INTEGREX j-200 NEO SERIES

High performance machine tool NEO series with high productivity and environmental performance

High productivity
Enhanced milling / turning spindle shorten cycle times

High accuracy
Enhanced heat displacement compensation ensures stable machining accuracy

Environmental performance
Visualization of energy consumption and regenerative power, energy-efficient control of equipment

Shown with optional equipment

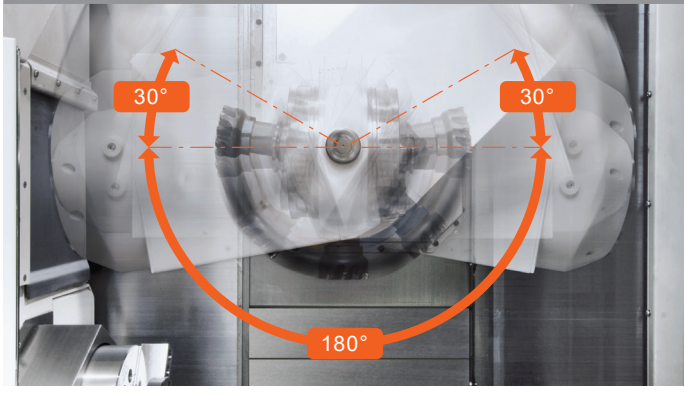
- Exceptional milling versatility allows cutting from all directions with a single tool
- Wide range of machining options with B-axis indexed every 1 degree
- Main spindle utilizes high-power, high-torque built-in motor spindle
- Visualize energy consumption and regenerative power with the “Energy Saver”
- Easy automation with Ez LOADER, an automation cell with a co-bot
- High-performance specification for higher productivity

Specification	Milling spindle (40% ED)			Main spindle (40% ED)
Standard	Single spindle turret	1° index	12000 min^{-1} (rpm), 7.5 kW (10 HP), 27.5 N·m	5000 min^{-1} (rpm), 15 kW (20 HP), 167 N·m
High-performance	Compact single spindle turret	0.0001° index	12000 min^{-1} (rpm), 18.5 kW (25 HP), 57.3 N·m	5000 min^{-1} (rpm), 18.5 kW (25 HP), 326 N·m

Milling spindle: multi-face machining with a single tool

The milling spindle unit can be indexed in 1 degree increments, allowing outer diameter, end face, and diagonal machining with a single tool. Similarly, the second spindle performs various machining with a single tool, reducing cycle times. The high-performance specification with 0.0001° indexing offers enhanced versatility for a variety of workpieces.

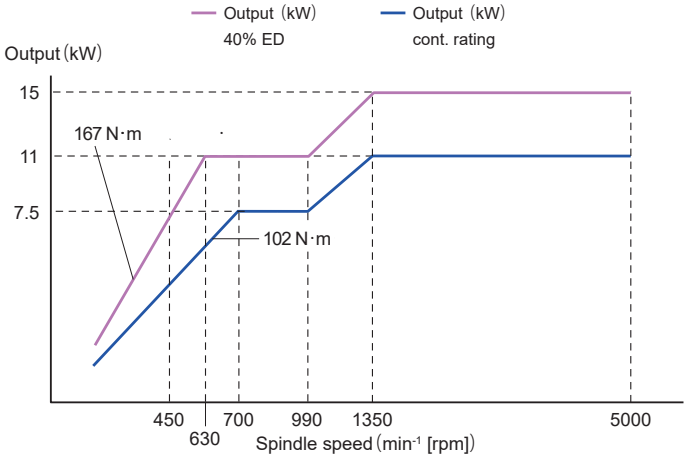
1° indexing



Turning spindle: designed for a wide range of workpieces

The high-power, high-torque built-in motor spindle provides excellent machining capabilities. The high-performance specification provides even higher power and torque at 18.5 kW (25 HP) and 326 N·m, enabling further improvements in productivity.

Main spindle output diagram



Standard Machine Specifications

		j-200 NEO		j-200S NEO
		500U	1000U	-
Capacity	Max. swing / Swing over cross slide	Φ530 mm		
	Max. machining diameter	Φ500 mm		
	Max. machining length	500 mm	1016 mm	910 mm
	Max. bar work capacity	Φ65 mm		
Travel	X-axis travel	450 mm		
	Y-axis travel	200 mm (±100 mm)		
	Z-axis travel	550 mm	1225 mm	1119 mm
	B-axis travel	-30° to +210°		
	C-axis travel	±360°		
Main spindle	Spindle speed	5000 min^{-1} (rpm)		
	Spindle nose	A2-6"		
	Spindle bore	Φ76 mm		
	Bearing ID (front side)	Φ110 mm		
	Min. indexing increment	0.0001°		
Second spindle	Spindle speed	-		5000 min^{-1} (rpm)
	Spindle nose	-		A2-5"
	Spindle bore	-		Φ61 mm
	Bearing ID (front side)	-		Φ90 mm
	Min. indexing increment	-		0.001°
Milling spindle	Turret type	Single spindle turret with ATC		
	Rotary tool spindle speed	12000 min^{-1} (rpm)		
	Rotary tool spindle max. torque (40% ED / cont. rating)	27.5 N·m / 21.9 N·m		

