23) | 7.7 ml/rev (H25)
- Min Flow Rate: 0.6 GPM (2,270 mL/min) at 500 rpm
- Max Flow Rate: 7.0 GPM (26,565 mL/min) at 3,450 rpm
- Max Differential Pressure: 125 psi (8.6 bar) [50 psi with PTFE gears]
- Max System Pressure: 1,500 psi (103.4 bar)
- Temp Range: -29° C - 121° C (20 to 250 °F)