



ROKU-ROKU

SINCE 1903

CEGA SSS-300/400 5AXP

Super - Hybrid Concept

High-Speed/Accuracy

5-Axis 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 $\pm 0.000040"$ and $\pm 0.000020"$ 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 5AXP, 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. The full 5-Axis Machining Package has been added for simultaneous 5-axis operation.

Multiple Applications

- High-speed direct 5-axis hard milling can be done by dry machining.
- Flush system is ideal for soft material 5-axis machining and micro drilling.
- Ultra-precision capability is ideal for non-metallic machining ie, Soda Glass, Zirconia and Machinable Ceramics.



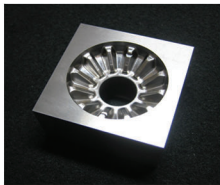
Highest Precision and Productivity for 5-Axis Milling, Drilling and Tapping

Now Available

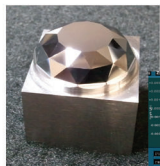
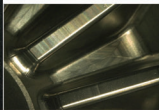
From MC Machinery Systems, Inc.

MC MACHINERY SYSTEMS, INC.

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Cold Forging Die
Machining in Carbide

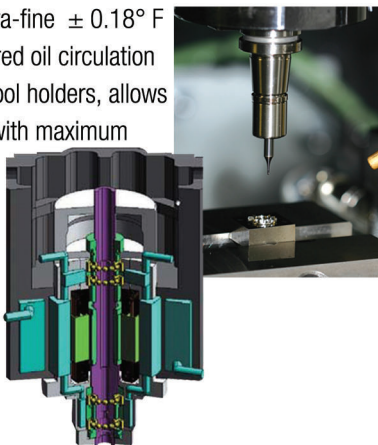


Tungstan Carbide Machining



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 μ m. Combined with an ultra-fine $\pm 0.18^\circ$ 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.



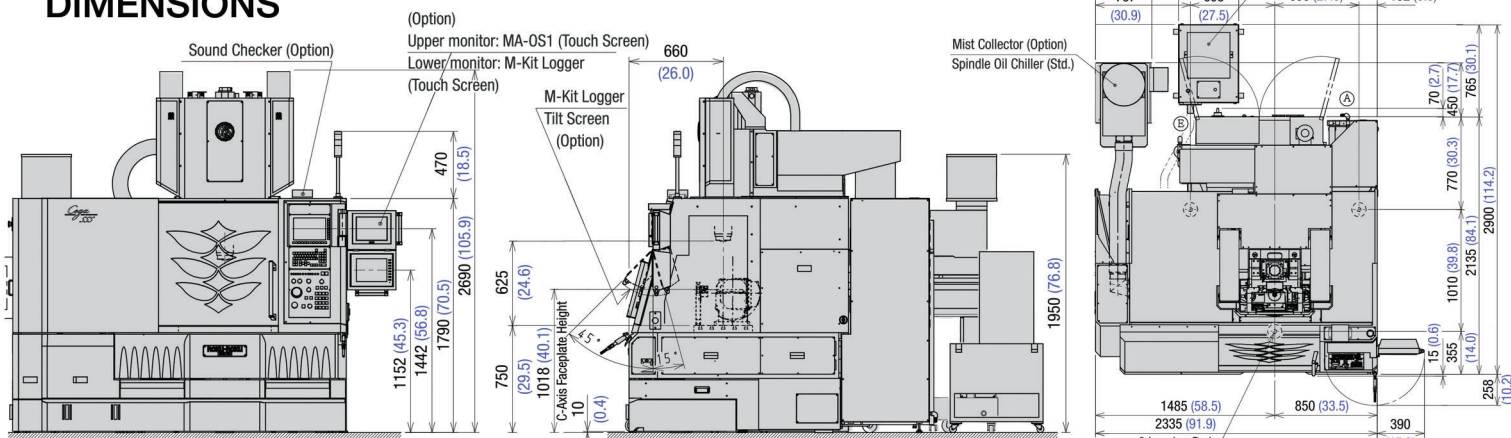
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SPECIFICATIONS

| CEGA SSS-300/400 5AXP | |
|--|----------------------------------|
| X x Y x Z Travels (in.) | 20.1 x 16.1 x 12.2 |
| Table Work Area (in.) | 25.6 x 16.1 |
| Max. Load on Table (lb.) | 484 |
| Rotary Faceplate to Spindle Nose (in.) | 12.4 ~ 24.6 |
| Max. Workpiece Weight Rotary (lb.) | 44 |
| Rotary Table Faceplate Dia. (in.) | 5.9 |
| Max. A-Axis Tilt Angle (deg.) | -110 ~ +30 |
| Max. A-Axis Rotation Speed | 12.5 RPM |
| Max. C-Axis Rotation Speed | 22 RPM |
| Max. Part Dia. on Faceplate (3.0" above) | 7.9 (9.8) |
| Linear Scales X, Y, Z-axes | Heidenhain 0.000002mm Standard |
| Positioning Accuracy Full Stroke | ± 0.000039 ($\pm 1.0\mu$ m) |
| Repeatability | ± 0.000012 ($\pm 0.3\mu$ m) |
| Index Accuracy (Tilt & Rotary) | ± 4 arc sec |
| Actual Measured Circularity (2.0" dia. at 8 IPM) | 0.000039" (1.0 μ m) |
| Spindle Speed SSS-300 (400) | 200~30,000 (200~40,000) |
| Spindle Taper | HSK-E40 |
| Spindle Air Purge | 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.) | 12,100 |
| Machine Height (in.) | 106 |
| Required Floor Space w Options W x D | 91.9" x 114.4" |
| Control Unit | Fanuc 31i-B5 with 5-axis package |
| Power Required | 200~220VAC 32 kVA w options |
| Air Supply | 17.5 cu.ft./min. @ 72 psi |

DIMENSIONS



Machine Height: 105.9" Installation Footprint: 91.9" x 114.2" w Chiller Machine Weight: 12,100 lbs.
Power Requirement: 200V +/-10%, 60Hz, 32kVA Compressed Air Supply: 17.5cu.ft./min. @ 72psi.

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