

GENMILL T-500

Axis Travel

| | |
|--------------------------------------|---------------------------|
| X-Travel | 20.08" 510mm |
| Y-Travel | 16.93" 430mm |
| Z-Travel | 12.99" 330mm |
| Spindle Nose to Rotary Table Surface | 5.1" – 18.1", 130 – 460mm |
| Spindle Center to Column | 18.89" 480mm |

Work Table

| | |
|---|---|
| Table Surface Dimension (X, Y) | 22.04" x 15.75", 560 x 400mm |
| T-Slot Dimension / Spacing | 3-14mm T-slots / 125mm center distance spacing |
| Table Height | 35" above floor, 890mm |
| Maximum Table Weight for Rated Accuracy | 550 pounds, 250kg @ 60m/min (770 lbs. @ 48m/min.) |

Spindle

| | |
|---|---|
| Spindle Motor – Mitsubishi DJ-D5.5/120-01 | 7.5-HP, 3.7/5.5kw 25% Duty-Cycle |
| Spindle Motor Coupling | Inline Direct-Drive, Beltless Spindle Drive |
| Spindle Speed | 12,000 rpm, 15,000 RPM optional |
| Synchronous Tapping Speed Limit | 6,000 rpm |
| Tapping Performance in Production | M20x2.5 in aluminum, M14x2.0 in steel |
| Drilling Performance in Production | 38mm in aluminum, 25mm in steel |
| Spindle Torque | 26 ft-lb @ 1,500 rpm, 25% Duty-Cycle |
| Tool Type | BT #30, 4-bearing spindle – 2-top, 2-bottom |
| Spindle Bearing - Inner Diameter | 40mm, P4 class-7, Steel Ball Bearings |
| Spindle Material / Hardness | SCM415 / HRC 58-62 |
| Spindle Runout | ≤ 0.000040" T.I.R. |
| Retention System / Holding Capacity | MAS-P30T-1 Belleville Spring Stack / 1650-1760 lbs. |

Axis Feeds

| | |
|-----------------------------------|---|
| Rapid Traverse – X/Y/Z | 2,362 ipm 60/60/60 /minute |
| Rated Cutting Feedrate – X/Y/Z | 0.04 - 1181 ipm 30/30/30m/minute |
| Mechanical Way System – X/Y/Z | Roller-Bearing Ways, Roller-Ways -30/30/35mm width |
| Axis Drive Motor Power – X, Y/Z | 2.0-HP / 3.0-HP 1.5kw / 2.2kw with brake |
| Axis Thrust Force – X, Y/Z | 3335 lbs. / 3692 lbs. 14840 N / 16430 N |
| Ballscrews – X, Y, Z | 32mm Ballscrews, 16mm Pitch |
| Positioning Accuracy – X/Y/Z | ±0.00015" ±0.004mm |
| Positioning Repeatability – X/Y/Z | ±0.00008" ±0.002mm |
| Least Input Command Increment | 0.0001" / 0.000040" 0.001mm / (40-millionths in metric) |

Tool Changer

| | |
|--|---|
| Tool Capacity | 21-Tools, Drum Turret |
| Tool Shank | BT#30, MAS P30T-1 Pull-Stud |
| Tool Change Time | 1.6-sec. chip-to-chip, Servo motor driven |
| Maximum Tool Diameter / with adjacent tool | 2.36" / 3.15" 60mm / 80mm with no adjacent tool |
| Maximum Tool Length / Weight | 7.87" / 6.6 lbs. 200mm / 3 kg |
| Tool Selection / Tool Access | Random access Bi-directional shortest path |

Specifications

| | |
|--|---|
| Air Service Requirements | 85 psi @ 5-scfm 6 Kg/cm ² |
| Connected Load Electrical Requirements | 40 Amps / 220vac ±5%, 60-Hz |
| Coolant Tank Capacity | 32-gallons / 120 liters |
| Coolant Pump (Cutting Tools) - HP / Pressure | 1.0-HP / 45 PSI, .75kw Grundfos MTH4-30/3A |
| Coolant Pump (Chip Flush Pump) | 1.0-HP .75kw |
| Floor space requirements (W x D x H) | 50" x 87" x 95" 125x221x241cm (+ chip conveyor) |
| Machine Weight | 6,110 pounds, 2,770 kg |
| Warranty – 1-year machine warranty | 3-year Mitsubishi control, motors, & drive warranty |