Precision Sizing for **Medical Tubing Products**

MedVac flood-cooling sizing tanks are uniquely designed to meet the specialized process needs of medical tubing manufacturers. These high technology, vacuum sizing systems feature advanced digital controls for rock-steady precision to ensure optimum product quality for single and multilumen microbore heart catheters to large-gauge medical tubing.

Model MedVac-235
(Shown with optional UV filter.)

Absolutely Consistent Dimensional Control

Available in five models, MedVac Series vacuum tanks provide exceptional tube ovality and concentricity for product sizing under vacuum or as a process aid for free extrusion.

Industrial duty, stainless steel construction combined with bow resistant half-inch {12.7 mm} tempered glass lids and an integrated proportional valve allow fine-control of the vacuum level to within 0.1 inch of water for repeatable, precise process control. Optional water tempering controls the bath to ±1 degree optimizing heat transfer rates for obtaining specific material properties.

Pivoting overhead controls allow process adjustments and monitoring right at the extrusion die.

Special non-contact tooling is available for the processing of low durometer materials.

Cleaner interior design

Tank interior is designed to ease cleanout by minimizing sharp corners and exposed threads where bacteria, pyrogens and other particulate matter can build up. Telescoping drip tray is one piece to aid wipe-down by eliminating open seams. Guide rollers inside the tank are attached to free-standing, removable mounts for cleaning.

Medical-grade filtration

Process water is segregated from the heat/cool circuit to eliminate contamination. System can be fitted with a UV water purifier and a 5 micron sedimentary pre-filter as options.

Easy set-up and operation

Narrow tank frame accommodates almost any extruder or melt pump, even three layer. Three-axis tank alignment system with hand wheels, linear slides and ball-screw actuators provide stable, precision positioning to within thousandths of an inch.

Process validation

Optional PAVC+ control offers a serial interface for a host microprocessor to record process settings. Optional transducer provides a digital, linear readout for measuring/recording distance from die face to where the tube enters the water.

Features

01

Stainless steel tank

02

Single piece, telescoping drip tray - easier to clean since there are no separate pieces to hide pyrogens or other contaminates.

03

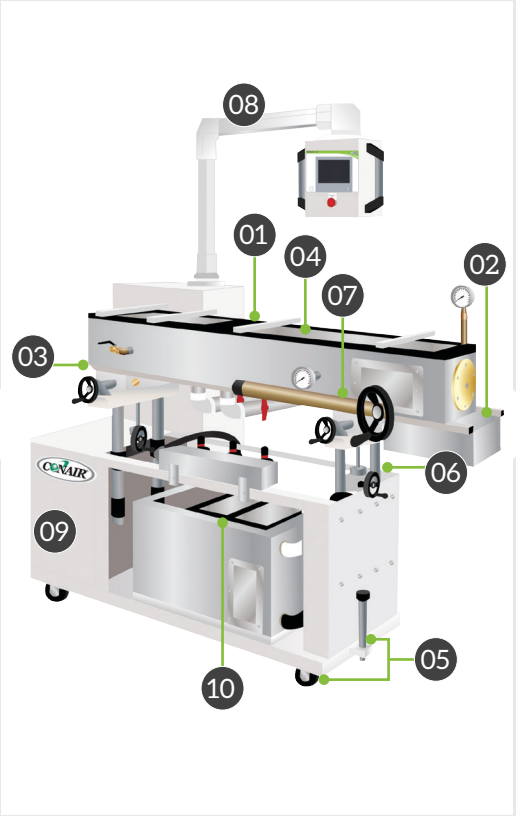
Rounded bottom for easier cleaning - eliminates corners to ease cleanout and removal of contaminates.

04

Hinged one-half inch {12.7 mm} tempered glass tank lids - solid design restricts bending to provide excellent visibility of the product and uncompromised sealing.

05

Highly durable urethane swivel casters with jackscrews for positive positioning.



06

Rock-steady, 3-axis precision position adjustment offer fine adjustment, is tighter and less prone to vibration and unwanted movement during process of critical tubes.

07

Manual 12-inch {305 mm} longitudinal adjustment with hand wheel provides fast linear movement to and from the die.

08

Swing arm, pivoting control pod with ten-turn potentiometer speed control and vacuum guage offers ease of access while allowing use of a co-extruder without frame interference.

09

Painted steel frame

10

Full capacity stainless steel reservoir with easy access glass lids.

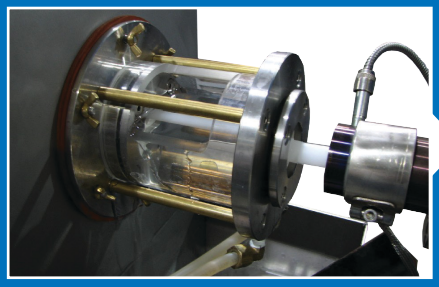
- **Variable speed VFAC vacuum pressure blower**
  High CFM capacity with low RPM allows operation to 130 inches water {3.3 meters water} with minimum noise.
- **Stainless steel (316) centrifugal water circulation pump**
  and heat exchanger.
- **Quick change, spin off filter**
- **Float valve** for automatic filling and make up.
- **Adjustable water level control**
  with thermometer.
- **Free-standing blank product roller assemblies**
  lift out of the tank for ease of cleaning.

