Model MT104-16-4

PRECISELY SIZE **SMALL TO LARGE** TUBE AND PROFILE

MT Vacuum Sizing Tanks provide stable vacuum for precise sizing of tube and profile extrusions up to 4.5 inches {114.3 mm} in diameter. Water/air separation technology improves product tolerances and surface finishes and allows for repeatable quality and minimizes scrap.

All models offer a high-efficiency plate heat exchanger; an improved spray bar and water level adjustment system; and a wide range of tank sizes and pump configurations. Manual motor starters are standard.

WATER/AIR SEPARATION ENSURES VACUUM STABILITY

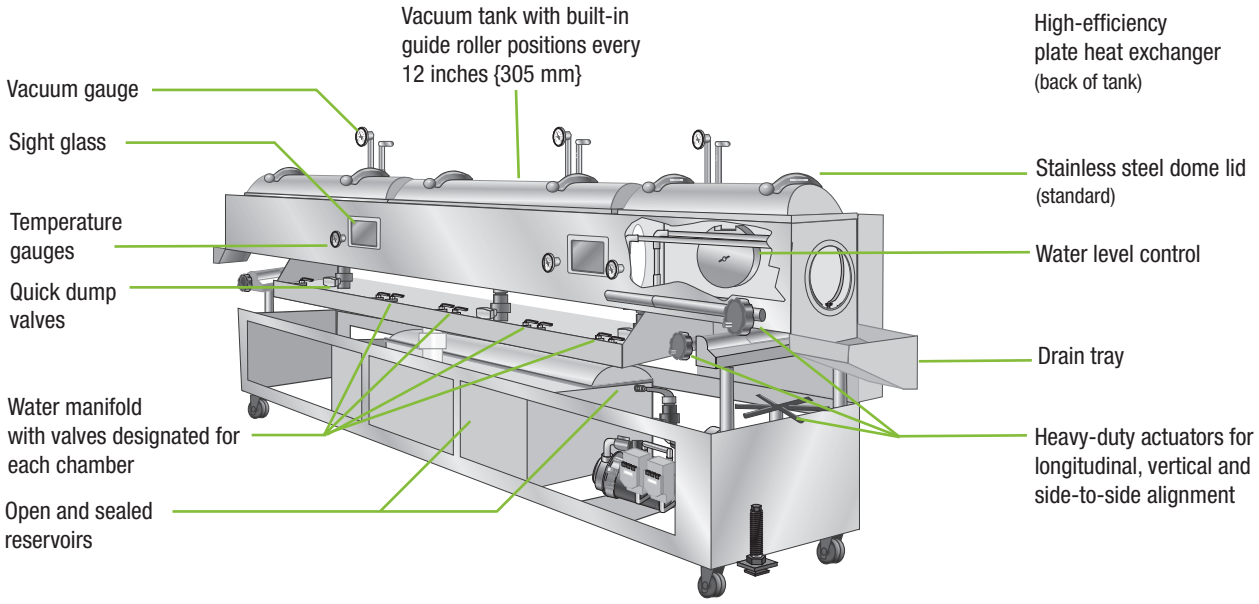
Most vacuum sizing tanks use a single standpipe to maintain water levels and pull vacuum into the chamber. Pockets of water and air surging through the same line can cause a hammer effect and vacuum fluctuations that can harm the shape and surface finish of the product.

MT sizing tanks eliminate this problem by using separate water and air pipes that lead to a closed water reservoir. Float valves in the reservoir maintain the water level below the vacuum pump inlet. The vacuum pump evacuates only the air in the reservoir, never the water, allowing optimum pump performance and minimizing surges in vacuum level.

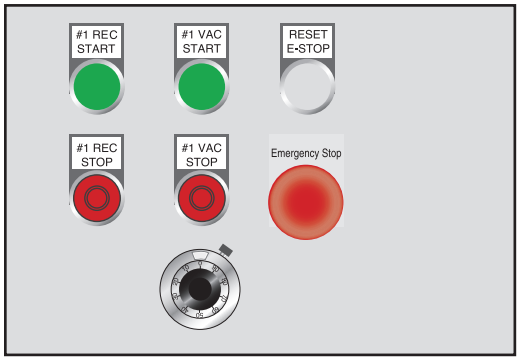
- **Easy to operate**
  Built-in water-manifold system with water and vacuum valves are dedicated to each vacuum chamber. Quick dump valves drain the tank. Optional digital control offers automatic vacuum adjustment and in-line gauge or computer interface.
- **Improved tank stability**
  Redesigned to handle heavier pulling forces. Roller system eliminates tank rock. Heavy-duty shafts and bearings provide precise yet rigid longitudinal, vertical and side-to-side adjustment capabilities.
- **Stainless-steel components**
  The vacuum tank, water reservoirs, splash tray, drip trays and dome lid are stainless steel. Other surfaces are painted for corrosion resistance.
- **Tank lengths 7 to 22 feet**
  Wide range of sizes, from a 7-foot {2.1 meter}, 2-chamber tank to the 22-foot {6.7 meter}, 5-chamber tanks.

