

## **MYCENTER®**



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HX630G



SIMPLIFY THE COMPLICATED

# HX630G Designed to tackle the toughest larg

## The ideal HMC for extra large par

- Field expandable 2-station APC with 4th axis rotary table with Heidenhain high resolution rotary scale.
  10 arc/sec positioning, 3 arc/sec repeatability.
- Ultra-high-speed rapid/cutting feeds, 60m/min (2,362ipm) on solid box ways
- Patented twin ballscrew and dual feedback technology in X, Y & Z axes
- Standard 62T (field expandable) fixed pot ATC can be expanded in the field up to 212 tools
- Powerful 53HP, 4-step gear driven, 12,000 min<sup>-1</sup> spindle. 8,000min<sup>-1</sup> and HSK spindle configurations are available options
- Fine resolution linear scale feedback in all axes (X,Y & Z)
- Standard 220psi coolant thru the spindle and wash coolant
- Double decker style chip conveyor and filtration system



Pioneering Icon CNC Operation with Interactive Touchscreen Display Technology

A rumatik / i

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

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

World renowned JAPANESE

### je part machining challenges

## ts and multi-fixtured tombstones

### *Kitamura castings provide critical design benefits:*

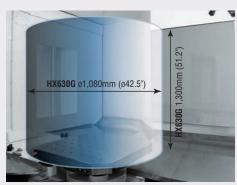
- Premium grade Meehanite cast iron
- Solid column construction
- Hand-scraped surfaces for absolute perfect fit with no gaps
- Solid Induction Hardened Boxways produced at our factory in Japan
- Zero overhang for guaranteed static accuracies of +/- 0.002mm (+/-0.000079") / full stroke



Induction hardened solid box guideways with linear scale feedback on all axes with twin ballscrew design in X,Y & Z axes.



*With Power to handle the toughest cutting conditions* the Mycenter-HX630G features a 53HP, high-torque, 4-step gear driven spindle that delivers high-efficiency cutting performance with low energy consumption. 8,000min<sup>-1</sup> and 12,000min<sup>-1</sup> configurations are available.

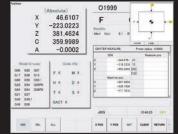


*The Mycenter-HX630G is designed to handle your largest part machining requirements.* It easily handles workpieces up to Ø1,080mm (Ø42.5") x 1,300mm (51.2") H. *The HX630G has a table load capacity of* 1,500kg (3,300Lbs).

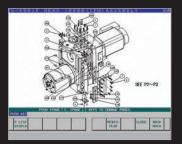
### The latest in control technology with a focus on ease of use for the operator



Customizable 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.



Work Set Assistance. Set-up work offsets with just a few keystrokes. Four types of measurements are possible. Edge side measure, center measure, 3 point diameter center measure and corner measure if angular.



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



Intelligent Advanced Control System. Controls the effects of heat displacement in order to ensure continuous accuracy in machining. Minimizes head displacement to less than +/-5 microns. 6 sensors positioned on the machine measure and monitor temperature of machine and compensation guarantees positioning accuracy of +/-0.002mm (+/-0.000079") / Full stroke. Kitamura patented system since 1998.

\*Daily Thermal Graphic Display

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

### design, engineering and manufacture since 1933

## SPECIFICATIONS Mycenter-HX630G

#### Table

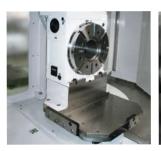
<i>Table</i>	
Table Size	630 x 630mm (24.8" x 24.8")
Table Indexing	0.001 Degree (4th Axis)
Tapped Hole (Size x Qty.)	M16 x 2.0 x 25
Max. Table Load	1,500kg / (3,300 lbs.)
Max. Workpiece Dian.	Ø1,080mm (Ø42.5")
Max. Workpiece Height	1,300mm (51.2")
Travels	
X-Axis Travel	1,100mm (43.3") / Twin Ballscrew Design
Y-Axis Travel	920mm (36.2") / Twin Ballscrew Design
Z-Axis Travel	1,050mm (41.3") / Twin Ballscrew Design
B-Axis Travel	0 to 360 Degrees Full 4th Axis
Table Surf. to Spindle Center	100 ~ 1,020mm (3.9" ~ 40.2")
Table Center to Spindle Nose	100 ~ 1,150mm (3.9" ~ 45.3")
Spindle	
Spindle Taper	#50 NST (HSK-A100 Opt.)
Spindle Speed	35 ~ 12,000min <sup>-1</sup> (8,000min <sup>-1</sup> 0pt.)
Drive Method	Gear Drive, 4 Step
Maximum Spindle Torque	585.9 N•m (432.1 ft•lbs)
Spindle Motor	40kW (53HP AC/15 min)
	22kW (30HP 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)	12,000 deg/min (33.3min <sup>-1</sup> )
IPC	
Number of Pallets	2
APC Change Time	14.7 seconds
TC	
Tool Storage Capacity	62 Tools (Opt. 112, 122, 162, 212)
Tool Selection Method	Random bi-directional, Fixed Pot
Tool Holder Style	CT (BT) 50
Max. Tool Dia.	Ø125mm (Ø4.9") / Ø320mm (Ø12.6")
Max. Tool Length	650mm (25.6")
Max. Tool Weight	30kg (66 lbs.)
Tool to Tool	2.1 seconds
Chip to Chip	5.2 seconds, min.
Itilities	
Power Requirement	65KVA, 200v AC, 3 Phase
Air Requirement	0.5 MPa, 410L/min (90psi, 14cfm)
Machine Dimensions	
Required Space (W x D)	4,134 x 5,760mm (162.7" x 226.8")
Machine Height	3,513mm (138.3")
Machine Net Weight	21,000kg (46,200 lbs.)
Control	Arumatik®-Mi

#### **Available Options**





Spindle and Tool Probes





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

Up to 1000psi Coolant Thru the Spindle Available



Software Suite

Adaptor

MTConnect Ready



Field Expandable Multi-Pallet Systems

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