



- RC80 Tube Cutoff Lathe Specifications -

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| 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) |
| Tube Feeder | |
| 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 90": ±.012" Up to 60": ±.008" Up to 120": ±.015" |
| Electrical Controls | |
| 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 |
| Hydraulic System | |
| 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. |
| Tube Loader | |
| 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.