

# SPECIFICATIONS Mycenter-HX630G/800

## Table

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> Opt.)
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> )

## APC

Number of Pallets	2
APC Change Time	14.7 seconds

## ATC

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.

## Utilities

Power Requirement	65KVA, 200v AC, 3 Phase
Air Requirement	0.5 MPa, 410L/min (90psi, 14cfm)

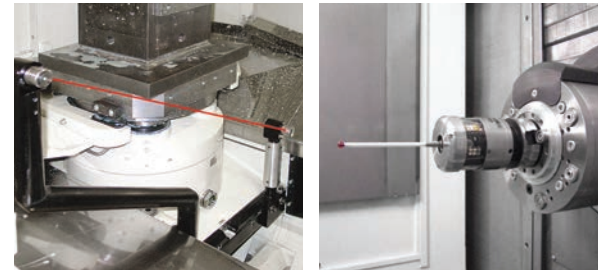
## Machine Dimensions

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.)

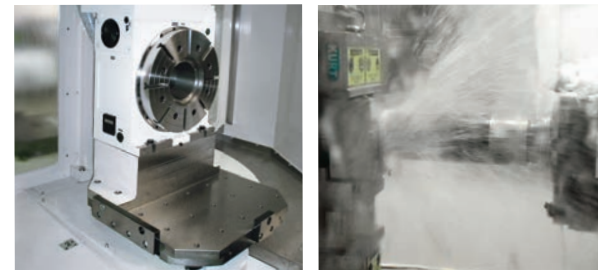
## Control

Control	Arumatik®-Mi
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## 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

