

MVT Series Vacuum Tanks

Clean room ready tank designed for precision micro-bore medical tubing applications.

MVT Series Vacuum Tanks were designed with an intense focus on the manufacturing requirements for microbore medical tubing. The advanced technology of these tanks with an emphasis on cleanability virtually eliminate the potential for bacteria or bio-films on the process water contact surfaces.

Key Features:

- Stainless steel base frame with non-marking casters and position locking floor pads.
- Electro-polished process water contact surfaces.
- Easy-to-clean rounded corners, including inside bulkheads and all water contact surfaces.
- Multiple side-viewing windows for quick process optimization.
- Half-inch tempered glass lids.
- Fully contoured externally adjustable product guide rollers -two units provided per one-foot of the vacuum chamber and water seal chamber.
- Tri-clover fittings and valves ease cleaning with a minimal number of threads exposed to process water.
- Medical grade, three-stage filter (5, 2, 0.5 micron) to filter pyrogens.
- Ultra-violet filter with 5-micron pre-filter to render germs sterile and filter out pyrogens.



Plus:

- Unique water circulation system enhances water flow throughout the tank minimizing pump cavitation and thus micro-water bubbles, which can cause tubing surface imperfections and ultra-sonic gauging issues leading to poor process control. Quick total system flushing/draining to pump the entire system dry is accomplished with the use of a three-way water valve. A low-level water switch is also included to prevent water pump damage during flushing.
- The vacuum reservoir is located on a sliding rail for cleaning ease.
- Process adjustments are simple with precision up/down, and side-to-side alignment provided on both ends of the tank. A servo linear actuator provides for precision tank linear adjustments. Fully programmable linear moves or a specific die gap can be easily programmed and saved via a full recipe system.
- Air wipe chamber with lid controls airflow and minimizes noise.
- A 7-inch operator touch screen with closed-loop vacuum control is also standard with control and displays to 0.01-inch water resolution. A programmable position vent valve can be adjusted through a drop-down menu to provide optimal CFM operation of the vacuum pump to extreme precision. A water temperature readout is also standard with the potential to add water temperature control as a recommended option.
- A wireless hand-held tablet is also included as standard allowing remote operation from this device while watching the extrudate enter the tank through the side windows. Vacuum level, tank position, product OD, puller speed, and even puller belt gap can be adjusted from the tablet.



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Models	MVT-3	MVT-5	MVT-8		
Performance characteristics					
Tube/profile capacity	Up to 1 in.				
Vacuum system	Variable-speed vacuum blower / 0 to 130 in. H2O {0 to 32.38kPa}				
Water System	316 stainless steel water circulation pump and heat exchanger, with 3-stage filter and UV filter				
Recirculating pump Hp {kW}	1 {0.75}				
Vacuum pump Hp {kW}	1.70 {1/26}				
Tank length ft	3	5	8		
Number of Compartments	3	4	4		
Compartment type		Primary	Secondary	Primary	Secondary
Vacuum inches	12 in.	12 in.	24 in.	24 in.	48 in.
Water (flood) seal inches	12 in.	12 in.	12 in.	12 in.	
Air wipe inches	12	12 in.	12 in.	12 in.	
Contoured roller assemblies included	4	8		14	
Dimensions inches {mm}					
A - Height	81 in.				
B - Height to centerline	42 ± 2" {1067 ± 51 mm}				
C - Overall length	46.7	70.7		106.7	
D - Overall depth	38.6	38.6		38.6	
Longitudinal adjustment (manual)					
Tank compartment cross section	8 in. wide x 6 in. deep				
Weight lb {kg}					
Shipping	950	1250		1400	
Electrical					
Voltage	460 volts/ 3 phase/ 60 Hz				

Information in this literature may change without notice. Consult with a Reel Power representative for the most current information.