



52-BY2

9-Axis Mill / Turn Lathe with 12-Angle Tools

- + 52 mm 2" Bar Capacity
- + Twin 15-HP 6,000 RPM Opposed Spindles
- + 36-Tool Positions - 18-Driven Tools
- + Machine at Any Angle with 12-Tool "B"-Axis
- + "B" Axis and Dual "Y" Axis for Front & Back Work
- + Simultaneous Main & Sub-Spindle Machining

Main Spindle	Maximum bar diameter Collet size / Spindle bearings Maximum spindle speed Servo Spindle motor horsepower	A2-5 Spindle with 2.008" (51 mm) bar capacity Traub TRB-52 / 5 x 90 mm ball bearings, 3-front, 2-rear 6,000 rpm (Integral Motor Spindle) 15-HP (11 kW) peak, 10-HP (7.5 kW) 30-min. rated
X¹, Y¹, Z¹ Axis	X ¹ , Y ¹ , Z ¹ Axis servo motor X ¹ Axis travel Y ¹ Axis travel Z ¹ Axis travel Minimum programmable input X ¹ , Y ¹ , Z ¹ Rapid Travel Rate	X ¹ = 1.3 HP (1.0 kW) Y ¹ / Z ¹ = 2.0 HP (1.5 kW) 10.63" 270 mm 18.11" 460 mm 9.84" 250 mm 0.00004" resolution (0.001 mm) 1,181 IPM (30 m/min) / 0.0001 mm resolution
Main Spindle Tooling	NOTE: 12 Main Spindle driven tools can be shared with Subspindle Number of driven tools Driven tool motor power Driven tool spindle speed Driven tool collet size O.D. turning tools I.D. boring tools	6 axial & 6 radial driven and "Any-Angle" tools 5-HP 3.5 kW 2,500 rpm maximum driven tool spindle speed ER-20 collet spindles (up to 1/2" tool shank) 20 mm OD Turning 5 - 20 mm O.D. turning tool holders available 5 - 25 mm I.D. bores available for tool bushings
Sub Spindle	Maximum bar diameter Collet size Maximum spindle speed Servo Spindle motor horsepower	2.008" 51 mm Traub TRB-52 6,000 rpm (Integral Motor Spindle) 15-HP (11 kW) peak, 10-HP (7.5 kW) 30-min. rated
X², Y², Z² Axis	X ² , Y ² , Z ² axis servo motor X ² axis travel Y ² axis travel Z ² axis travel X ² , Y ² , Z ² rapid travel rate Minimum programmable input Ballscrew diameter	X ² / Z ² = 1.3 HP (1.0 kW), Y ² = 2.0 HP (1.5 kW) 18.89" 480 mm 18.11" 460 mm 10.63" 270 mm 1,181 IPM 30 m / min 0.0001" (0.001 mm = 40 millionths of an inch) 25 mm diameter with 10 mm pitch for all axes
Sub Spindle Tooling	Number of axial driven tools Number of radial driven tools Driven tool motor power Driven tool spindle speed Driven tool collet size O.D. turning tools I.D. boring tools	3 axial driven tools, uses ER-20 collets 3 radial driven tools, uses ER-20 collets 2.7-HP 2.0 kW 2,500 RPM maximum driven tool spindle speed ER-20 collet spindles (up to 1/2" tool shank) 4 - 20 mm O.D. turning tool holders available 4 - 25 mm I.D. bores available for tool bushings
Specifications	Coolant System Electrical Requirements Air Requirements Machine Weight	80 Gallon tank, 4-coolant pumps with flow control 110-Amps, 42 kVA 220 vac ±5%, 3-phase 85 psi, 20-cfm, for parts catcher, ejector, oil mist unit 12,345 lbs. 5,600 kgs