Options

- Left-to-right direction
- Special non-automotive powder coat
- Stainless steel frame
- Full-length stainless steel splash tray under main tank
- Passivation of stainless components to minimize corrosion
- Electropolish of main stainless components
- Stainless steel plumbing package for deionized water for medical applications
- Mounting of customer supplied ultra sonic wall unit in first 18 inches {457 mm} of vacuum chamber with water connections, including de-bubbling unit for water input
- PAVC+ Ethernet or Analog interface
- PAVC+ Temperature control
- Ultraviolet water treatment unit
- Filter housing with 5 micron rating filter
- Special power: 230/3/60, 380/3/50 or 575/3/60
- Increased vacuum capability of up to 200 inches water
- CE certification
- UL certification

Tooling Options

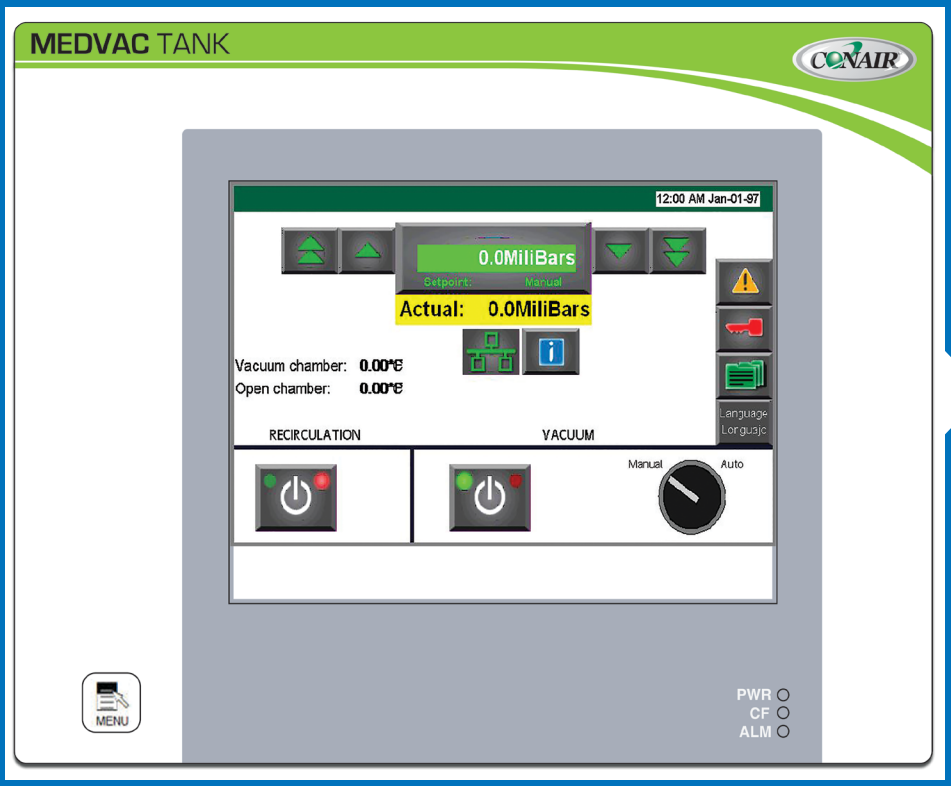
- Pre-skinning chamber with independent water flow control valve complete with one set of tooling
- Additional sets of pre-skinner inserts for other product sizes
- Flow meter rated for 0 to 70 gallons per hour {0 to 284 liters per hour} with brass pressure regulator
- Split design air wipe assembly with mounting bracket
- Flow meter option in stainless steel
- Additional blank product guide roller assemblies
- Contoured product guide roller assemblies



Pre-skinning chamber with tooling inserts for flexible polymers

- Calibrate/quench assembly for flexible materials
- Hold-down guide rollers, contoured or non-contoured
- Split-design air-wipe assemblies
- Split design air wipe assembly with mounting bracket
- Adjustable water level

