



HX300 G/400





HORIZONTAL MACHINING CENTER

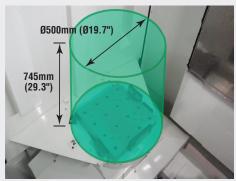
SIMPLIFY THE COMPLICATED

HX300iG/400 Ultra-compact mid-si

Made in Japan quality, rigidity and relia

- Rigid 9,100kg (20,020Lbs) Meehanite cast construction manufactured in Japan with craftsmanship in handscraping techniques
- Field expandable 2-station APC with high speed 4th Axis rotary table and rotary scale. Integral drive motor driven with rapids 54,000deg/min (150min⁻¹)
- Ultra-high-speed rapid/cutting feeds, 60m/min (2,362ipm)
- Ultra-high speed tool change, T-T 1.3 Seconds
- High performance THK double roller linear guideway system
- Powerful 15,000min⁻¹, 30HP Direct Drive, Dual Contact Spindle. 20,000min⁻¹ HSK spindle is an available option.
- Ballscrew cooling and fine resolution linear Scale feedback in X, Y, Z axes.
- Standard hinge belt style conveyor combined with dual internal chip augers = High efficiency chip evacuation







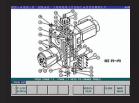


Pioneering Icon CNC Operation

- 67 Million pulse encoder technology with up to 8,192 block look-ahead processing speeds
- Software upgrades throughout the life of the control
- Completely customizable and expandable user experience
- Video Guidance and visual programming screens
- Anywhere-Remote E-Mail status updates



ustomizable Icon Screen. Advanced touch screen capabilities with user customized main menu touch screen and a variety of visual programming screens and functions that offer the operator faster and easier methods of part set-up and processing.



Maintenance Support Function. Kitamura's Maintenance Support Function offers operator convenience in displaying methods of machining maintenance, repair and parts support on the NC Screen.



Our high efficiency Intelligent Advanced Control System (IAC) consists of a series of strategically located sensors and machine efficiency monitors that work to keep component growth due to machining heat build-up to less than ±5 microns (±0.0002").



Video Guidance. Useful functions visually walk the user through methods of battery replacement, alarm release, APC recovery, PMC ladder and alarm release / guidance making it easier to monitor machine performance and uptime.

Positioning Accuracy +/-0.002mm (+/-0.000079") / Full Stroke

Repeatability +/-0.001mm (+/-0.000039")

bility for high-production environments

All mating surfaces are hand scraped to assure an absolutely perfect fit. No need for geometry compensation to adjust for squareness, parallelism and perpendicularity. High performance THK double roller linear guideways offer long life expectancy while holding accuracies. Smooth and quiet operation.

Generous Work Envelope

Ø500mm (Ø19.7") x 745mm (29.3") H. Standard 2-APC system and full 4th axis offer smart fixturing and work holding options. An additional 5th axis can be added to BOTH pallets in the field for ultimate flexibility and less handling of your more complex parts.





High Speed B-Axis - Integral Drive Motor Driven 54,000deg/min (150min⁻¹) Rotation.

- Positioning Accuracy ±2 arc sec
- High resolution built-in Heidenhain rotary encoder
- Zero backlash
- Dramatically faster indexing time reduces out of cut time and increases the amount of material removed in milling applications. Turning is possible with "Fastest in class"

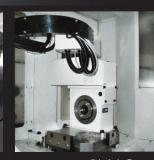
Standard 50-Tool Automatic Tool Changer

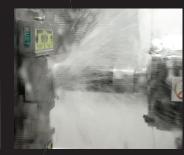
minimizes tool change time for maximum cutting time. Kitamura's exclusive, patented fixed pot ATC system assures tools are always returned to the same pot and the next tool to be used is kept in a "stand-by" pot. Up to 200T can be added in the field for increased capability.

