

TITAN™

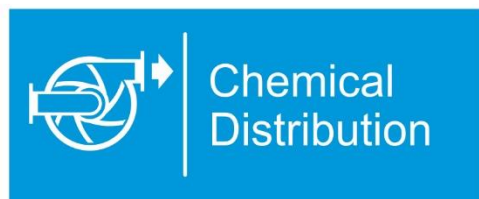
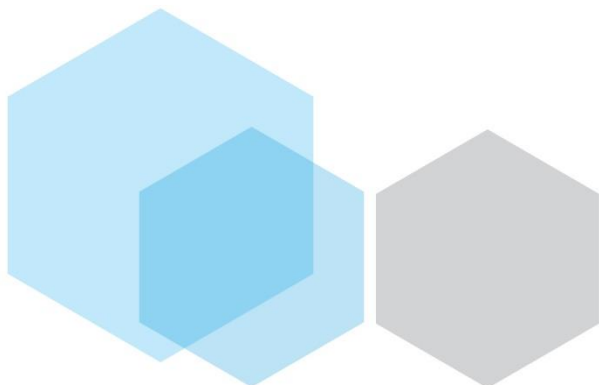


## Chemical Distribution Unit (CDU)

The Titan™ CDU is a closed loop pressure controlled delivery system that transfers chemical from one or more interchangeable vessels to a distribution tank. The system maintains continuous chemical pressure control to production areas and includes automated sampling and an internal waste pump.

### Advantages

- ▶ Fully automated system
- ▶ Low cost of ownership
- ▶ Flexible and user-friendly HMI
- ▶ Space efficient design
- ▶ System and/or component redundancy as required to maximize production uptime
- ▶ High flow system



## Features

- ▶ Pressure and flow monitoring
- ▶ Manual UPW/N<sub>2</sub> pump and filter purging
- ▶ Redundant pneumatic pumps
- ▶ Tank level monitoring
- ▶ Automated DFS sample chamber
- ▶ Maintenance points for system purging and draining
- ▶ Solenoid valves with system force capability
- ▶ All wetted flow paths are PFA or PTFE
- ▶ Polypropylene cabinet materials

## Safety

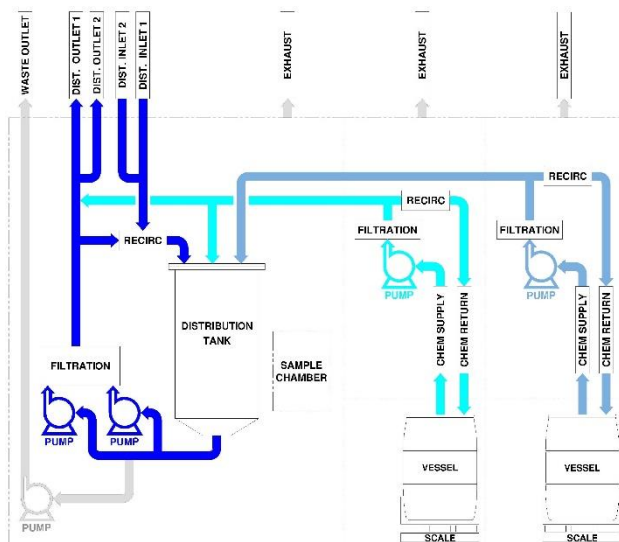
- ▶ Cabinet leak detection and alarming
- ▶ Cabinet exhaust monitoring and alarming
- ▶ Cabinet door interlocks
- ▶ Recirculating UPW spray guns for maintenance
- ▶ Cabinet contains 110% of the largest volume
- ▶ Waste pump for system draining and maintenance
- ▶ Bi-directional vent to prevent chemical off-gassing
- ▶ Local and remote EMO capability
- ▶ UL 508A Certified
- ▶ SEMI S2 Compliant

## Options \*Contact DFS for a complete list of available options.

- ▶ 200L single or dual vessel feed
- ▶ Internal 55-gallon tank or larger external tank
- ▶ Automated UPW/N<sub>2</sub> pump and filter purging
- ▶ Single or dual loop supply
- ▶ Redundant maglev pumps
- ▶ Vessel gloves
- ▶ Vessel scales
- ▶ Parallel, 0-3 10-inch or 20-inch filter housings
- ▶ Temperature monitoring and control
- ▶ Metrology to monitor loop supply
- ▶ FM4910 cabinet materials
- ▶ SEMI S2 Certified

## Controls

- ▶ PLC and HMI
  - On-screen system P&ID
  - Maintenance and shutdown monitoring
  - Force screens for maintenance and troubleshooting
  - Pump runtime monitoring
  - Password protected screens
  - Manual activation of valves/pumps
- ▶ Connectivity to system PLC Ethernet networks
- ▶ Communication with PC via PLC network



Model	Modules
Applications	Acid, bases, oxidizers
Flow Rate	20, 40, or 60 LPM
CDU Footprint	38"Dp x 84"W x 84"H
Vessel Footprint	38"Dp x 33"W x 84"H
Tank Footprint	40"Dp x 41"W x 84"H

Facility Requirement	Utilities
Ultrapure Water (UPW)	20 LPM
Nitrogen (N <sub>2</sub> )	500 SCFH
Clean Dry Air (CDA)	750 SCFH
Exhaust	190-290 SCFM
Process Drain	40 LPM
Power	120VAC
Cabinet Drain	Gravity or pressurized



**DFS** Diversified Fluid Solutions  
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