

MYCENTER<sup>®</sup>

# HX250iG



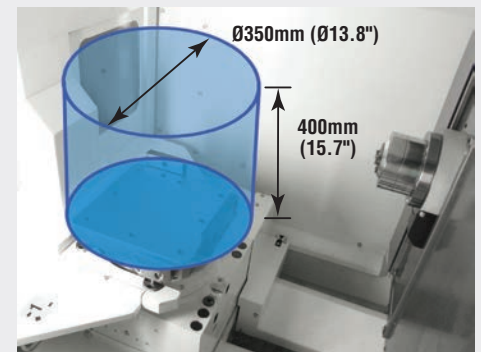
**HORIZONTAL** MACHINING CENTER

SIMPLIFY THE COMPLICATED

# HX250iG The machine for high speed, high

## Power & precision in an

- Rigid 4,500kg (9,900Lbs) Meehanite cast construction manufactured in Japan with craftsmanship in handscraping techniques
- Space-saving, ultra compact 2.33 x 2.95m (7.7' x 9.7') footprint
- 2-station APC with high speed 4th Axis rotary table with rotary scale. Integral drive motor driven with rapids of 108,000deg/min (300min<sup>-1</sup>)
- Ultra-high-speed rapid/cutting feeds, 60m/min (2,362ipm)
- Ultra-high speed tool change, T-T 0.9 Seconds
- High performance THK double roller linear guideway system
- Powerful 15,000min<sup>-1</sup>, 15HP Direct Drive, Dual Contact Spindle. 30,000min<sup>-1</sup> HSK spindle is an available option
- Standard scraper type chip conveyor with rolling filtration system



*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**

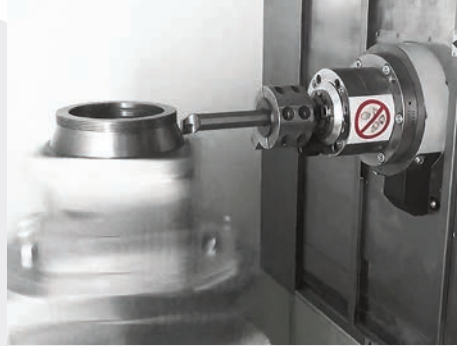
# h productivity intricate machining of small components

## ultra-compact footprint

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.

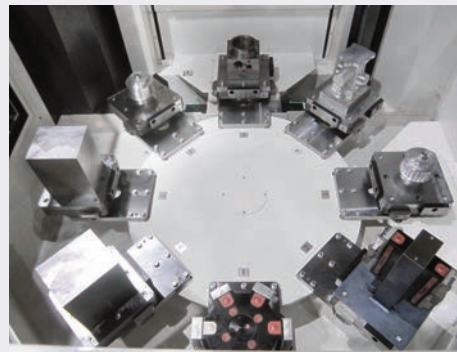
### Generous Work Envelope.

Ø350mm (Ø13.8") x 400mm (15.7") 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 108,000deg./min (300min<sup>-1</sup>) 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" rapid feeds.



**Now Available – Field installable 10-Station APC System. Fits within a compact 4117mm (163") deep x 2995mm (118") wide footprint.**

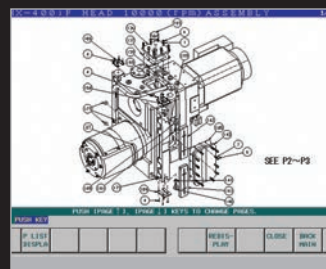
## The latest in control technology with a focus on ease of use for the operator



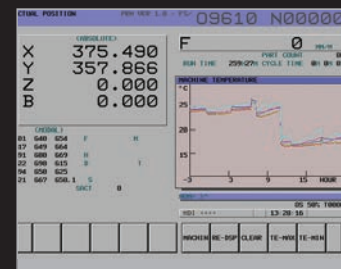
**Customizable Icon Screen.** Advanced touch screen capabilities with user customized main menu touch screen and a variety of visual programming screens and functions that offer the operator faster and easier methods of part set-up and processing.



