





Single-Use Chromatography Skid

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		Equipment Specifications		
Litility Dequirements	Power	120 - 230 VAC, 50/60 Hz, 1200 Watts		
sand requirements	Compressed Air	5 - 6 bar, oil & particle free		
Valves		(10) Pinch Valves		
Operating Temperature		2 - 50° C, 10 - 90% RH (Non-condensing)		
Single Use Pressure Sensor		(1) Single-Use Pressure Sensor		
UV		(1) Single-Use Flow Cell with UV Photometer		
UV Wavelength		206 - 700 nm		
Conductivity Sensor		(1) Single-Use Conductivity Sensor		
Conductivity Range		1 – 500 mS/cm		
pH Sensor		(1) Single-Use pH Sensor		
H Range		2 - 12 pH		
Flow Path		1/4" System	1" System	
System Flow Rate		1 - 180 L/h	6 - 2000 L/h	
Column ID		8 - 25 cm	20 - 80 cm	
Pump Speed Range		0.2 - 265 RPM		
Pump Capacity		up to 3000 L/h		
Inline Dilution Capability		Yes		
Onboard Pressure Sensor		(1) Single-use Pressure Sensor		
Pressure Range		0 - 60 psi ±2 psi		
Overpressure Protection		Yes		
Inline Bubble Detectors		(3) Clamp-on Bubble Detectors		
		Control		
HMI (Human Machine Interface)		Yes		
		Performance & Testing		
Column Efficiency Testing		Yes		
HETP (Height Equivalent to a Theoretical Plate)		Capability to measure and report		
Asymmetry Factor		Capability to measu	Capability to measure and report	

Automated Engineering Services, Inc.



TECHNICAL SPECIFICIATIONS

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Flowpath Assemblies

Our single-use flowpaths are designed with cutting-edge fluid management technologies, including overmolded connections, pump heads, tubing, filters, and sensors. These components create a robust, nearly leak-free, closed singleuse device. The flowpaths are easily attachable, simplifying operation and enhancing process efficiency. Innovative valve blocks direct fluids through uniform, crevice-free flow paths, achieving extremely low turbulence. Multi TEE injection molded silicone inserts, combined with overmolded connections, minimize the footprint and significantly reducing dead legs.

- **Minimized Turbulence:** Uniform, crevice-free internal diameter (ID) reduces turbulence.
- Enhanced Leak Prevention: Over-molded connections significantly reduce the risk of leaks.
- Improved Drainability: Minimal dead legs improve drainability and decrease hold-up volume.
- **Dimensional Consistency:** Injection molded flowpaths ensure batch-to-batch consumable consistency.
- **Footprint Optimization:** Multi TEE injection molded silicone inserts and over-molded connections minimize the overall footprint.
- **Increased Efficiency:** Simplified process connections throughout the system boosts operational efficiency and process robustness.