Field Expandable Multi-Pallet Systems

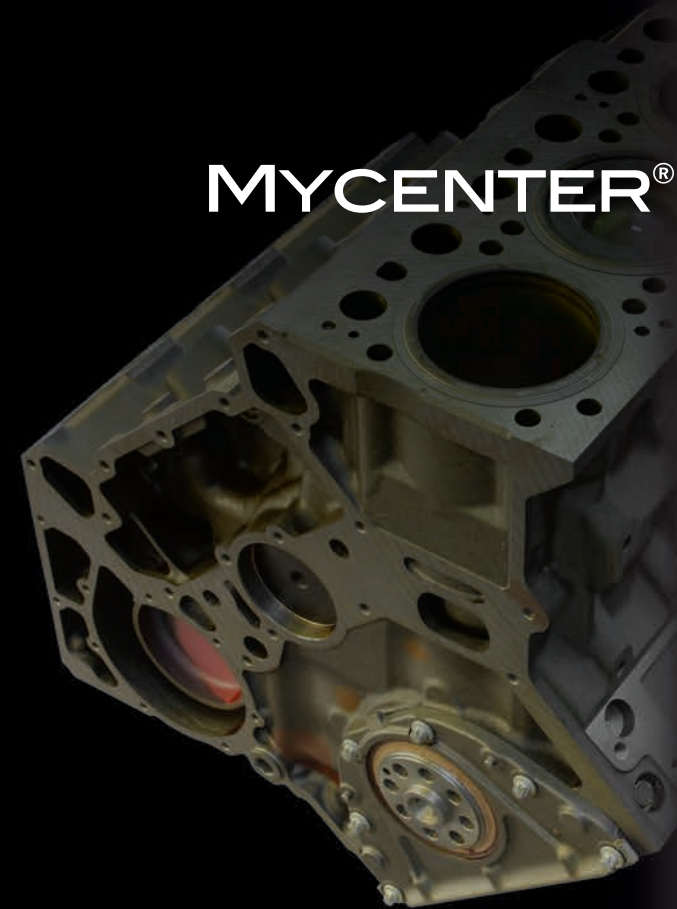


**Kitamura Machinery Co., Ltd. (Headquarters)**  
TEL: (0766) 63-1100 FAX: (0766) 63-1128  
www.kitamura-machinery.co.jp

**Kitamura Machinery of U.S.A., Inc. (Chicago)**  
TEL: (847) 520-7755 FAX: (847) 520-7763  
www.kitamura-machinery.com

**Kitamura Machinery GmbH (Düsseldorf)**  
TEL: (0211) 65-6077 FAX: (0211) 904-7916  
www.kitamura-machinery.eu

# MYCENTER® HX630G/800

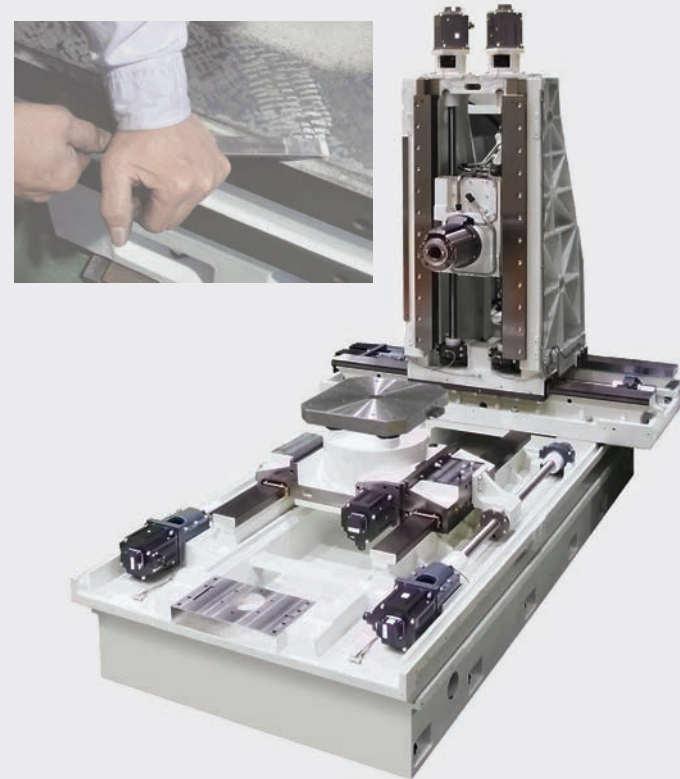




# HX630G/800 Designed to tackle the toughest large part machining challenges

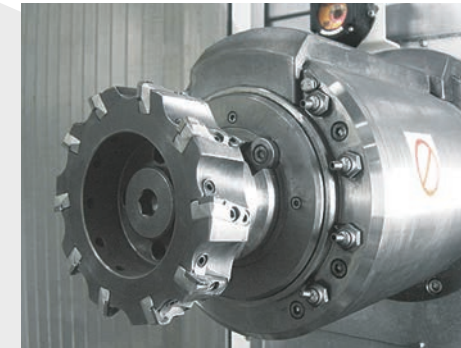
## The ideal HMC for extra large parts and multi-fixtured tombstones

- 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



### Kitamura castings provide critical design benefits:

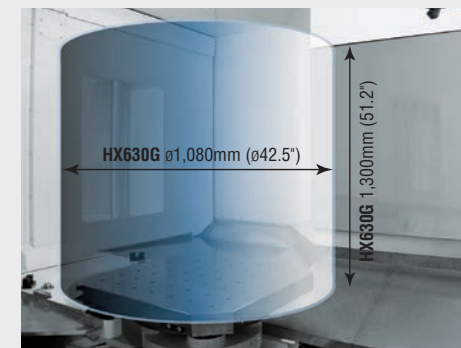
- Premium grade Meehanite cast iron
- Solid column construction
- Hand-scraped surfaces for absolute perfect fit with no gaps
- Solid Induction Hardened Boxways produced at our factory in Japan
- Zero overhang for guaranteed static accuracies of +/- 0.002mm (+/-0.000079") / full stroke



**With Power to handle the toughest cutting conditions** the Mycenter-HX630G/800 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.



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



**The Mycenter-HX630G/800 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/800 has a table load capacity of 1,500kg (3,300Lbs).



### Pioneering Icon CNC Operation with Interactive Touchscreen Display Technology

## Arumatik® Mi

- 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

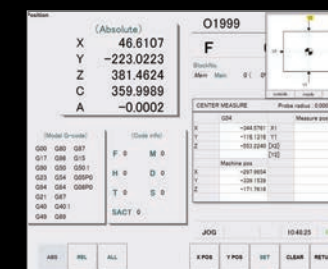
Positioning Accuracy +/-0.002mm (+/-0.000079") / Full Stroke

World renowned JAPANESE

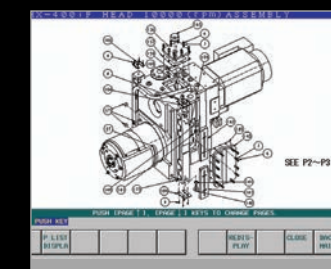
### The latest in control technology with a focus on ease of use for the operator



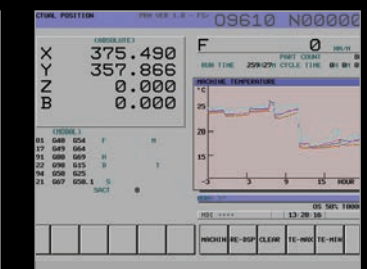
**Customizable Icon Screen.** Advanced touch screen capabilities with user customized main menu touch screen and a variety of visual programming screens and functions that offer the operator faster and easier methods of part set-up and processing.



**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