**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-HX250iG

## Table

|                           |                             |
|---------------------------|-----------------------------|
| Table Size                | 254 x 254mm (10.0" x 10.0") |
| Table Indexing            | 0.001 Degree (4th Axis)     |
| Tapped Hole (Size x Qty.) | M12 x 1.75 x 8              |
| Max. Table Load           | 100kg (220 lbs.)            |
| Max. Workpiece Dia.       | Ø350mm (Ø13.8")             |
| Max. Workpiece Height     | 400mm (15.7")               |

## Travels

|                               |                                |
|-------------------------------|--------------------------------|
| X-Axis Travel                 | 305mm (12.0")                  |
| Y-Axis Travel                 | 305mm (12.0")                  |
| Z-Axis Travel                 | 330mm (13.0")                  |
| B-Axis Travel                 | 0 to 360 Degrees Full 4th Axis |
| Table Surf. to Spindle Center | 60 to 365mm (2.4" to 14.4")    |
| Table Center to Spindle Nose  | 60 to 390mm (2.4" to 15.4")    |

## Spindle

|                        |  |
|------------------------|--|
| Spindle Taper          | #30 NST (HSK-E40 Option / 30k)                               |
| Spindle Speed          | 150 ~ 15,000min <sup>-1</sup> (30,000min <sup>-1</sup> Opt.) |
| Drive Method           | Direct Drive   |
| Maximum Spindle Torque | 70.0 N•m (51.6 ft•lbs)                                       |
| Spindle Motor          | 11kW (15HP AC/30 min)<br>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)     | 108,000 deg/min (300 min <sup>-1</sup> ) |

## APC

|                   |                                 |
|-------------------|---------------------------------|
| Number of Pallets | 2 (Opt. 10-Station Pallet Pool) |
| APC Change Time   | 7.9 seconds                     |

## ATC

|                       |                                  |
|-----------------------|----------------------------------|
| Tool Storage Capacity | 40 Tools (Opt. 52, 102)          |
| Tool Selection Method | Random Bi-Directional, Fixed Pot |
| Tool Holder Style     | BT 30 (HSK-E40 Opt.)             |
| Max. Tool Dia.        | Ø50mm (Ø2.0") / Ø75mm (Ø3.0")    |
| Max. Tool Length      | 200mm (7.9")                     |
| Max. Tool Weight      | 2kg (4.4 lbs.)                   |
| Tool to Tool          | 0.9 seconds                      |
| Chip to Chip          | 2.8 seconds, min.                |

## Utilities

|                   |                                 |
|-------------------|---------------------------------|
| Power Requirement | 30KVA, 200v AC, 3 Phase         |
| Air Requirement   | 0.5 MPa, 150L/min (90psi, 6cfm) |

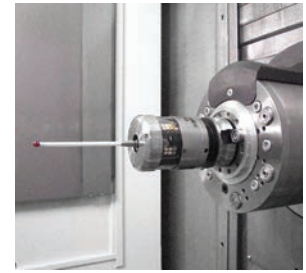
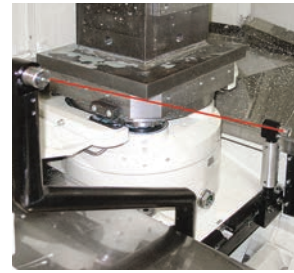
## Machine Dimensions

|                        |                                  |
|------------------------|----------------------------------|
| Required Space (W x D) | 2,330 x 2,948mm (91.7" x 116.1") |
| Machine Height         | 2,470mm (97.2")                  |
| Machine Net Weight     | 4,500kg (9,900 lbs.)             |

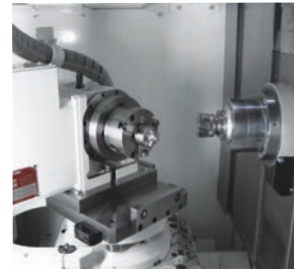
## Control

|  |                                   |
|--|-----------------------------------|
|  | Arumatik <sup>®</sup> -Mi Control |
|--|-----------------------------------|

## 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
- MTCConnect Ready Adaptor



Smart Fixturing and Workholding Options



**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

