

# SPECIFICATIONS Mycenter-HX800G

## Table

Table Size	800 x 800mm (31.5" x 31.5")
Table Indexing	0.001 Degree (4th Axis)
Tapped Hole (Size x Qty.)	M16 x 2.0 x 49
Max. Table Load	3,000kg (6,600 lbs.) *With Limitations
Max. Workpiece Dia.	Ø1,525mm (Ø60.0")
Max. Workpiece Height	1,550mm (61.0")

## Travels

X-Axis Travel	1,550mm (61.0") / Twin Ballscrew Design
Y-Axis Travel	1,300mm (51.2") / Twin Ballscrew Design
Z-Axis Travel	1,400mm (55.1") / Twin Ballscrew Design
B-Axis Travel	0 to 360 Degrees Full 4th Axis
Table Surf. to Spindle Center	100 ~ 1,400mm (3.9" ~ 55.1")
Table Center to Spindle Nose	150 ~ 1,550mm (5.9" ~ 61.0")

## 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)	8,000 deg/min (22.2min <sup>-1</sup> )

## APC

Number of Pallets	2
APC Change Time	23.0 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	5.9 seconds, min.

## Utilities

Power Requirement	70KVA, 200v AC, 3 Phase
Air Requirement	0.5 MPa, 410L/min (90psi, 14cfm)

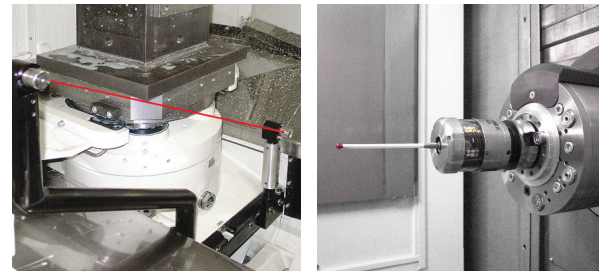
## Machine Dimensions

Required Space (W x D)	4,295 x 7,119mm (69.1" x 280.3")
Machine Height	3,554mm (139.9")
Machine Net Weight	28,400kg (62,480 lbs.)

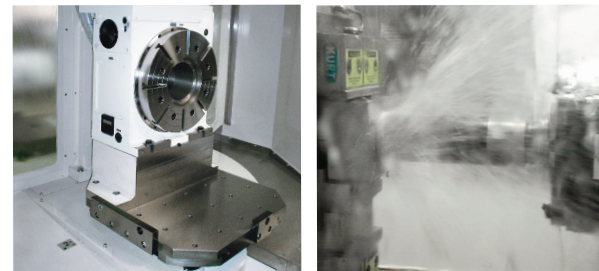
## Control

Arumatik®-Mi

## Available Options



Spindle and Tool Probes

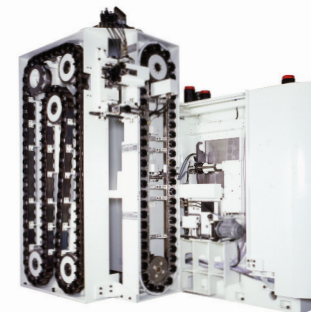


Field Retrofittable 5th Axis Rotary Tables (available on both pallets)

Up to 1000psi Coolant Thru the Spindle Available



- Machine Monitoring Software Suite
- MTConnect Ready Adaptor



Field Expandable Tool Changer Systems, up to 212 Tools



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# MYCENTER® HX800G



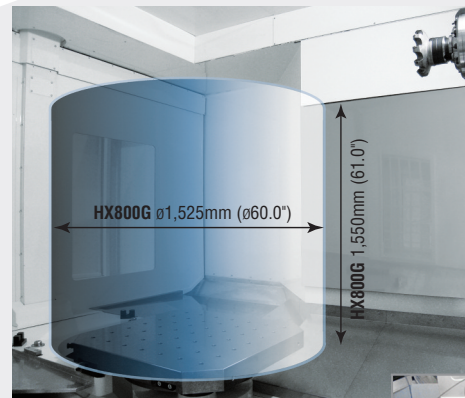
HORIZONTAL MACHINING CENTER

SIMPLIFY THE COMPLICATED

# HX800G Extreme capacity, power and performance for extreme parts

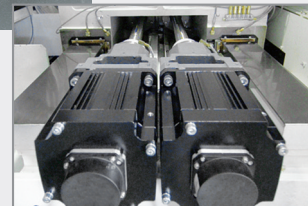
## Designed for high-power, high-precision cutting of supersize work

