

DFS AC_vFLO™ GAS DELIVERY SYSTEM

High Purity Gas Delivery System

The DFS AC_vFLO™ gas cabinet is defining the new standard in Gas Cabinet Technology! This System is designed to provide a continuous gas flow to process production tools with minimal technician intervention. The intuitive HMI interface allows the user to easily configure the unit for Full Auto Mode supply. For the more experienced user, the system allows a Manual Control Mode to perform service, configuration, and start-up related activities.

The pressure control system automatically controls supply point pressure without the use of manual regulators. During normal supply, the system is capable of automatically adjusting the delivery outputs to address the inverse gain effects from a depleting cylinder pressure. Once a cylinder is placed online, it is no longer necessary to make additional adjustments to the supply regulator to maintain the pressure setpoint. Pressure control is accomplished by using our proprietary algorithm to control the system's proportional responses real time via dynamic feedback from the supply side pressure transducers.



Cabinet Features

- ▶ Modular valve panel designs
- ▶ All welded 12 gauge cold-rolled steel construction
- ▶ Knife-edge sealed doors
- ▶ Polyester powder coating of exterior and interior for superior corrosion resistance
- ▶ Self-closing and self-latching doors and windows for improved safety
- ▶ Front door louvers for laminar air flow through cabinet
- ▶ Integrated drop down cylinder ramp

Cabinet Configurations

- ▶ 2 Cylinder Auto-Switchover
- ▶ 2 Cylinder independent outlet for compatible gases
- ▶ Metal door filters



DFS AC_vFLO™ GAS DELIVERY SYSTEM

Control Features

- ▶ Industrial PLC
- ▶ 12-inch IPC color touchscreen
- ▶ Automated delivery pressure control with auto crossover
- ▶ Configurable and automated panel and pigtail purges
- ▶ Real Time Data trending
- ▶ Multi-level security log-in
- ▶ Auto-zero load cells and pressure transducer
- ▶ Manual operation for troubleshooting and maintenance
- ▶ Multi-purge gas capabilities

Cabinet Safety Features

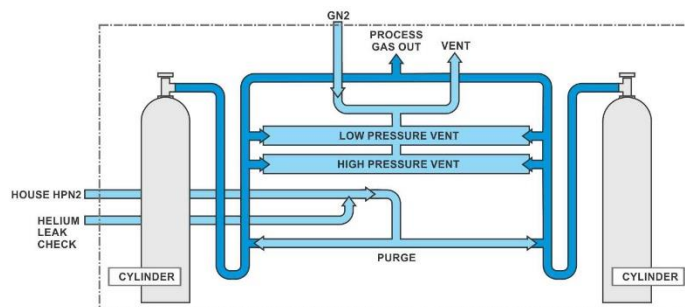
- ▶ Exhaust sensor with configurable site specific response protocol
- ▶ Integral cylinder brackets and chains
- ▶ Cylinder separation barrier for flammable and pyrophoric gases
- ▶ Face shield protection
- ▶ Audible alarms (and optical signal tower)
- ▶ Service door face velocity with door open = 200fpm

Control Safety Features

- ▶ Programmed leak checks
- ▶ Intelligent vent system
- ▶ Software interlocks
- ▶ Excess flow sensors
- ▶ Life Safety system controls
- ▶ Remote shutdown capable
- ▶ Actuated cylinder valve ready
- ▶ UVIR sensors

Cabinet Options

- ▶ Cylinder or panel heat trace
- ▶ Adjustable cylinder rack
- ▶ Cylinder load cells (scales)
- ▶ Purge gas purifier and filtration
- ▶ Process gas purifier and filtration
- ▶ Mass flow controllers
- ▶ ESO deep purge pigtail
- ▶ Rate of rise fire sensor
- ▶ UL approved sprinkler heads



Model	AC _v FLO Gas Cabinet
Applications	Toxics, corrosives, oxidizers, inerts, and flammables and pyrophorics
Materials Flow Path	1/4" SS316L, 10Ra Avg 15Ra Max, EP
Communications	Cat-5 Ethernet (legacy comm ports available)
Cabinet Materials	Steel with polyester powder coating
Code Compliance	SEMI S2, S8, ASME, NFPA, NEC, UL
Footprint	18.94"Dp x 25"W x 85" H
Footprint C1D2	18" Dp x 24"W x 80"H

Facility Requirement	Utilities
Power	110VAC, 5A
Exhaust 2 cylinders	300 SCFM@0.15"WC
Venturi N ₂	Adj to 85psi, 60slm
N ₂ /CDA (PID Control)	Adj to 90psi
Process Supply	Gas dependent
Purge N ₂	Adj to 60psi, 30slm
Process Vent	0.5-2.0"WC, 100slm

AC_vFLO™



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