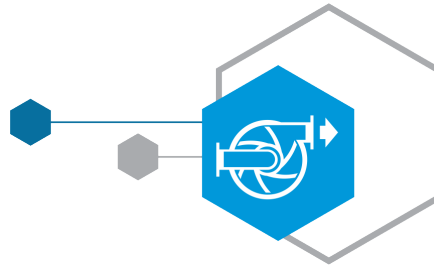


DFS TITAN™ DUAL VESSEL CDU



Dual Vessel Chemical Distribution Unit (CDU)

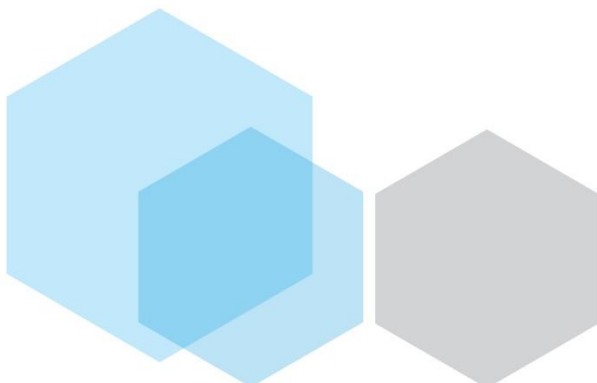


The DFS Titan™ Dual Vessel CDU transfers from interchangeable vessels via AODD pumps. The system maintains continuous chemical pressure to production areas using either automated closed loop pressure control or deadhead supply.

The two chemical vessels allow a constant supply of chemical. When one of the vessels becomes empty, the system automatically switches over to the other full and approved vessel. Chemical is supplied to the production area by one online vessel with the other vessel in standby. The system can be configured to automatically recirculate chemical globally, locally, or on-demand only.

Advantages

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




Chemical
Distribution

DFS TITAN™ DUAL VESSEL CDU

Features

- ▶ Flow-through pressure transducers
- ▶ Pump redundancy with side-to-side switching
- ▶ Non-intrusive level sensors
- ▶ Maintenance points for system purging and draining
- ▶ Isolated pumps and plumbing in vessel sections
- ▶ Solenoid valves with system force capability
- ▶ All wetted flow paths are PFA, PTFM, or PTFE
- ▶ Polypropylene cabinet materials

Safety

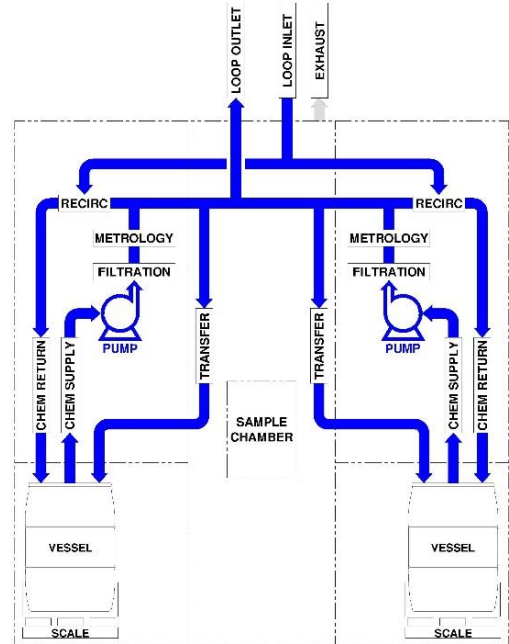
- ▶ Cabinet leak detection and alarming
- ▶ Cabinet exhaust monitoring and alarming
- ▶ Cabinet door interlocks
- ▶ Compartmentalized plumbing to minimize exposure to pressurized plumbing during maintenance on a single side
- ▶ Recirculating UPW spray guns for maintenance
- ▶ Bi-directional vent to prevent chemical off-gassing
- ▶ Cabinet contains 110% of the largest volume
- ▶ Local and remote EMO capability
- ▶ UL 508A Certified
- ▶ SEMI S2 Compliant

Options

- ▶ Single or parallel 10-inch or 20-inch filter housings
- ▶ Metrology verification of incoming and loop chemical supply
- ▶ Automated DFS sample chamber
- ▶ Fixed PFA vessel with single interchangeable vessel feed
- ▶ Waste pump for system draining and maintenance
- ▶ High flow pumps
- ▶ Vessel scales for side-to-side chemical transfer
- ▶ Second supply outlet
- ▶ Ultrasonic flow meters
- ▶ 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	Titan Dual Vessel CDU
Applications	Acid, bases, oxidizers
Flow Rate	20 to 40 LPM
Internal Flow Path	3/4"
Footprint	38"Dp x 90"W x 79.5"H

Facility Requirement	Utilities
Ultrapure Water (UPW)	2 LPM
Nitrogen (N ₂)	100 SCFH
Clean Dry Air (CDA)	32 SCFM
Exhaust	150-220 SCFM
Process Drain	20 LPM
Power	208VAC
Cabinet Drain	Gravity



DFS Diversified Fluid Solutions
A Critical Process Systems Group Company

11789 W. Executive Drive, Boise, ID 83713

For more information: www.dfsolution.com
To speak to a representative: 208.489.0053
To request a quote: info@dfsolution.com