

FABTRON

The FT33 Series , PVSA Type Oxygen Purifier

The FABTRON FT33 Series is a high-performance gas purification system specifically designed for oxygen applications. By integrating granular adsorbent media with a hollow fiber structured module, the purifier maximizes mass transfer efficiency within a compact footprint. Utilizing Pressure Vacuum Swing Adsorption (PVSA) technology, the system delivers stable, continuous, and energy-efficient oxygen purification under precisely controlled pressure and vacuum conditions.

The high-surface-area granular adsorbent selectively removes trace impurities such as H₂O, CO₂, CO, N₂, and hydrocarbons to ppm or sub-ppm levels, ensuring high purity oxygen for industrial and laboratory use. The hollow fiber configuration enhances gas distribution uniformity, reduces channeling, and improves overall adsorption efficiency. Ambient-temperature operation maintains stable performance while minimizing thermal stress on system components.

Regeneration is achieved through pressure reduction and deep vacuum (typically below 1 torr), enabling thorough desorption and extended adsorbent service life. A dual-PVSA adsorber alternating design ensures uninterrupted high-purity oxygen supply while providing scalable capacity and simplified maintenance.

Advantages

- * High Purification Efficiency
- * Ambient Temperature Operation
- * Energy-Efficient Regeneration Lorem ipsum
- * Extended Adsorbent Life
- * Continuous Operation
- * Low Pressure Drop Design
- * Modular & Scalable Configuration

Designed Flow Rate

- * 10 to 3,000 Nm³/Hr.



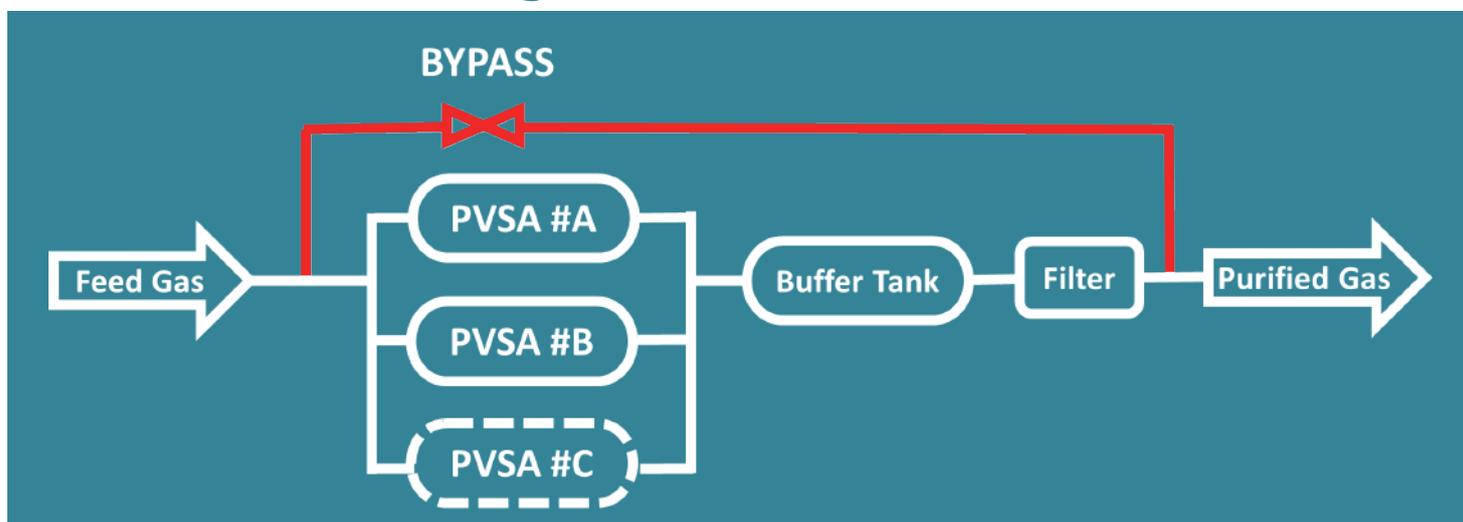


O2 PVSA Technology gas purifier.

Increase purity up to >5-nines grade purity

Platform No.	Flow Rate (Nm3/Hr)	Gas Purified :	Impurities Removed :
FT33	10 to 3,000	O2	H2O, CO, CO2, CH4, N2 to <1 ppm

Platform and Flow Diagram



Features Table

Instrumentation	Standard	Optional	Instrumentation	Standard	Optional
Fully Automated Controller by Programmable Logic Controller.	√		Inlet and Outlet Manual Isolation Valve.		√
12 inches Touchable Human Machine Interface.	√		Auto / Manual Bypass Valve.		√
Separate Control Power. 100-240 VAC.		√	Inlet Mass Flow Meter.		√
UPS for Separate Control Power.		√	Inlet and Outlet Pressure Transmitters.		√
Emergency Off Button (EMO).		√	Inlet and Outlet Analytical Port.		√
Emergency Remote Shutdown	√		Instrument Air Management System with Reservoir.		√
Purified Gas Moisture Transmitter.		√	Over Pressure Relief Valves.	√	
MODBUS or PROFINET Communication Port.	√		0.003µm Particle Filter, Metal or Teflon.		√
Alarm Light Tower.		√	Purifier fixed bolster brackets.		√
Analog Signal Output Interface. * Mass Flow Meter 4-20 mA Signal Output. * Pressure Transmitters 4-20 mA Signal Output. * Common Alarm Relay, N.C. * Gas Relay Indicating Purifier Status, N.C.		√	Backup Column with Auto/ Manual regeneration		√
			Outdoor Enclosure.		√