MT VACUUM SIZING TANKS

FEATURES

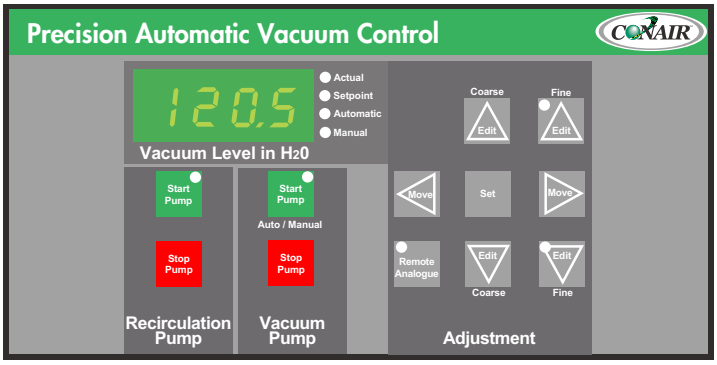


CONTROLS



Potentiometer Control

This potentiometer control provides push buttons to start and stop the vacuum blower and the water recirculation pump. Vacuum levels are adjusted using a 10-turn potentiometer, which controls the RPM of the vacuum blower.



Optional Digital Control

The Precision Automatic Vacuum Control (PAVC) provides manual or automatic control of the vacuum system. Using a PID program and built-in vacuum transducer, the PAVC controls the vacuum level to the setpoint entered.

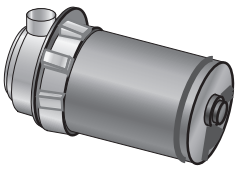
The PAVC can be connected to an in-line product gauge for automatic adjustment of the vacuum setpoint. The PAVC also has a serial port for data acquisition or remote control.

A remote digital potentiometer is available only with the addition of this option.

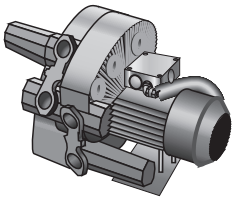
OPTIONS

OPTION AVAILABILITY BY MODEL ● Standard ○ Optional — Not Available

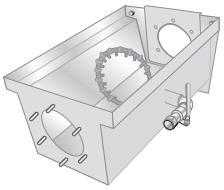
OPTIONS	WATER PUMPS 2 HP	WATER PUMPS 5 HP	WATER PUMPS 7.5 HP	VACUUM PUMP 1.7 HP	VACUUM PUMP 5 HP	AIR WIPE COMPARTMENT	WATER FLOW METERS	GLASS LIDS	TELESCOPING DRAIN TRAY	FLIP-UP ROLLERS
MT104-7-2	●	—	—	●	—	○	○	○	○	○
MT104-10-3	●	—	—	●	—	○	○	○	○	○
MT104-13-3	●	—	—	●	—	○	○	○	○	○
MT104-16-4	●	—	—	●	—	○	○	○	○	○
MT104-22-5	●	—	—	●	—	○	○	○	○	○
MT105-7-2	●	—	—	●	—	○	○	○	○	○
MT105-10-3	●	—	—	●	—	○	○	○	○	○
MT105-16-4	●	○	—	●	○	○	○	○	○	○
MT105-22-5	●	○	○	●	○	○	○	○	○	○



- **5 or 7.5 Hp water pump** for processing thick-walled products or high-speed lines that require greater water flow.
  2 Hp = 40 gpm @ 50 psi
  5 Hp = 100 gpm @ 45 psi
  7.5 Hp = 180 gpm @ 50 psi

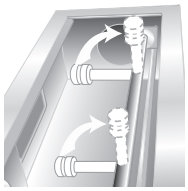


- **5 Hp vacuum pump** for processes that require vacuum pressures up to 200 inches of water (14.7 inches of mercury) and cfm rates up to 150 for producing larger tubes and profiles.



- **Bolt-on air wipe compartment** for drying the plastic product as it leaves the sizing tank. The air-wipe requires compressed air supplied at up to 80 psi.

- **Flow meters** on the water valves in each chamber.



