

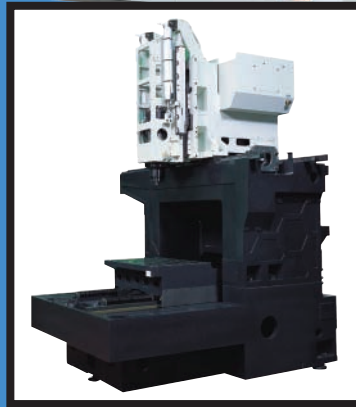
# ROKU-ROKU

## HC-658

### 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 range (200 through 32,000 RPM) using a long-life AC motor. Ideal for drilling and tapping applications.

#### Multiple Applications

- High-speed direct hard milling can be done by dry or semi-dry (oil-mist) systems.
- A full machine enclosure, sealed way and ball screw covers, and pressurized linear housings trap and contain all graphite dust.
- Patented Amano PIE-30 transfers the graphite-contaminated air within the enclosure to a disposable plastic bag.

#### High Rigidity Tool Holders

- Utilizing double contact HSK-E40 holders, the spindle achieves clamping rigidity six times higher when compared to a regular BT shank.

#### Z-axis Balance Cylinder

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

#### Fanuc 31i-A5 Super High-Speed Processor & AI Contour Control II

- The Fanuc 31i-A5 is a "NANO CNC System" with Intelligent Velocity Control, NANO Interpolation and NANO Smoothing. The look ahead has been expanded to 1000 blocks.

Highest Precision and Productivity  
For Graphite and Hard Milling

**Now Available**

From MC Machinery Systems, Inc.

#### Travels

X-axis travel (spindle head left/right)	23.6"
Y-axis travel (table forward/backward)	19.7"
Z-axis travel (spindle head up/down)	15.7"
Heidenhain Linear Scales	(STD)
Distance from Table Surface Spindle Nose	7.8" ~ 23.6"

**Super Spindle Unit  
32,000 RPM**

# SPECIFICATIONS

<b>HC-658</b>	
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	200 ~ 32,000 RPM
Spindle Taper	HSK-E40
Spindle Air Purge	Standard
Air Blast through Spindle	Standard
Linear Scales X, Y, Z-axes	Heidenhain 0.00001mm Standard
ATC (Automatic Tool Changer)	30 Position Standard
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.)	118 x 118
Control Unit	Fanuc 31i-A5 with AI Contour Control II
Power Required	200 ~ 220V 22KVA
Air Supply	21 cu.ft./min @ 72 psi

# DIMENSIONS