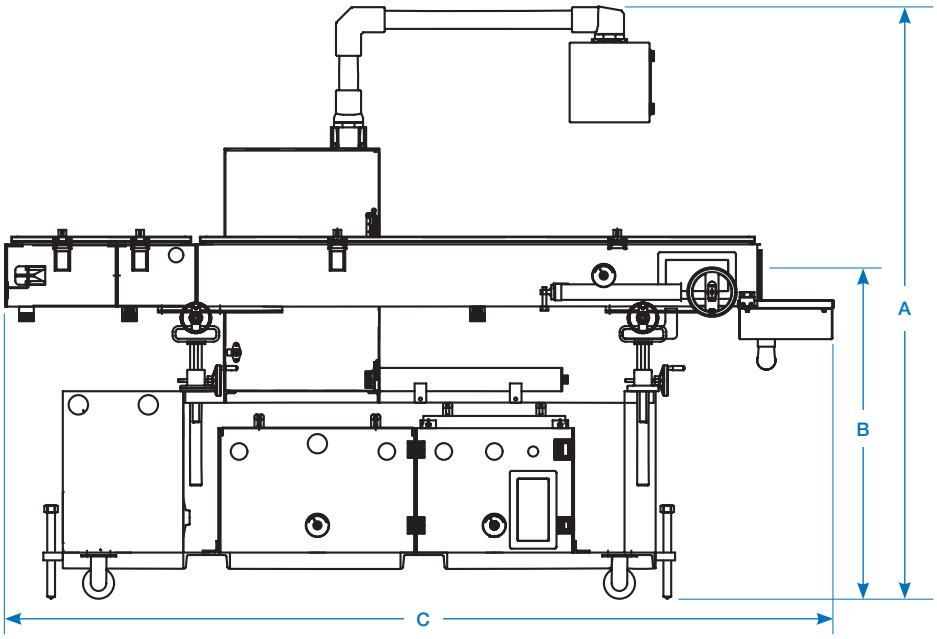
PAVC+ Vacuum Control



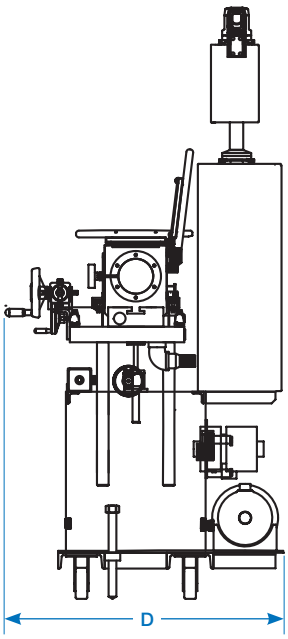
The optional touchscreen PAVC+ Vacuum Control is used with Conair vacuum water tanks to maintain a constant and precise vacuum pressure within the tank. Connections are provided for automatic feedback control of the setpoint by use of X/Y laser scanners that monitor the profile. The PAVC+ provides recirculation and vacuum pump Start and Stop, with input conditioning. Setpoint adjustment is done via the HMI control panel of the vacuum tank. The local setpoint can also be adjusted externally via Raise and Lower contacts, or Ethernet communications.

With recipe storage and optional Ethernet communication for interfacing with a host computer or other equipment, the PAVC+ control is ideal for fine tuning vacuum sizing and storing those settings for rapid startups in the future.

Specifications



Front view



Side view

Models	MedVac-235	MedVac-238	MedVac-2311	MedVac-2317	MedVac-2323
Performance characteristics					
Tube/profile capacity	Up to 2 inch {51 mm}				
Vacuum system	Variable-speed vacuum blower / 0 to 130 In. H2O {0 to 32.38 kPa}				
Water system	Stainless steel centrifugal water circulation pump and heat exchanger with spin-off filter				
Recirculating pump Hp {kW}	1 {0.74}		2 {1.4}		
Vacuum pump Hp {kW}	1.70 {1.26}				
Tank length inches {mm}	60 {1524}	96 {2438}	132 {3353}	204 {5181}	276 {7010}
Number of compartments	3	3	4	5	6
Compartment type					
Vacuum inches {mm}	36 {914}	72 {1829}	108 {2743}	180 {4572}	252 {6401}
Water (flood) seal inches {mm}	10 {254}				
Air wipe inches {mm}	14 {355.6}				
Blank roller assemblies included	2	3	4	8	12
Dimensions inches {mm}					
A - Height	76.8 {1951}				
B - Height to centerline	42 ± 2 inch {1067 ± 51 mm}				
C - Overall length	80.8 {2052.32}	107.2 {2722.88}	143 {3632.2}	215 {5461}	287.5 {7302.5}
D - Overall depth	33 {838}	33 {838}	33 {838}	36 {914}	36 {914}
Longitudinal adjustment (manual)	8 - 12 inches {203 - 305 mm}				
Tank compartment cross section	8 x 8 inch {203 x 203 mm}				
Approximate weight lb {kg}					
Shipping	1250 {567}	1400 {635}	1600 {726}	2100 {953}	2600 {1180}
Voltage Full load amps *					
460V/3 phase/60 Hz	Consult Conair				
Water requirements	City, tower or chiller water. Main supply line: 1 inch NPT fitting				

Specification Notes

* FLA data for reference purposes only. Does not include any options or accessories on equipment. For full FLA detail for power circuit design of specific machines and systems, refer to the electrical diagrams of the equipment order and the nameplate applied to the machine.

Specifications may change without notice. Consult with a Conair representative for the most current information.