



ROKU-ROKU

SINCE 1903

CEGA SSS-300/400

Super - Hybrid Concept

High-Speed/Accuracy

Milling, Drilling, Tapping

Highly Rigid Structure

- High rigidity, bridge-type monoblock structure allows high-speed, high-precision machining surpassing typical "C-Frame" construction 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 $\pm 0.000039"$ ($\pm 1.0\mu\text{m}$) Full Stroke and $\pm 0.000020"$ ($\pm 0.5\mu\text{m}$) repeatability.

Extended Speed Range

- SSS 300: (200 ~ 30,000 RPM) / SSS 400: (200 ~ 40,000 RPM) using a long-life integral 20 or 7.4 HP AC motor. Ideal for micro drilling, tapping and milling applications.

Z-axis Balance Cylinder

- Dual Balance Cylinders, standard equipment on CEGA SSS-300/400, reduces load for the ball screw and servo motor allowing 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.

Multiple Applications

- Standard Coolant plus oil mist systems cover both high accuracy production plus hard milling applications.
- The new High Precision Filtration System option allows high speed carbide machining over long periods with no concern of carbide dust accumulation.



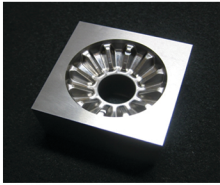
Drilling and Tapping Carbide

Highest Precision and Productivity for Milling, Drilling and Tapping

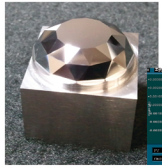
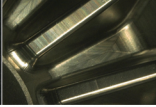
Now Available

From MC Machinery Systems, Inc.

MC MACHINERY SYSTEMS, INC.
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Cold Forging Die
Machining in Carbide

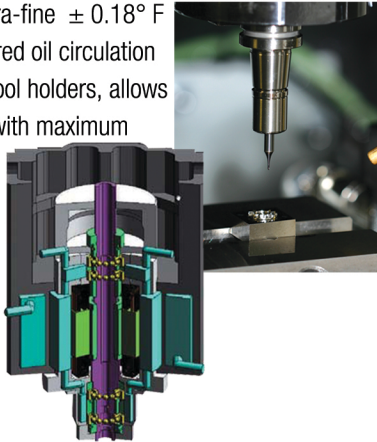


Tungsten Carbide Machining



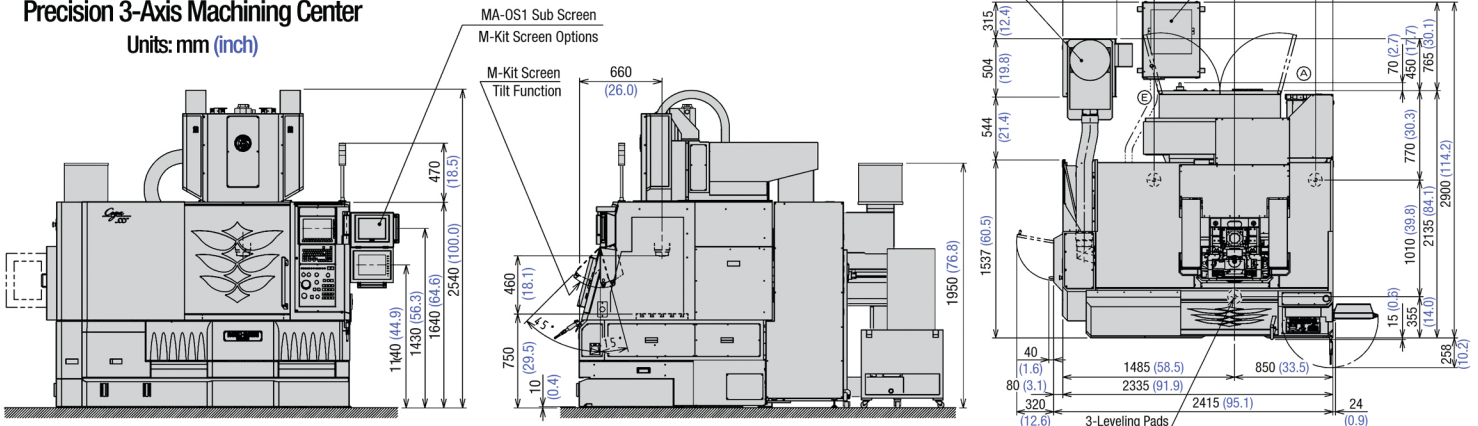
COMMITMENT TO DYNAMIC BALANCE

High accuracy and fine surface finish are products of a dynamically balanced spindle and tool holder system. Roku-Roku designs their integral motor spindles with the finest materials available including special ceramic bearings to achieve a dynamic run-out at the spindle taper of 0.5 μm . Combined with an ultra-fine $\pm 0.18^\circ \text{F}$ precision double-layered oil circulation jacket and HSK E40 tool holders, allows continuous operation with maximum speed realizing beautiful seamless surface finish with multiple tools.



Roku-Roku CEGA SSS 300/400 Precision 3-Axis Machining Center

Units: mm (inch)



Machine Height: 100.0" Installation Footprint: 95.0" x 114.0" Machine Weight: 11,000lbs.
Power Requirement: 200V +/-10%, 60Hz, 32kVA Compressed Air Supply: 21.2cu.ft./min. @ 72psi.

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SPECIFICATIONS

CEGA SSS-300/400	
X x Y x Z Travels (in.)	20.1 x 16.1 x 12.2
Table Work Area (in.)	25.5 x 16.0
Table top to Spindle Nose Distance (in.)	5.9 ~ 18.1
Max. Workpiece Weight (lb.)	440
Coolant Capacity (gal.)	40
Positioning Accuracy Full Stroke	± 0.000039 ($\pm 1.0\mu\text{m}$)
Repeatability	± 0.000020 ($\pm 0.5\mu\text{m}$)
Actual Measured Circularity (4.0" dia. at 8 IPM)	0.000044" (1.0 μm)
Spindle Speed SSS 300 (SSS 400)	200~30,000 (200~40,000)
Spindle Taper	HSK-E40
Spindle Motor HP SSS 300 (SSS 400)	20 (7.4)
Linear Scales X, Y, Z-axes	Heidenhain 0.000002mm Standard
ATC (Automatic Tool Changer)	20 Position Standard
Rapid Traverse Speed	590"/min.
Cutting Speed (Normal Mode)	0.01 ~ 394"/min.
Cutting Speed (GR Super PC Mode)	590"/min.
Machine Weight (lb.)	11,000
Machine Height (in.)	100
Required Floor Space w Options W x D	95.0" x 114.0"
Control Unit	Fanuc 31i-B5 with new iHMI system
Power Required	200~220VAC 32 kVA w options
Air Supply	17.5 cu.ft./min. @ 72 psi

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