- World's fastest 60m/min (2,362ipm) rapid feedrates on Solid Box Ways
- Largest work envelope in its class  $\varnothing 1,525\text{mm} \times 1,550\text{mm}$  ( $\varnothing 60.0'' \times 61.0''$  H)
- Patented twin ballscrew and dual feedback technology in X, Y, Z axes with Heidenhain scale feedback
- Standard 62T (field expandable) fixed pot ATC can be expanded in the field up to 212 tools
- Powerful 53HP, 4-step gear driven, 12,000min<sup>-1</sup> spindle. 8,000min<sup>-1</sup> and HSK spindle configurations are available options
- Standard full 4th axis rotary table with Heidenhain high resolution rotary scale. Easy part set-up and high level accuracies - 10 arc/sec positioning, 3 arc/sec repeatability.



**The Mycenter-HX800G is designed to handle your largest part machining requirements.**

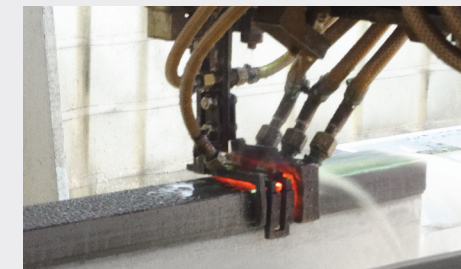
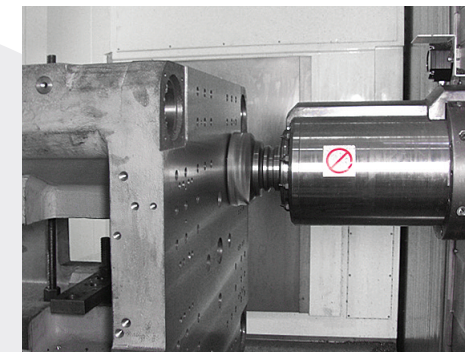
It easily handles workpieces up to  $\varnothing 1,525$  ( $\varnothing 60.0''$ ) x 1,550mm (61.0") H. The HX800G has a table load capacity of 3,000kg (6,600Lbs). Standard full 4th axis for easier set-up of more complex parts.



Patented Twin Ballscrew & dual feedback technology since 1999 provides the stability to support and move large, heavy masses at higher speeds.

**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  $\pm 0.002\text{mm}$  ( $\pm 0.000079''$ ) / 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-HX800G 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.

**Exceptional Chip Management** Double decker style chip conveyor with 100 micron filtration, internal chip augers and wash and shower coolant quickly eliminates chips, improving accuracy, surface finish and tool life.



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

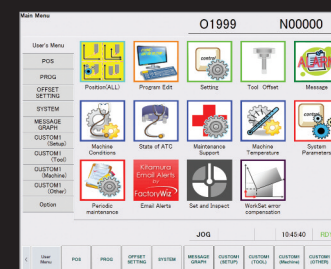
**Arumatik-Mi**

- 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

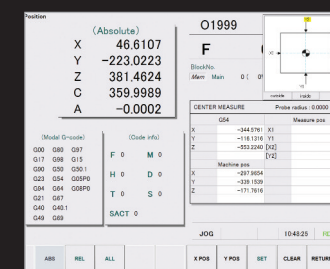
Positioning Accuracy  $\pm 0.002\text{mm}$  ( $\pm 0.000079''$ ) / Full Stroke

**World renowned JAPANESE**

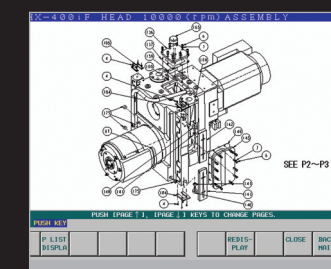
The latest in control technology with a focus on ease of use for the operator



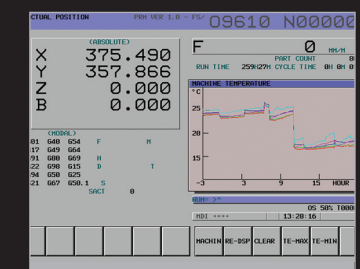
**Customizable Icon Screen.** Advanced touch screen capabilities with user customized main menu touch screen and a variety of visual programming screens and functions that offer the operator faster and easier methods of part set-up and processing.



**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  $\pm 5$  microns. 6 sensors positioned on the machine measure and monitor temperature of machine and compensation guarantees positioning accuracy of  $\pm 0.002\text{mm}$  ( $\pm 0.000079''$ ) / Full stroke. Kitamura patented system since 1998.

\*Daily Thermal Graphic Display

Repeatability  $\pm 0.001\text{mm}$  ( $\pm 0.000039''$ )

**design, engineering and manufacture since 1933**