MegaPure[™] 100

Chemical Distribution System

- » Economical
- » Space-efficient design
- » Single pass chemical filtration
- » Pulsation dampening of pump
- » Sample point for distribution
- » SEMI S2-93 reviewed
- » High-capacity option

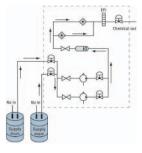
System Features

The MegaPure 100 Chemical Distribution System with pulsation dampener provides single pass filtration at 0.05µ for acids, bases, and oxidizers with a space efficient footprint. It is generally configured for one or two 55 gallon feed drums. Advanced microprocessor PLC-based controls are isolated in a separate nitrogen purged compartment. PLC network communication enhances the system's user-friendly operator interface panel.

- · Excess flow indication and shutdown
- · Photoelectric leak detection and alarm
- Manual DI/N2 pump and filter purging
- · Recirculating DI spray gun
- Cabinet door interlocks
- Teflon[™] pump with pulsation dampening
- · Manual valve isolation of inlet and outlet lines and pump
- Non-intrusive drum empty detection
- · Cartridge filter (10")

Options

- · Sample port
- · Dual drum with auto-changeover
- High capacity (HC)
- Redundant pump
- Redundant filter (standard on HC)
- · Aspirated drain
- FRPP cabinet (S2-92 and FM4910 reviewed)
- · Drum cabinets
- CE Mark 220 V, 50Hz
- Particle counter connection
- · Custom configuration and integration



Reliability

- > 2,500 hrs MTBF
- > 1,250 hrs MTBA
- < 2 hrs MTTR
- > 95% availability

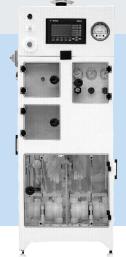
Performance

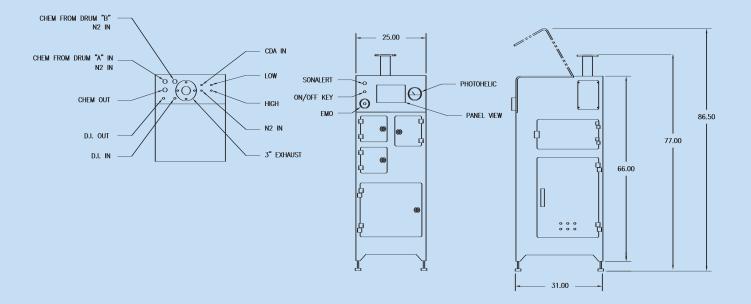
Flow rate: 2.5 GPM @ 20 psi (Regular Flow) 6 GPM @ 20 psi HC (High Capacity) (DI water @ Exit of CDU outlet)

Utilities for testing

DI water (18 meg ohm) Semiconductor grade nitrogen (99.999%) Clean dry air







Controls

- Connectivity to system PLCs via DH+ network
- Allen-Bradley monitoring system
- · Local and remote EMO capability
- Dry contacts (chemical request/chemical available)

Components

- Teflon pumps and piping
- Non-intrusive drum empty detection
- Photoelectric leak detectors
- Cartridge filter (10")
- Pulsation dampener
- · Excess flow indicator

Model	MF 100	MF 100 HC
Application	Acid, bases, oxidizers	Acid, bases, oxidizers
Flowpath	3/4"	1"
Dispense rate	2.5 GPM @ 25 psi	6 GPM @ 20 psi
Cabinet Materials	Polypropylene	Polypropylene
Footprint	25" x 31" x 74"	36" x 36" x 85"
Filter Housing	10" Cartridge filter	10" Cartridge filter(s)
Leak detection	Yes	Yes

Facility requirements	MP 100	Connection Type
DI	5 GPM @ 25 psi	1/2" Teflon™ Flaretek
N ₂	2 SCFM, 90 psi 3 SCFM, 90 psi (HC)	3/8" SS Swagelok
CDA	10 SCFM, 80 psi 12 SCFM, 80 psi (HC)	3/8" SS Swagelok 1/2" SS Swagelok (HC)
Exhaust	65 SCFM (dist.) 2" H ₂ 0	3" Pipe flange
Process drain	30 psi, 5 GPM	3/4" FNPT polypro
Power	120 VAC, 15 AMP service	3/4" Conduit
Cabinet drain	Gravity	3/4" FNPT polypro



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