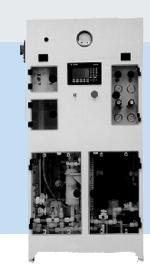
MegaPure[™] 500SF

Chemical Distribution System

- » Exceptional submicron particle performance
- » Stabilized filtration of day tank
- » Recirculation filtration of supply drum
- » Built in tendancy for uninterrupted chemical distribution
- » Non-intrusive empty drum detection
- » Pulsation dampening of pump
- » Drum and day tank sample ports
- » SEMI S2-93 reviewed



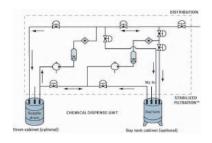
System Features

The MegaPure 500SF Chemical Distribution System provides exceptional submicron particle performance. Developed to meet the needs of fabs running below 0.5mm geometries, the MegaPure 500SF offers high-purity 0.05µm polishing filtration and a particle performance for most chemicals of less than 10 particles per ml at 0.2µm. Stabilized Filtration of the day tank eliminates filter shocking. Built-in redundancy and the day tank are included for high volume distribution to multiple use-points.

- · Excess flow indication and shutdown
- · Photoelectric leak detection and alarm
- · Manual DI/N2 pump and filter purging
- · Cabinet door interlocks
- · Recirculating DI spray guns
- · Separate drum and day tank filtration circuits
- · Cartridge filter (10")
- · Encapsulated or cartridge dispense filter
- · Sample ports
- · Dual drum with auto-changeover

Options

- High capacity (HC)
- Parallel drum filter (Standard on HC)
- Parallel day tank filter (Standard on HC)
- · Fab-wide recirculation
- Aspirated drain (for non-solvent applications)
- · Drum/day tank cabinet
- FRPP cabinet (S2-93 and FM4910 reviewed)
- CE Mark 220 V, 50Hz
- · Stainless steel (304) station for solvent applications



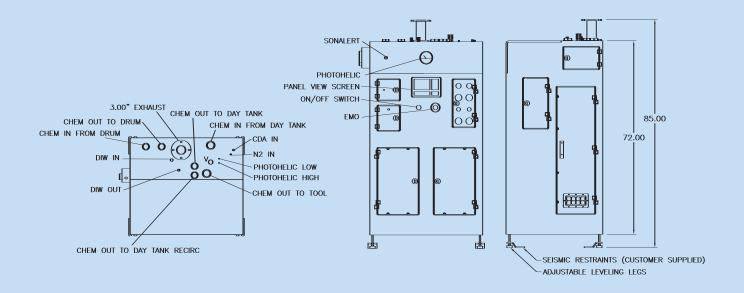
Reliability

- > 4,000 hrs MTBF
- > 2,500 hrs MTBA
- < 2 hrs MTTR
- > 99.5% availability

Performance

Flow rate: 2.5 GPM @ 25 psi (Regular Flow) 6 GPM @20 psi (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

- · Allen-Bradley SLC 500 series PLC
- · Allen-Bradley Panelview 550 GUI
- System P&ID/ status
- Alarm and warning screens
- Distribution valve box status
- Pump and filter runtime screens
- Password protected maintenace screens
- Manual activation of valves/pumps
- Connectivity to system PLCs & MegaView $^{\!\top\!\!\!M}$ supervisory via DH+ network
- · Local and remote EMO capability

Components

- · Teflon pump
- · Non-intrusive level detectors
- · Cartridge (10") and encapsulated filters

Facility requirements	MP 500SF	Connection Type	
DI water	5 GPM @ 25 psi	1/2" Teflon™ Flaretek	
N ₂	2 SCFM, 90 psi	3/8" SS Swagelok 1/2" SS Swagelok	
CDA	10 SCFM, 80 psi	3/8" SS Swagelok 1/2" SS Swagelok (HC)	
Exhaust	120 SCFM, 2" H ₂ O	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	1/2" FNPT polypro	

Model	500SF	500SF HC	500SF SS	1100PV
Application	Acids, bases, oxidizers	Acids, bases, oxidizers	Solvents	Solvents
Flowpath	3/4"	1"	3/4"	1"
Dispense rate	2.5 GPM @ 25 psi	6 GPM @ 25 psi	2.5 GPM @ 25 psi	6 GPM @ 25 psi
Cabinet Materials	Polypropylene	Polypropylene	Stainless Steel (304)	Stainless Steel (304)
Footprint	36" x 46" x 82"	36" x 42" x 82"	36" x 36" x 74"	36" x 42" x 82"
Filter Housing (drum)	10" Cartridge filter	10" Cartridge filter	10" Cartridge filter	10" Cartridge filter
Filter Housing (dist.)	Encapsulated filter	Encapsulated filter	Encapsulated filter	Encapsulated filter
Day tank configuration	Customer specific	Customer specific	Customer specific	Customer specific
Fire suppression	No	No	Yes	Yes
Leak detection	Yes	Yes	Yes	Yes
Safety	S2-93 Reviewed	S2-93 Reviewed	S2-93 Reviewed	S2-93 Reviewed



