

HC-658 II

ROKU-ROKU

SINCE 1903

Super Hybrid Concept

Hard Milling

Graphite Milling



Highly Rigid Structure

- High rigidity, bridge-type monoblock structure allows high-speed, high-precision machining by far.
- Minimized distance between guide surface and spindle center provides greater stability.
- High rigidity bed with ideal rib distribution has been designed by computer analysis.
- With linear scales included as standard equipment, Roku-Roku guarantees static positioning accuracy $\pm 0.000060''$ and $\pm 0.000020''$ repeatability.

Extended Speed Range

- Capable of a wide RPM range, 200 through 32,000 (40,000 optional), using a long-life grease packed integral AC motor. Ideal for milling, drilling and tapping applications.

Z-axis Balance Cylinder

- Dual Balance Cylinders, standard equipment on the HC-658 II, reduces load on the ball screw and servo motor allowing for quick smooth motion of the Z-axis.

Fanuc 31i-B5 Super High-Speed Processor & AI Contour Control II

- The Fanuc 31i-B5 is a "NANO CNC System" with Intelligent Velocity Control, NANO Interpolation and NANO Smoothing. The look ahead has been expanded to 1000 blocks .

HC II Feature Upgrades

- Super PC III (3 machining modes) has been expanded to Super PC X now with 10 modes of corner control and precision, achieving a 30% improvement in cycle time.
- Automatic lubrication system improves serviceability by automatically greasing the ball screws and linear guides.
- Oil cooled X-axis ball screw nut improves long run accuracy stability.

Highest Precision and Productivity
For Graphite and Hard Milling

Now Available

From MC Machinery Systems, Inc.

MC MACHINERY SYSTEMS, INC.
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DUST PROTECTION AND COLLECTION

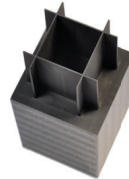
As a graphite machining center, great care was taken in consideration of providing the best in dust collection and prevention. The HC Series provides a full enclosure cover and dust preventive structure for ways, screws, and ATC as standard equipment. The high-performance Amano PiA-30M Dust Collector is capable of changing the working area air six times per minute.

The dust collection and protection during graphite machining both outside and inside of the machine, such as ball screw and LM guide rail for work table, are perfectly complete.



SUPER J-CUT

Roku-Roku developed the Super J-Cut Broaching System to provide a square broaching tool keyed into the spindle nose and uses the movement of the Z-axis to broach square corners in graphite electrode material.

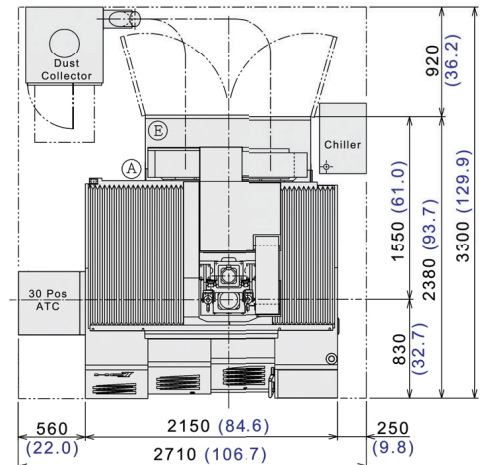
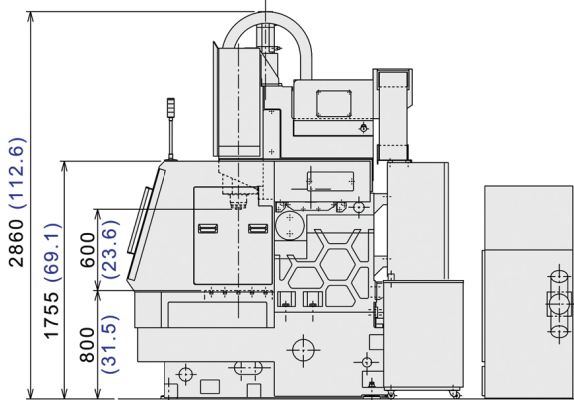
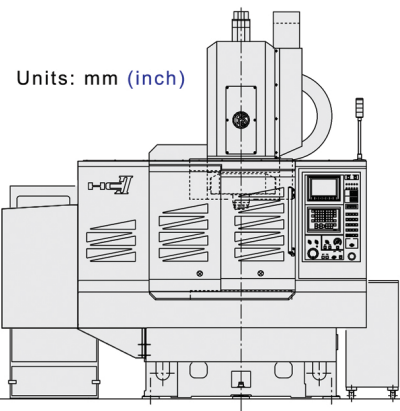


MULTIPLE APPLICATIONS

Beyond the excellent graphite machining capability, High-Speed direct hard milling can be done by dry or semi-dry (oil-mist) systems.



DIMENSIONS



Machine Height: 112.6" Installation Footprint: 106.7" x 129.9" Machine Weight: 12,100lbs.
 Power Requirement: 200V +/-10%, 60 Hz, 22kVA Compressed Air Supply: 21.2cu.ft./min. @ 72psi.

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SPECIFICATIONS

HC-658 II	
X x Y x Z Travels (in.)	23.6 x 19.6 x 15.7
Table Work Area (in.)	30.0 x 20.0
Table to Spindle Nose Distance (in.)	7.8 ~ 23.6
Max. Workpiece Weight (lb.)	440
Table Height from Floor (in.)	31.5
Positioning Accuracy Full Stroke	±0.000060"
Repeatability	±0.000020"
Actual Measured Circularity (2.0 Dia At 8 IPM)	0.000078"
Spindle Speed (Option)	200 ~ 32,000 RPM (40,000 RPM)
Spindle Taper	HSK-E40
Spindle Air Purge	Standard
Air Blast through Spindle	Standard
Linear Scales X, Y, Z-axes	Heidenhan 0.00001mm Standard
ATC (Automatic Tool Changer) [Option]	30 Pos. Standard [60 Pos.]
Rapid Traverse Speed	787"/min
Cutting Speed (Normal Mode)	0.01 - 315"/min
Cutting Speed (GR Super PC Mode)	787"/min
Dust Collection System	Amano PiE-30 Standard
Machine Weight (lb.)	12,100
Machine Height (in.)	113
Required Floor Space (Machine Unit) (in.)	107 x 94
Control Unit	Fanuc 31i-B5 with AI Contour Control II
Power Required	200 ~ 220V 22KVA
Air Supply	21 cu.ft./min @ 72 psi

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