Available Options









Spindle and Tool Probes

Field Retrofittable 5th Axis Rotary Tables (available on both pallets)

Up to 1000psi Coolant Thru the Spindle Available



- Machine Monitoring Software Suite
- MTConnect Ready Adaptor



Smart Fixturing and Workholding Options



Field Expandable 8-Station Multi-Pallet System

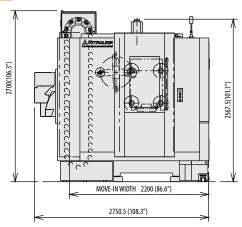
design, engineering and manufacture since 1933

SPECIFICATIONS Mycenter-HX300iG/400

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Table	
Table Size	305 x 305mm (12.0" x 12.0")
Table Indexing	0.001 Degree (4th Axis)
Tapped Hole (Size x Qty.)	M16 x 2.0 x 16
Max. Table Load	250kg (550 lbs.)
Max. Workpiece Dia.	Ø500mm (Ø19.7")
Max. Workpiece Height	745mm (29.3")
Travels	
X-Axis Travel	460mm (18.1")
Y-Axis Travel	510mm (20.0")
Z-Axis Travel	560mm (22.0")
B-Axis Travel	0 to 360 Degrees
Table Surf. to Spindle Center	50 to 560mm (2.0" to 22.0")
Table Center to Spindle Nose	60 to 620mm (2.4" to 24.4")
Spindle	
Spindle Taper	#40 NST (HSK-A63 Opt.)
Spindle Speed	40 to 15,000min ⁻¹ (20,000min ⁻¹ Opt.)
Drive Method	Direct Drive
Maximum Spindle Torque	95.5 N•m (70.4 ft•lbs)
Spindle Motor	22kW (30HP AC/ 5 min)
	15kW (20HP AC/10 min)
	11kW (15HP AC/30 min)
	7.5kW (10HP AC/Cont.)
Feed	
Rapid Feed X,Y,Z	60m/min (2,362ipm)
Cutting Feed Rate X,Y,Z	60m/min (2,362ipm)
Rapid Feed (B-Axis)	54,000 deg/min (150 min ⁻¹)
APC	
Number of Pallets	2
APC Change Time	8.5 seconds
ATC	
Tool Storage Capacity	50 Tools (Opt. 62, 100, 150, 200)
Tool Selection Method	Random Bi-Directional, Fixed Pot
Tool Holder Style	CT (BT) 40 (HSK-A63 Opt.)
Max. Tool Dia.	Ø95mm (Ø3.7") / Ø150mm (5.9")
Max. Tool Length	350mm (13.8")
Max. Tool Weight	10kg (22 lbs.)
Tool to Tool	1.3 seconds
Chip to Chip	2.5 seconds, min.
Utilities	
Power Requirement	45 KVA, 200v AC, 3 Phase
	,
	50 KVA, - Opt. 20,000rpm Spindle
Air Requirement	
Air Requirement For 20,000 min ⁻¹ Spindle	50 KVA, - Opt. 20,000rpm Spindle
·	50 KVA, - Opt. 20,000rpm Spindle 0.5 MPa, 280L/min (90psi, 10cfm)
For 20,000 min ⁻¹ Spindle	50 KVA, - Opt. 20,000rpm Spindle 0.5 MPa, 280L/min (90psi, 10cfm)
For 20,000 min ⁻¹ Spindle Machine Dimensions	50 KVA, - Opt. 20,000rpm Spindle 0.5 MPa, 280L/min (90psi, 10cfm) 0.5 MPa, 350L/min (90psi, 13cfm)
For 20,000 min ⁻¹ Spindle Machine Dimensions Required Space (W x D)	50 KVA, - Opt. 20,000rpm Spindle 0.5 MPa, 280L/min (90psi, 10cfm) 0.5 MPa, 350L/min (90psi, 13cfm) 2,759 x 3,574mm (108.6" x 140.7")

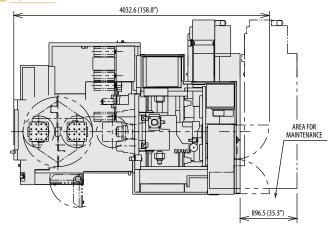
FLOOR PLANS

Front View



Side View WOKEIN HEIGHT 2564.2(89.1). 3573.5 (140.7")

Layout View





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