

# Standard Machine Specifications

		HORIZONTAL CENTER NEXUS 6000-II		HORIZONTAL CENTER NEXUS 6800-II	
				Standard	Hard metal package
Stroke	X-axis (column travel left / right)	800 mm		1050 mm	
	Y-axis (spindle head travel up / down)	800 mm		900 mm	
	Z-axis (pallet forward / backward)	800 mm		980 mm	
	Distance from pallet center to spindle	150 ~ 950 mm		100 ~ 1080 mm	
	Distance from pallet top to spindle center	100 ~ 900 mm		100 ~ 1000 mm	
Table	Pallet size	500 × 500 mm		630 × 630 mm	
	Max. workpiece dimension	ø 900 × 1000 mm		ø 1050 × 1300 mm	
	Pallet load capacity (evenly distributed)	1000 kg		1500 kg	
	Pallet top surface	M16×P2, Tapped 25 places, pitch 100 mm		M16×P2, Tapped 25 places, pitch 125 mm	
	Minimum indexing angle increment	1°		1°	
	Indexing time	1.9 sec / 90°		1.9 sec / 90°	
Spindle	Max. spindle speed	10000 rpm		10000 rpm	6000 rpm
	Spindle gear ranges	2 (electric)		2 (electric)	2 (electric)
	Spindle taper	No. 50		No. 50	HSK A-100
	Spindle bearing size (I.D.)	ø 100 mm		ø 100 mm	ø 120 mm
	Spindle acceleration time to top speed	3.0 sec ( 0 → 10000 rpm )		3.0 sec ( 0 → 10000 rpm )	3.5 sec ( 0 → 6000 rpm )
Feedrate	Rapid traverse rate (X, Y, Z-axis) *1	60 m/min		60 m/min	
	Cutting feedrate (X, Y, Z-axis) *1	1 ~ 60000 mm/min		1 ~ 60000 mm/min	
	Axis acceleration / deceleration	0.7 G		0.8 G	
Automatic tool changer	Tool shank	CAT No.50		CAT No.50	HSK A-100
	Tool magazine capacity	43		43	
	Maximum tool dia. / length (from gauge line) / weight	ø 125 mm / 500 mm / 30 kg		ø 125 mm / 630 mm / 30 kg	
	Maximum tool diameter (when adjacent pockets empty)	ø 250 mm*2		ø 250 mm*2	
	Tool selection method	Random selection / shortest path		Random selection / shortest path	
	Tool change time (chip-to-chip)	3.5 sec		4.2 sec	
Automatic pallet changer	Number of pallets	2		2	
	Change system	Rotary type		Rotary type	
	Pallet change time	9.0 sec		10.0 sec	
Motors	Spindle motor (30 min. rating / cont. rating)	AC 37 / 30 kW ( 50 / 40 HP )		AC 37 / 30 kW ( 50 / 40 HP )	
	Coolant pump motor ( 50 Hz / 60 Hz )	730 W / 1210 W		730 W / 1210 W	
Electrical and air requirement	Electrical power supply (30 min. rating / cont. rating)	89.30 / 79.38 kVA		92.44 / 82.51 kVA	105.08 / 95.10 kVA
	Air supply pressure (pressure / volume)	0.5 MPa ~ 0.9 MPa / 350 L/min		0.5 MPa ~ 0.9 MPa / 350 L/min	
Machine size	Height	3350 mm		3400 mm	
	Required floor space <including coolant tank and chip conveyor(rear discharge)>	2820 × 6755 mm		3301 × 6795 mm	
	Machine weight	14700 kg		19000 kg	21000 kg
Sound	Equivalent continuous sound Pressure level at operator position (dependent on equipment options)	Less than 80 dB (A)			

\*1 Limited feedrate with continuous axis movement

\*2 Max. tool diameter can be ø 260 mm when adjacent pockets are empty and the pockets next to them have tools less than ø 240 mm

\*3 Max. tool diameter can be ø 260 mm when adjacent pockets are empty and the pockets next to them have tools less than ø 360 mm