

SENTRY EQUIPMENT CORP



**GUIDE TO
GAS, LIQUID & SLURRY
SAMPLERS**

AUTOMATIC ISOLOK® SAMPLERS

Automatic samplers allow batch or composite sampling.



Model SAA

- 3 cc to 8 cc sample volume per cycle
- Process pressure: vacuum to 200 psig (14 barg)



Model SAB

- 10 cc to 25 cc sample volume per cycle
- Process pressure: vacuum to 300 psig (21 barg)



Model SAL-A

- Up to 8 cc sample volume per cycle
- ISOVALVE® allows sampler to be easily removed for inspection or servicing while process lines remain pressurized
- Process pressure: vacuum to 200 psig (13.7 barg)



Model SAL-B

- Up to 25 cc sample volume per cycle
- ISOVALVE® allows sampler to be easily removed for inspection or servicing while process lines remain pressurized
- Process pressure: vacuum to 300 psig (21 barg)



Model SAL-DBB

- 8, 10, or 24 cc sample volume per cycle
- For sampling slurries in severe duty applications such as mining
- Double Block and Bleed ISOVALVE® allows sampler to be easily removed for servicing while process lines remain pressurized
- Process pressure: 300 psig (21 bar) to 500 psig (34.4 bar)



Model M4KSA

- 1, 2, or 3 cc sample volume per cycle
- Food-grade elastomers for all process contact seals
- FDA approved materials and conformant to 3-A Sanitary Standards (third party verified)



Model MSC

- Up to 14 cc of medium viscosity products
- Food-grade elastomers for all process contact seals
- FDA approved materials and conformant to 3-A Sanitary Standards (third party verified)



Model MSD

- Up to 14 cc sample volume per cycle
- Ideal for liquids or slurries up to 150,000 cP
- Food-grade elastomers for all process contact seals
- Contracting annulus positively ejects sample into container
- Process pressure: from 30 psig (2 bar) to 200 psig (13.7 bar)



Model MSE

- Up to 10 cc sample volume per cycle
- Ideal for liquids or slurries up to 150,000 cP
- Food-grade elastomers for all process contact seals
- Contracting annulus positively ejects sample into container
- Process pressure: from atmospheric to 150 psig (10.3 bar)

MANUAL LOW-EMISSIONS SAMPLERS

Manual samplers that ensure maximum safety to the operator and the environment.

Model MVD

- Double block valve gives built-in speed loop capability
- Adjustable throttling stop and spring return for safety
- One piece process and vent needle assembly is replaceable without sampler disassembly
- Non-coring side discharge needles allow complete resealing of the septum when the bottle is withdrawn from the sampler
- Wide variety of bottle, septum and needle/tube stub arrangements and sizes



Model MCL (liquids) and MCG (gases)

- Continuous flow of sample assures representative sample
- Tandem switching valve integrates multiple functions into one device
- Quick disconnects allow for easy removal and transportation of sample cylinder
- Self-sealing quick disconnect fittings prevent leakage when cylinder is removed
- Optional outage tube prevents over-pressurization of cylinder when taking samples



Model MIL

- Direct in-line liquid sampling
- Flanged or NPT end connections
- Low dead volume with optional nitrogen purge
- Sampling valve with spring return safety handle
- Pressure ratings up to 2200 psig (150 barg) at 100°F (38°C)



Model MFV

- Single action design for maximum safety and simplicity
- Tandem switching valve integrates multiple functions into one device
- Precise fixed volume sample size minimizes waste and potential for overfilling
- Complete purge of previous sample
- Fully isolated sample loop from sample source
- Options for vent to carbon canister, waste/flare header, or other recovery system



Model MGC / GasGrab™ Sampler

- Safe and representative sampling of toxic gases such as H₂S
- Designed to minimize fugitive toxic gas emissions, reducing exposure risk to the environment and operator
- Used in conjunction with hand-held gas measurement systems such as Dräger-Tubes and RAE gas detection tubes (Dräger Safety and RAE Systems' products are not sold by Sentry Equipment)
- Tandem switching valve integrates multiple functions into one device



Model MLG (liquefied gases)

- Continuous flow of sample assures representative sample
- Tandem switching valve integrates multiple functions into one device
- Quick disconnects allow for easy removal and transportation of sample cylinder
- Self-sealing quick disconnect fittings prevent leakage when cylinder is removed
- Separate fixed expansion cylinder allows for proper cylinder outage without discharge to the atmosphere or wasting product



MANUAL LOW-EMISSIONS SAMPLERS

Model MBP

- Contemporary samples without a speed loop or bypass
- Eliminates sample waste by back purging old sample from sample line
- Sampler and sample line are purged in each sample cycle, ensuring a representative sample



Model MTR

- Designed to take a representative, fixed volume sample from the top of a reactor vessel or tank
- Used in pharmaceutical and specialty chemical applications
- Standpipe overflow design eliminates sample flushing and prevents contamination from the vacuum source
- All wetted parts are made of highly corrosion-resistant materials
- Easy to flush and disassemble



OPTIONS & ACCESSORIES

Controllers for ISOLOK® automatic samplers

- PLC-based controllers allow manual, automatic, or continuous sample cycling
- Standard controller housing is NEMA 4X; NEMA 7/9 enclosures are available
- Options include air eject/purge, park position, CSA and CE approval, proximity sensor integration and fully pneumatic controls (typical for explosive environments)

Sampler Options

- Sample coolers, thermal shut off valves, activated carbon canisters
- Hazardous liquid samplers can be enclosed in a glove box with forced ventilation
- Multiple enclosure options

Special Materials of Construction

- Special materials include Hastelloy®, Monel®, Kynar®, Titanium, etc.
- Special seal materials include: Viton®, Kalrez®, EPDM, Buna-N, TFE, EPDM, polyurethane, and custom

Sample Containers

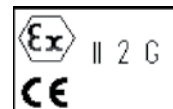
- Containers are available for pressurized applications
- Depending on sampler model, containers are available in polyethylene, stainless steel, and glass



For additional details on specific samplers, available construction materials, and other technical information, individual data sheets are available from Sentry's authorized representatives and web site: www.sentry-equip.com

⚠ WARNING

It is solely the responsibility of the end-user, through its own analysis and testing, to select products and materials suitable for their specific application requirements, ensure they are properly installed, safely applied, properly maintained, and limit their use to their intended purpose. Improper selection, installation, or use may result in personal injury or property damage.



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