



CAMPRO U255C 4 + 1 Axis Machining Center

Innovative Design Concepts

- The new U Series 5 Axis Machining Center gives your workshop the versatility to machine smaller less expensive components without the expense or large footprint of a swivel head machine.
- Double arm supported A/C axes.
- Using the integrated trunnion table design is the easiest upgrade path for 3 Axis machine workshops as the approach to part tooling is very similar and reduces the training time required for your operators.
- The X, Y, and Z axis on this machine all feature heavy duty roller type linear guideways to maintain precision positioning under rapid movement and heavy loading.

STANDARD FEATURES:

- Custom Macro B (User Definable)
- Twin Arm 24 Tool ATC
- Tool Change Time (Tool To Tool) 2.5 sec.
- Tool Change Time (Chip to Chip) 6.0 sec.
- Portable Manual pulse generator
- Massive One-piece Meehanite cast iron bed
- Chip Auger
- 4th Axis Prep (no amplifier)
- Double Anchored, Pre-tensioned Ballscrews
- Fast 1,181 IPM Rapid Traverse rate
- Fast 33.3 RPM A Axis
- Fast 33.3 RPM C Axis
- Work light
- Operator call lamp (red, yellow, green)
- Spindle load meter
- Assembly and operation tools
- Auto Power Off
- 10,000 rpm I.D.D. spindle
- Roller type linear guides on 3 axes
- Spindle oil cooler
- Full-enclosed splash guard
- Spindle air blast system
- Telescope covers on 3 axes
- Pneumatic system
- Automatic lubrication system
- Coolant flushing device
- Oil-coolant separator
- Heat exchanger for electrical cabinet
- Instruction manual, parts list, and electrical diagram
- Fanuc operator and maintenance manuals
- WARRANTY-MACHINE: One-Year Parts Only
- WARRANTY-CONTROL: Two-Years Parts and Labor

SPECIFICATIONS:

CAPACITY:

X axis travel	15.75" (400 MM)
Y axis travel	20.47" (520 MM)
Z axis travel	17.72" (450 MM)
A axis travel	+ - 110 degrees
C axis travel	360 degrees
Table loading area	10.43" X 8.46" (265 X 215 MM)
Allowable table load	220 pounds (100 KG)

A-axis:

Transmission	Worm Gear
Speed reduction ratio	1:120
Tilting Angle	+ - 110 Degrees
Maximum speed	33.3 RPM

SPECIFICATIONS (CONT'D.)

C-axis:

Transmission	Worm gear
Rotation angle	360 Degrees
Maximum Speed	33.3 RPM
Indexing angle	.001 deg.
Allowable workpiece load	H: 220 lbs. (100 kg) V: 165 lbs. (75 kg)

SPINDLE:

Spindle nose to table top	3.94" – 21.65" (100 – 550 MM)
Spindle taper	CAT 40 Big Plus
Spindle speed	10,000 RPM
A.C. spindle motor (30 min.)	10/15 HP (7.5/11 KW)
Spindle torque (30 min)	55 FT-LBS. (74 NM)
Spindle Driving Method	I.D.D. (Inline Direct Drive)

AUTOMATIC TOOL CHANGER:

ATC Type	Twin Arm Type
Number of Tools	24
Tool Shank	CAT 40
Max. Tool Dia.	3.1" (80 MM)
Max tool Diameter (No Adjacent Tool)	5.9" (150 MM)
Max. Tool Length	9.8" (250 MM)
Max. Tool Weight	15.4 lbs. (7 KG)
Tool Change Time TOOL – TOOL	2.5 sec
Tool Change Time CHIP – CHIP	6.0 sec
Tool Selection	Random Bi-Directional

MOTION:

X and Y axis rapid traverse rate	1,181 IPM (30 M/MIN)
Z axis rapid traverse rate	1,181 IPM (30 M/MIN)
A Axis Rapid	33.3 rpm
C Axis Rapid	33.3 rpm
Cutting feed rate	393 IPM (10 M/MIN)
Slide Type	Box Ways
Least command increment	.001mm,
Positioning accuracy	+/- .00020" (full stroke)
Repeatability	+/- .00008"

GENERAL:

Floor Space Required (W x D)	115.35" x 88.98" (2,930 X 2,260 MM)
Height	111.7" (2,830 MM)
Machine Weight	14,300 lbs. (6,500 KG)
Standard Power Source Requirement - Fanuc	205-235 Volts / 3 Phase/60HZ
Power Capacity	65 Amps Minimum (25 KVA)
Air Source Requirement	85 – 115 PSI

Why U need the U Series 5 Axis:

The new U Series 5 Axis Machining Center gives your workshop the versatility to machine smaller less expensive components without the expense or large floor plans of a swivel head machine.

Perfect for Small Batch Production: If you need to machine less expensive components economically, the trunnion type 5 axis machine is the perfect choice as it delivers greater machining volume compared to more expensive swivel head machines.

Extended Undercut Capability:

The U series machine delivers 120 trunnion swivel which allows you to complete components in a single set up without the repositioning that could be required on other machines.

Greater Working Volume within a smaller space:

As the movement is handled by the worktable rotation, there is no need for a large working area to accommodate a swivel head. You can save on space as well as costs.

Higher Cutting Speed Longer Tool Life:

With the 5 Axis design, you use shorter tools that can be oriented toward the cutting surface. This means that you cause less stress to the cutting tools at high speeds and can prolong cutting tool life, saving your money.



Unique I.D.D. Spindle Design:

Ceramic ball bearing in the spindle to carry out high dynamic accuracy, high rigidity, and also provides longer service life. Direct-driven spindle motor ensures better torque transmission, decreased noise and backlash, and reduced vibration. Inline, direct-driven spindle that is coupled directly to the motor provides smooth operations for excellent surface finishes, and is equipped with a spindle oil cooler which reduces operating heat for greater thermal stability.

Complex Shape Machining One Set Up:

For prototyping, you can machine extremely complex shapes directly from a solid block, so you have no need to first go through a casting process and then machining. This drastically reduces your production time and save you significant money on the casting part of the process.

Easy to use on tilted machining (G68.2)

Fanuc-----Tilted working plane indexing command (Standard)

- Easy definition and verification of inclined coordinate system.
- The 3D display of the coordinate system on the screen helps to select the right machining surface without any mistakes.
- The programs for 3-axis machining can be used without any modification.
- The programs for 3-axis machining can be used without any modification. Workpiece clamping confirmation to eliminate human error during part loading.

PRICE

\$97,400.00

FOB: Port Of Entry / Newark, NJ