Bessemer Rx-SmartMED Micro-Puller/Cutter Series

Clean-room ready puller/cutter designed for precise microbore medical tubing applications.

Novatec has changed the industry standard for medical puller/cutters incorporating essential features for microbore medical tubing applications into the base design of the Bessemer Rx-SmartMED Micro-Puller/Cutter Series. Say no to confusing options, and markups and get just what you need with the only puller/cutter built from the ground up with an intense focus on the manufacturing requirements for microbore medical tubing. Key features have been fine-tuned to offer the most precise, most easy to clean, most efficient puller/cutter available on the market today. Pulling speed regulation and cutting technology accuracy has been optimized for extremely small, thin-walled, low durometer and potentially tacky applications.

Micro-Puller/Cutter
Model NPC-MED-6

KEY FEATURES

- >> Seven-inch full color touch screen with standard features, which include: on demand encoder and endsense, flywheel, and follower cutting modes, variable blade speed, scrap mode and more.
- >> Stainless-steel base and NEMA-rated electrical enclosure.
- >> Combination casters and locking devices simplify height adjustment and mobility in a clean room.
- >> Anodized plates eliminate corrosion, and all shafting is stainless steel.
- >> Dual servo-driven puller with Seimens-based PLC and precision in-line planetary reducers; three standard speed ranges available.
- >> Precision flat belts with triangular belt wrap offer precision feeding of microbore tubing. Three sets of belts include sponge, white nitrile, and dual layer with sponge and silicone combination.
- >> Servo boom system with two independent servos to eliminate the old-style manual hand wheel system of belt gapping. The zero/closed position can be programmed, with password protection, and thus validated. The operator can program the desired gap or simply upload from a saved recipe.
- >> Precision linear slide bearings have been incorporated into the belt boom system to assure the belts are parallel in both axes to offer precision tube tracking through the belt contact area.
- >> Belt guarding is designed for ultimate safety and operational ease. Both walk-through modes or completely closed modes are encased with clear polycarbonate covers to offer total visibility. Safety sensors are provided on both the upper and lower boom for additional built-in safety as well as an emergency-stop pushbutton at the entrance.
- >> A guide bushing replaces the typical vertical and horizontal rollers to provide for walk-through string up and further safety.
- >> Puller belt and cutting site are overhung from the front of the base to minimize wraparound of small, tacky tubing during startup.
- >> The cutter bushing has been placed at approximately 45 degrees to the rotating blade arm center to improve the visibility of the cut tube exit further as well as allow for the incorporation of a blade lubrication tray. The polycarbonate guarding provides total blade visibility for precision gapping and observation during the cutting cycle.
- >> The precision Siemens servo allows on-demand blade speeds up to 1500 RPM's to minimize blade interruption and accommodates the use of slicing blades for cutting low durometer microbore tubing.
- >> The entire blade guard assembly with incorporated stainless-steel blade lubrication tray has been designed to slide back to enhance total cleaning on a regular basis. Safety interlocks are provided to provide the utmost in safe operation.
- >> Dual axis precision linear bearing slides are also provided, allowing the cutter to be slid out of the way during the coiling operation.

OPTIONAL TAPER TUBING SYSTEM INCLUDES:

- >> 19-inch Siemens PC-based touch screen offers enhanced visibility and minimizes the number of screens needed.
- >> Advanced taper tube package with dramatically enhanced features to minimize the trial and error startups, often associated with processing taper tubing.
- >> Eight individually controlled analog air outputs.
- >> Dropdown operator input screens to select extruder size, material, durometer, throughput, single-lumen or multi-lumen tube, symmetrical or non-symmetrical taper tube, distal and proximal dimensions, transition lengths, choices of pre-written velocity profiles or custom, desired line speed, and more. With this data, the operator can program the die and pin size they intend to use, and the program will advise if it is possible and if not will make a recommendation.
- >> A full recipe system is standard, which can be downloaded or remain on the PC hard drive.

OPTIONS:

A laser gauging system can be integrated to facilitate the gap, and automatically follow the actual tube in real time at a set crush differential. Including this option will eliminate the operator variable of belt gap and differential slippage, which can directly affect pulling speed and cut length.

Discharge conveyor interface and control.

Models	Bessemer-Rx
Performance characteristics	
Extrudate capacity in. dia.	0.25 -0.625
Servo puller drive motor Hp {kW}	0.8 {0.63}
Dimensions in. {mm}	
A - Height	79
B - Height to centerline, ± {±50.8}	42.0 {1067.0}
C - Width	36
D - Depth	23.750
Belt width ±3/8 {±9.5}	1.0 - 3.0 {25.4 - 76.2}
Weight lb {kg}	
Installed	715.0 - 790.0 {324.0 - 358.4}
Shipping	700.0 - 800.0 {317.5 - 363.0}
Electrical requirements/full load amps	
Drive type (Puller)	Dual servo with precision planetary gearhead
460V/3 phase/60 Hz	Dual servo 16.5 amp
HMI control	Touch screen
7 in.	

Specification Notes

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