



## - RC80 Tube Cutoff Lathe Specifications -

Method of Cutoff	The tube is held stationary during cutoff by two lathe chucks. The rotating-headstock cuts the tube, then chamfers both ends, inside and out. Use carbide inserts for thick-wall or cutoff discs and sizing rollers for thin-wall	
Maximum Diameter	9.1"	
Minimum Diameter	3.5"	
Maximum Tube Wall	Cutoff & OD chamfer: 1.25" Cutoff & OD/ID chamfer: .70"	
Minimum Tube Wall	@ 8" diameter: .083" @ 3.5" diameter: .065"	
Minimum Tube ID	Depends on tube O.D. and wall thickness	
Chamfer Angles	17.5°, 27.5°, 40°, 45° (using single ISO-standard inserts) 15°, 20°, and 30° and custom angles (using tandem ISO-standard inserts) Custom ground inserts for radius or dual-angle chamfers	
Maximum OD Chamfer Depth	.250" (depends on tool size, angle, measurement method) Two-step chamfer sequence can be used for deeper chamfers	
Maximum ID Chamfer Depth	Approx .150" (depends on tool size, angle, measurement method)	
<b>Tube Feeder</b>		
Feeder Stroke	30" standard, up to 60" optional	
Feeder Drive	Servo-solenoid valve, hydraulic cylinder, linear encoder feedback	
Advance Speed	25"/second (max.)	
Cut Lengths	.75" min., 480" max. Up to three cut lengths per tube. Random lengths are automatically measured and optimized.	
Trim and Face Cuts	.75" min. trim cut, 28" max. trim cut, within ±.015" End-face and chamfer without trim (add ±.005")	
Squareness of Cut	.001" T.I.R. per 1.0" of tube diameter	
Cut Length Repeatability	Up to 30": ±.005" Up to 60": ±.008"	Up to 90": ±.012" Up to 120": ±.015"
<b>Electrical Controls</b>		
Service requirements	480VAC 3Ø @ 100A (average load: 22kW)	
Headstock Drive	Baldor® 30HP Energy-Efficient, inverter-duty, ODP, 450 max. headstock RPM	
Control System	Allen-Bradley® ControlLogix® CF Memory card, Ethernet/IP Rack-mounted, closed-loop servo motion control modules Allen-Bradley® PanelViewPlus® ColorTouch screen Allen-Bradley® PowerFlex® variable-frequency headstock drive Integrated cabinet (requires no added floor-space) Constant surface speed headstock control	
Control Options	Allen-Bradley® Dial-Up Modem or Paging Modem VersaView® ColorTouch screen with imbedded Windows CE Cabinet cooling	
<b>Hydraulic System</b>		
Hydraulic Pump	Bosch® 26 GPM Whisper Pump®, pressure-comp. vane, 3000 PSI rated	
Pump Motor	Baldor® 20HP Energy-Efficient, ODP	
Hydraulic Valving	Bosch-Rexroth® servo and directional valves, Hydac® accumulator	
Hydraulic Filtration	Hydac® 10µ pressure, 10µ return, 10µ case drain	
Hydraulic Cooling	Standard: Water-to-oil heat exchanger, 1-4 GPM at 30 PSI appx. Optional: Oil-Air® integrated pump/cooler/filter system with 12 GPM circulating pump. 1 HP Baldor® motor.	
<b>Tube Loader</b>		
Bundle Lift	Hydraulic drive, #120 flat-link chains, 12,000 lbs. bundle capacity	
Tube Lift	Hydraulic drive, urethane V-rolls, 2,000 lbs. tube capacity	
Auto-Load Length	24' standard, 40' optional, 120" min.	
Hand-Load Length	14" min.	
Short Remnant Handling	2" (min.) thru 6", released into chip conveyor (bin) or into front conveyor (bin)	
Long Remnant Handling	6" thru 120" (max.), advanced through along with primary lengths	
Remnant Drop/Reload Time	6-14 seconds, depending on tube size	

- RC80 Rotating-Head Cut-Off Lathes are compatible with our strap loaders, chain loaders and indexing conveyors.