

Machine Name : 5 Axis Machining Center

Brand : CATO

Machine Model : CV300

Stock No. : 4812761

Ex-factory Date : 2024



Main Technical Parameters:

Three-axis travel: 700 × 570 × 500 mm

Distance from spindle nose to worktable surface: 105-605 mm

Distance from spindle center to column guideway surface: 628 mm

Maximum distance from C-axis disk surface to spindle center when A-axis is at 90°: 330 mm

Rapid traverse speed of X/Y/Z axes: 48/48/48 m/min

Cutting feed rate: 1-12000 mm/min

Spindle Parameters

Spindle type: $\phi 70$ mm built-in spindle

Spindle taper: HSK-A63

Maximum spindle speed: 20,000 rpm

Spindle motor power: 30/34 kW (continuous / S6 40%)

Spindle motor torque: 47.7/57.3 N·m (continuous / S6 40%)

Tool Magazine Parameters

Tools magazine capacity: 24 tools

Maximum tool diameter: 70mm (full tool) / 120mm (adjacent empty pocket)

Maximum tool length: 300mm

Guideway and Ballscrew Parameter

Guideway type: Roller linear guideways

X-axis guideway: 35mm / 2 sliders

Y-axis guideway: 35mm / 2 sliders

Z-axis guideway: 35mm / 2 sliders

X-axis ballscrew: $\phi 40 \times 16$

Y-axis ballscrew: $\phi 40 \times 16$

Z-axis ballscrew: $\phi 40 \times 16$

Accuracy Parameters

Positioning accuracy: +0.005/300mm

Repeatability accuracy: $\pm 0.003/300$ mm

5-axis Rotary Table Parameters

Rotary table drive type: Roller cam drive

Rotary table diameter: $\phi 300 \times 250$ mm

Maximum workpiece machining diameter: 400mm

Rotary table load capacity:

Horizontal position: 100kg

Tilted position: 70kg

Maximum A/C-axis rotation speed:

A-axis: 60rpm

C-axis: 60rpm

A-axis positioning accuracy: 40 arc-sec

A-axis repeatability accuracy: 20 arc-sec

C-axis positioning accuracy: 15 arc-sec

Lubrication and Cooling System

Oil distributor type: Volumetric type

Coolant tank capacity: 240L

Coolant pump specification: 0.32MPa / 16L/min

Overall Dimensions

Machine dimensions (L x W x H): 2453 x 3122 x 2885mm