		j-200 NEO		j-200S NEO
		500U	1000U	-
Rapid traverse rate	X-, Y-, Z-axis	40000 mm/min		
	W-axis	8000 mm/min		
	C-axis	555 min^{-1} (rpm)		
Automatic tool changer system	Tool shank type	HSK-A63 (T63)		
	Tool storage capacity	20-tools (Option : 36, 72-tools)		
	Max. tool diameter / length / weight	Φ90 mm / 250 mm / 5 kg		
Tailstock	Center	MT5 (Dead center)	MT4 (Built-in center)	-
Motors	Main spindle motor (40% ED / cont. rating)	15 kW / 11 kW (20 HP / 15 HP)		
	Milling spindle motor (40% ED / cont. rating)	7.5 kW / 5.5 kW (10 HP / 7.4 HP)		
	Coolant pump motor	1.1 kW (60 Hz)		
Power requirement	Required power capacity (30 min. rating / cont. rating)	31.91 kVA / 26.08 kVA		40.57 kVA / 30.54 kVA
	Air source	0.5 MPa, 380 L/min		0.5 MPa, 410 L/min
Coolant	Tank capacity (without chip conveyor)	150 L	180 L	205 L
Machine size	Machine height	2580 mm / 2640 mm*		
	Floor space requirement	2990 mm × 2420 mm	3790 mm × 2420 mm	
	Weight	7400 kg	8300 kg	9200 kg

* Machine height depends on the AC power source in each country

Standard and Optional Equipment

● : Standard ○: Option - : N/A

		j-200 NEO		j-200S NEO
		500U	1000U	-
Machine	8" non through-hole chuck H3KS8 (Howa)	●	●	○
	8" through-hole chuck H3KT8 Z-323 (Howa) [Φ51 mm]	○	○	●
	8" through-hole chuck H3KT8 Z-324A (Howa) [Φ65 mm]	○	○	○
	8" non through-hole chuck N-08A0615 (Kitagawa)	○	○	○
	8" through-hole chuck B-208A615 (Kitagawa) [Φ51 mm]	○	○	○
	8" through-hole chuck BR-08 (Kitagawa) [Φ65 mm]	○	○	○
	Second spindle 8" through-hole chuck H3KT8 (Howa)	-	-	●
	Second spindle 8" through-hole chuck (B-208A615+non through-hole cylinder)	-	-	○
	Collet chuck SAD65	○	○	○
	High / low chuck pressure	○	○	○
	B-axis 1° index	●	●	●
	20 tool magazine	●	●	●
	36 tool magazine	○	○	○
	72 tool magazine	○	○	○
	Preparation for multi & flash tool system	○	○	○
	Live center LC-5SW (5000 min^{-1} (rpm)) (NSK)	○	-	-
	Live center LC-5A (2000 min^{-1} (rpm)) (NSK)	○	-	-
	Automatic steady rest	-	○	-
	Double foot pedal switch	○	○	○
	NC tailstock (MT5 dead center)	●	-	-
	NC tailstock (MT4 built-in center)	○	●	-
High accuracy	Coolant temperature control	○	○	○
	Ball screw core cooling (X-, Z-axis)	●	●	●
	Ball screw core cooling (Y-axis)	○	○	○
	Scale feedback (X-, Y-, Z-axis)	○	○	○
Safety equipment	Overload detection system	○	○	○

		j-200 NEO		j-200S NEO
		500U	1000U	-
Factory automation	Tool eye (automatic)	○	○	○
	Automatic chuck jaw open / close	●	●	●
	Tool breakage detection on magazine side	○	○	○
	Mazak Monitoring System B (RMP600)	○	○	○
	Bar feeder interface	○	○	○
	Ez LOADER 10 / 20 / 30 preparation	○	○	○
	Automatic front door	○	○	○
	Auto power on / off + warm-up	●	●	●
	Status light (3 colors)	○	○	○
	Status light (1 color / machining end : yellow)	○	○	○
	EIA / ISO code input	●	●	●
Coolant / chip disposal	Chip pan	●	●	●
	Chip conveyor (side discharge)	○	○	○
	Chip bucket	○	○	○
	High pressure coolant 1.5 MPa (with chiller unit)	○	○	○
	SUPERFLOW coolant system (without chiller)	○	○	○
	Shower coolant	-	○	○
	Workpiece cleaning coolant (HD1)	○	○	○
	Air blast through spindle (HD1)	○	○	○
	Chuck jaw air blast	○	○	○
	Chuck jaw air blast (second spindle)	-	-	●
	Turret air blast (flood coolant nozzle)	○	○	○
	Smooth coolant system	○	○	○
	Oil skimmer	○	○	○
	Preparation for mist collector	○	○	○
Others	Additional M function	○	○	○
	Manual CD	●	●	●
	Dual monitor	○	○	○

Mazak

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