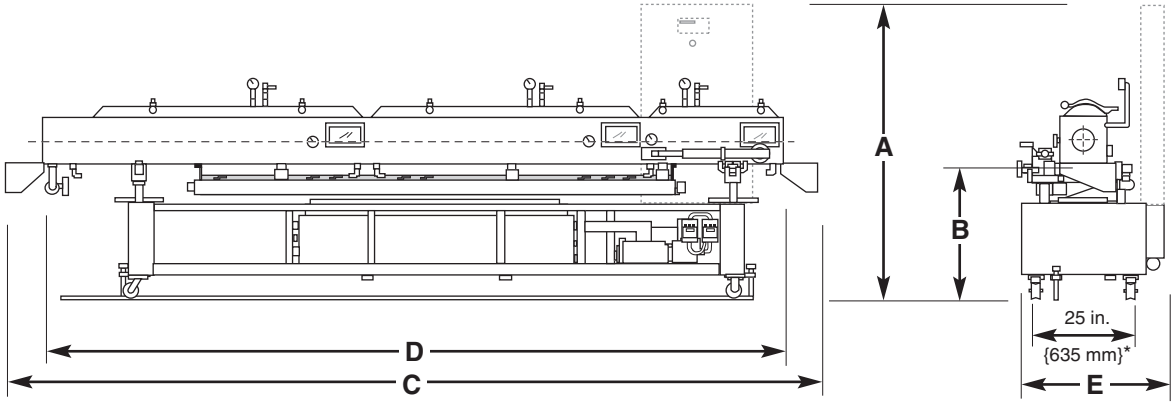
- **Flip-up immersion rollers** for holding the plastic product above or below the water in the sizing tank.

- **Glass lids** to view the product as it goes through the process. Glass lids may not be used on units that have vacuum blowers larger than a 1.7 HP and produce pressures greater than 135 inches of water {3.4 meters of water}.

- **Telescoping front drain tray** for catching water running off the calibration tool. The tray expands from 4 to 12 inches {102 mm to 305 mm}.

MT VACUUM SIZING TANKS

SPECIFICATIONS



MODEL	MT104					MT105			
TANK STYLE	104-7-2	104-10-3	104-13-3	104-16-4	104-22-5	105-7-2	105-10-3	105-16-4	105-22-5
Performance characteristics									
Tube/profile capacity	up to 2 inches {50 mm}					up to 4.5 inches {125 mm}			
Vacuum blower / Water pump	1.7 Hp vacuum / 2 Hp water					1.7 Hp vacuum / 2 Hp water			
Number of compartments	2	3	3	4	5	2	3	4	5
3 ft. / 6 ft. / 1 ft. seal	0 / 1/ 1	1 / 1 / 1	0 / 2 / 1	1 / 2 / 1	1 / 3 / 1	0 / 1 / 1	1 / 1 / 1	1 / 2 / 1	1 / 3 / 1
Dimensions inches {mm}									
A - Overall height	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}	84 {2134}
B - Height to centerline†	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}	42 {1067}
C - Overall length	108 {2743}	144 {3658}	180 {4572}	216 {5486}	288 {7315}	108 {2743}	180 {4572}	216 {5486}	288 {7315}
D - Tank length feet {mm}	7 {2134}	10 {3048}	13 {3962}	16 {4877}	22 {6705}	7 {2134}	13 {3962}	16 {4877}	22 {6706}
E - Overall width	7 {2134}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}	48.5 {1232}
Tank compartment width	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}	12 {306}
Tank compartment height	8 {203}	8 {203}	8 {203}	8 {203}	8 {203}	12 {306}	12 {306}	12 {306}	12 {306}
Weight lb {kg}									
Shipping	1500 {680}	1800 {816}	2200 {998}	2800 {1270}	3500 {1587}	1500 {680}	2200 {998}	2800 {1270}	3500 {1587}
Electrical requirements Full load amps‡									
240V/3 phase/50-60 Hz	12.9					12.9			
480V/3 phase/50-60 Hz (Std)	6.5					6.5			
Water requirements									
	City, tower or chiller water; main supply line 1 inch NPT fitting								

SPECIFICATION NOTES:

* You will need a V-groove caster adapter if you have rails that are not spaced 25 inches {635 mm} apart. Adapters are available for rails with center line spacing of 22 to 25 inches {559 to 635 mm}.

† Centerline height is adjustable ± 2 inches {50.8 mm}.

‡ Amp draws will increase for optional pump configurations.

These tables define standard configurations only. Specifications can change without notice. Contact a Conair representative for the most current information.