

Automatic Sampling Systems

*For Refined and Intermediate
Liquid Petroleum Products*



***Custom Sampler Systems engineered and
manufactured to your specifications.***

Flow Management Devices provides both standard and customized sampling solutions designed to meet your specific sampling needs and comply with local and international engineering standards including API MPMS 8.2.

Our Automatic Sampler Systems draw a representative sample of hydrocarbon products to determine the composition and quality of the product.

When combined with a metered quantity, sampling results can calculate the product volume for process control, allocations, and financial transactions.

What Makes Our Sampling Systems Unique?

Utilizing a precision electric servo pump technology ensures a consistent sample size every stroke, without the worry of line pressure, pneumatic, or hydraulic pressure. The adjustable servo cylinder allows for accurate control of variable sample grabs ranging in size from 1 to 75 cc.

Applications:

- Designed specifically for refined and intermediate products (gasoline, jet fuel, kerosene, diesel, fuel oil, naphtha, reformat, gas oils, transmix, etc.)
- Fast loop installation

Features:

- Pneumatic, hydraulic, or all electric configurations available
- Variable sample grab size
 - Programmable from 1 cc to 75 cc per stroke
 - Software configurable
 - Quickly reconfigurable for different flow rates or batch sizes
- Scalable design, configurable from 1 to 16 sample vessels per unit
- Automated purge system to prevent cross contamination between batches
- Customizable operation, easily adaptable for any application
- Intelligent self diagnostics
- Class I Div 1 Hazardous Area Classification
- Meets all API MPMS Chapter 8.2 Requirements for Automatic Sampling

Optional Features:

- System can be configured with various on-line analytical equipment including:
 - Densitometers
 - BS&W / Water cut meters
 - Optical interface detection
 - Flow meters to ensure proper fast loop performance
- Local controls for manual operation
- Weigh scale system for real-time verification of system operation
- System can be controlled by external source (Control room, flow computer, PLC, etc.) or can be fully autonomous
- Can be installed in a sampling building or in a stand-alone cabinet

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For Refined and Intermediate Liquid Petroleum Products

Specifications

Uses	Fast Loop - Refined & Intermediate Products
Electric Sample Pump	Precision Servo Controlled
Sample Size	Variable up to 75 cc with standard pump Programmable Index Grab sizes (ex: 10, 15, 25, 50 cc etc...)
Pulse Input	Simulates pneumatic solenoid sequence
Inputs & Output	Analog and/or digital
Communication Methods	Consult Factory
Diagnostics	Custom Options Available
Valving Control Options	All electric, offering the lowest maintenance trouble free operation pneumatic and hydraulic valve operators available as well
System Integration	Configurable to work with existing PLC or autonomously with on-board PLC
Scales for Sample Collection	Optional
Pressure	Standard: Up to ANSI 600# service Optional: Consult factory for higher pressure options
Input Voltage	Standard: 115-230 VAC Optional: 3 phase and DC
Hazardous Area Use	Class I Div 1
Sample Retention Vessels	Customized to your individual project requirements



"Always Improving Liquid Measurement Technology"

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