

Planetary Tube Cutting for Medical Products

Conair's M-TPC-1 Planetary Cutter offers a highly desirable, high speed tube cutting solution on a precision traveling table. The cutting blade rotates rapidly around tubular extrusions for clean, square cuts, free of the crush and distortion common to other cutting machines.

The M-TPC-1 accommodates up to a 1-inch {25.4 mm} cutting capacity and is designed to move with your extruded product to clamp, cut, release and repeat without sacrificing line speed.

The clamping system and servo table assure quality, planetary cuts. The standard planetary cutter orientation is right-to-left, but left-to-right orientation cutters are available.



Model M-TPC-1
(Shown with
optional dead stop.)

Clean, Balanced Planetary Cutting of Medical Tubing

Conair's M-TPC-1 Planetary Cutter provides the most precise cut possible for tube products. The cutter itself displaces material which virtually eliminates debris while creating a clean, square cut without distorting the tube or pipe. A servo motor uses a sophisticated velocity profile to modify the speed of rotation for cut quality and line speed.

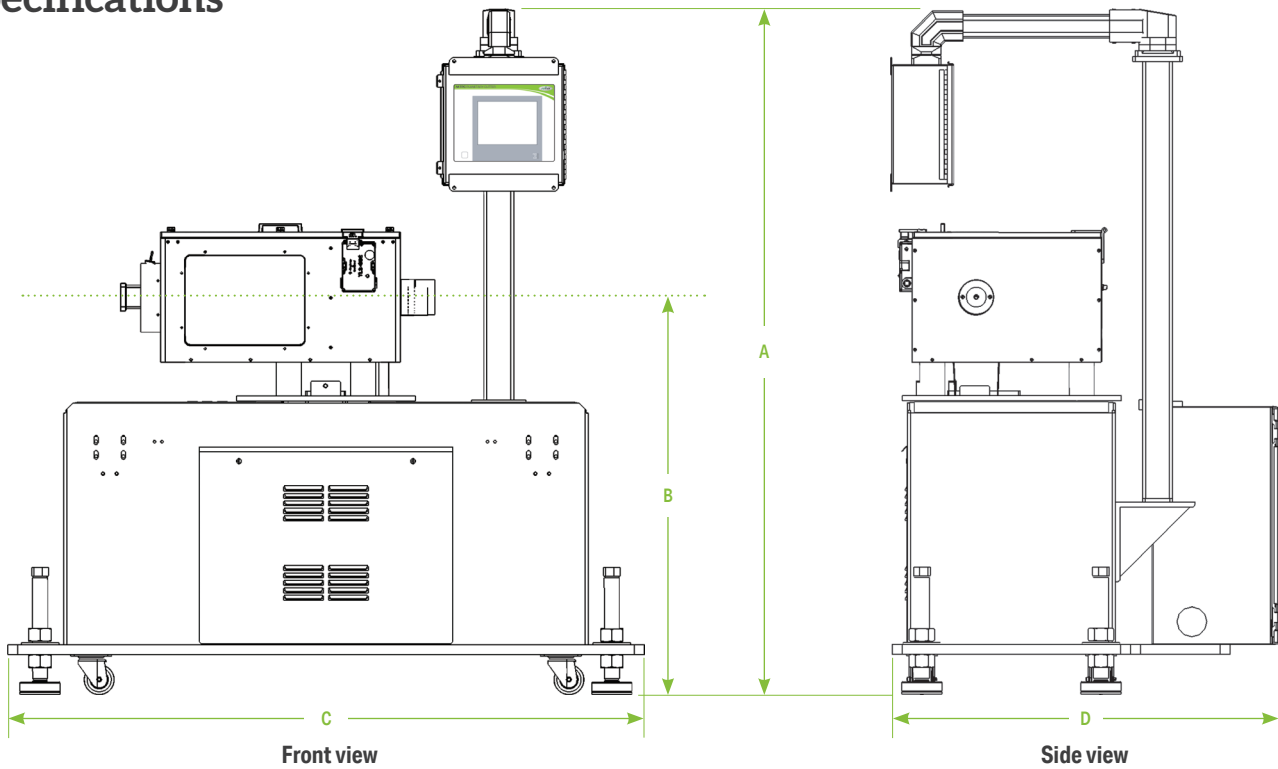
The M-TPC has been engineered to allow quick blade changes without having to remove product from the machine. This forethought eliminates the need to restart the line from scratch any time a blade is replaced.

Clear polycarbonate provides guarding for the cutting enclosure, for full observation of the planetary cutting process.

- ▶ **Cut medical tubular extrusions without distortion or swarf**
Difficult to cut materials such as styrene, PET, HIPS, PC, etc. can now be cut accurately. Other cutters and saws are unable to cut tubular extrusions without distorting them, and often create cuts that are not square and generate particulate.
- ▶ **Eliminate secondary trimming, deburring operations**
The M-TPC, with its smooth planetary cutting action, displaces material for a clean and precise cut, eliminating the need for trimming, deburring or blowing off.
- ▶ **Reduced machine maintenance**
A heavy-duty precision linear motion system provides smooth and consistent table movement with commercially available components.
- ▶ **Precision cut lengths**
Servo table travel is provided by planetary reducers and a heavy-duty timing belt eliminating costly secondary functions, and providing cut-to-length repeatability.
- ▶ **Easy to navigate touchscreen**
Front-mounted touchscreen control allows you to start and stop the cutter, adjust table travel velocity, blade velocity profiles, and scale factors, all while utilizing storable recipes.
- ▶ **Cleanroom ready**
Available in RAL-9003 white paint, or stainless steel.



Specifications



Models	M-TPC-1
Performance characteristics	
Applications	Tube
Pipe diameter capacity* inches (mm)	1.00 {25.4}
Maximum cuts per minute†	33 to 45
Blade type	Round
Blade drive servo motor Hp {kW}	3.2 {2.4}
Blade speed	Variable blade speed standard on all modes‡
Dimensions inches (mm)	
A - Height	74 {1880}
B - Height to centerline (± 2)	42 {1067}
C - Overall width	64 {1626}
D - Overall depth	40 {1016}
Maximum table travel	24 {609}
Voltage § Full load amps	
460 V/3 phase/60 Hz	Consult Conair
Compressed air requirements	
	80 psl {5.52 bars}

Specification Notes

* Profile capacity dimensions are provided for guidance only. The actual capacity can vary depending on the diameter you are attempting to produce.

† Based on material, wall thickness, cut quality and length.

‡ Maximum blade surface speeds are individually configured based on each models blade diameter.

§ 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 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.

Control

The screenshot shows the M-TPC-1 touchscreen control interface. It features a green background with white text and icons. At the top, it says 'M-TPC-1 PLANETARY CUTTER' and 'CONAIR'. The main display area shows 'Menu', 'Stop', and 'Start' buttons. There are also indicators for 'Mode', 'Blade', and 'Cut length'. The interface is designed for intuitive operation with large, clear buttons and text.

The M-TPC-1 features a full-color touchscreen control with intuitive graphic icons for easy operation!

Make cutting speed adjustments, customize operation, save recipes, and create unique user privileges all from a touchscreen control that allows for easy communication to other devices. All Conair controls are designed with the same style icon/button operation, making learning a new piece of equipment easy and comfortable.

Options

- Power: 230/3/60, 380/3/50, 208/3/60 or 575/3/60
- Photo eye and/or dead stop precision cut-to-length
- Bushing sets for additional product sizes
- Left-to-right operation
- Powder coated frame
- UL certification
- Full enclosure guarding

