

# Standard Machine Specifications

## Standard Machine Specifications

		VERTICAL CENTER NEXUS 510C-II	VERTICAL CENTER NEXUS 510C-II HS
Stroke	X axis stroke (table right/left)	1050 mm	1050 mm
	Y axis stroke (saddle back/forth)	510 mm	510 mm
	Z axis stroke (spindle up/down)	510 mm	510 mm
	Distance from table top to spindle nose	150 mm - 660 mm	150 mm - 660 mm
	Distance from column surface to spindle center	576 mm	576 mm
Table	Table size	1300 x 550 mm	1300 x 550 mm
	Max. load capacity (evenly distributed)	1200 kg	1200 kg
	Table surface configuration	18 mm T slot x 5, 100 mm pitch	18 mm T slot x 5, 100 mm pitch
Spindle	Max. spindle speed	12000 rpm	15000 rpm
	Spindle speed range	2-Step (Electric)	2-Step (Electric)
	Spindle taper	No. 40	No. 40
	Spindle bearing ID	ø70 mm	ø80 mm
	Spindle acceleration	2.04 sec	1.9 sec
Feedrate	Rapid traverse rate (X,Y,Z axes)* <sup>1</sup>	36 m/min	50 m/min
	Cutting feedrate (X,Y,Z axes)* <sup>1</sup>	1-36000 mm/min	1-50000 mm/min
	Acceleration/Deceleration	0.5 G	0.5 G/0.75 G (X,Y axes/Z axis)
Automatic tool changer	Tool shank	CAT No. 40, MAS BT-40* <sup>4</sup>	CAT No. 40, MAS BT-40* <sup>4</sup>
	Tool storage capacity	30	30
	Max. tool diameter/Length (from gauge line)/weight	ø80 mm/350 mm/8 kg	ø80 mm/350 mm/8 kg
	Max. tool diameter with adjacent tool pockets empty	ø125 mm	ø125 mm
	Tool selection method	MAZATROL random memory	MAZATROL random memory
	Tool change time (tool-to-tool)	1.3 sec	1.3 sec
Motors	Spindle motor (5min./10min./30min./cont. rating)	AC 18.5/15/11/7.5 kW (25/20/15/10 HP)	AC 30/22 kW (40/30 HP) <15min./cont. rating>
Electrical and air requirements	Electrical power supply (30 min./cont. rating)	30.88/25.9 kVA	63.87/52.14 kVA (15min./cont. rating)
	Air supply	0.5 MPa (5 kgf/cm <sup>2</sup> )-0.9 MPa (9 kgf/cm <sup>2</sup> )/ 200 NL	0.5 MPa (5 kgf/cm <sup>2</sup> )-0.9 MPa (9 kgf/cm <sup>2</sup> )/ 300 NL
Tank capacity	Coolant tank capacity	250 L	250 L
Machine size	Machine height (from floor)	2843 mm (2877 mm)* <sup>2</sup>	2801 mm (2801 mm)* <sup>2</sup>
	Required floor space	2973.5 mm x 2835 mm	2973.5 mm x 3062 mm
	Machine weight	6900 kg	7820 kg

\*1) Limited feedrate with continuous axis movement

\*2) With optional coolant through spindle

\*3) When adjacent pockets and the pockets next to them are empty

\*4) For Asian market