DATRON

DATRON CNC milling solutions for

5-axis machining

Applications such as:

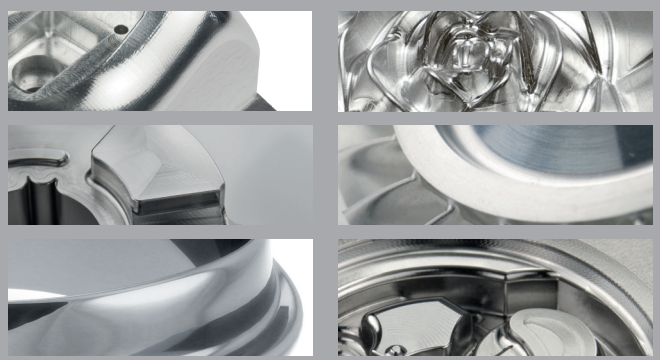
- Medical components
- Aerospace parts
- Rapid prototyping
- Tool and mold making
- Dental technology
- Micromechanics
- Graphite Electrodes
- Microdrilling
- Watch and jewelery industry
- Eyewear industry
- Steel engraving

Benefits:

User-friendly Windows®-based control

German engineered

American support



DATRON C5 — made for complex, 5-axis work.

The DATRON C5 was developed specifically for precise, simultaneous 5-axis milling of small parts. It's ability to machine titanium and steel (in addition to non-ferrous metals and abrasive materials) makes it ideally suited to applications in a variety of industries. The C5 accommodates parts up to 100 mm in diameter and is capable of producing highly-complex geometries. The low-vibration design delivers superior surface finishes while the rigid 48,000 RPM spindle, precision ball screws and linear scales provide industry leading accuracy. With a 22-station tool changer, integrated tool-length measurement and a footprint of only 1 m^2 the C5 is a machine tool unlike any other.

DATRON C5
5-axis Simultaneous Milling Machine

For Machining of Small Parts
Dynamic – Precise – Powerful

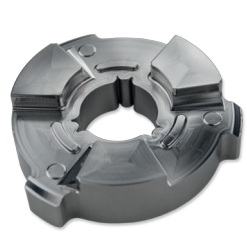
DATRON Dynamics, Inc.
115 Emerson Road
Milford, NH 03055

Phone: 603.672.8890
Fax: 603.672.8067
www.datron.com

DATRON C5

Dynamic – Precise – Powerful

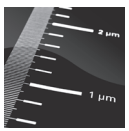
Complex geometries, small parts, any material. The DATRON C5 gives you the agility to respond quickly to new opportunities. Productive and cost-effective!



48,000 rpm
Max. milling performance with small tools. Dynamic HSC control system.

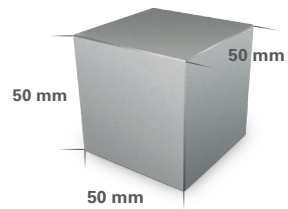
Precision spindle featuring HSK-E 25 tool holding system and concentricity better than 2 µm.

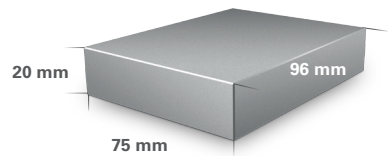
Integrated **zero-point clamping system** with ± 0.5 µm repeatability (optional).



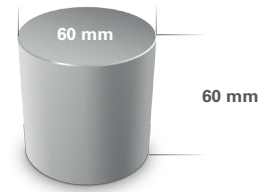
Linear position measuring system with ± 5 µm absolute accuracy and 40 nm positioning accuracy.

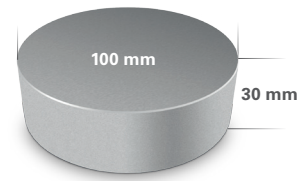
Cubic workpieces





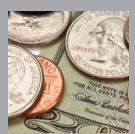
Cylindrical workpieces



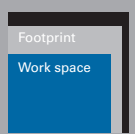


Saves resources:
Minimum-quantity cooling system uses as little as 30 ml/hour.

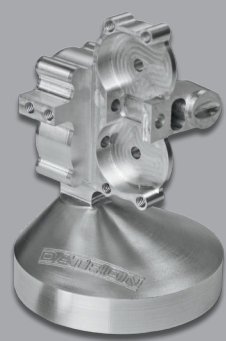
Saves energy:
Very low power consumption lowers operational costs.



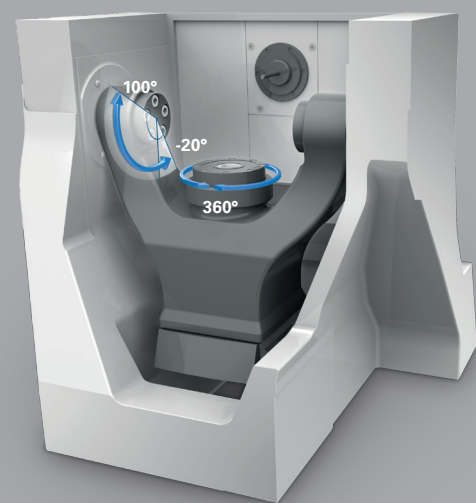
Saves money:
Low-cost in purchase and operation.



Saves space:
Smallest footprint in the industry.



Range of motion: 4th/5th axis



Working area	DATRON C5
Traverse path (X x Y x Z)	153 mm x 100 mm x 100 mm
Workpiece sizes (Examples)	**Cylindrical:** Diameter 60 mm, height 60 mm Diameter 100 mm, height 30 mm **Cubic** (X x Y x Z): 96 mm x 75 mm x 20 mm 50 mm x 50 mm x 50 mm
Tool length	75 mm (from HSK face contact)
Machine dimensions	
Machine construction	Solid cast steel frame, cast aluminium 4th/5th axis
Installation dimensions (W x D x H) without control PC pedestal	940 mm x 1190 mm x 1910 mm
Weight	ca. 900 kg
Supply	
Voltage	3 x 400 VAC/16A
Power input	4,000 VA (max. fuse 3 x 16 A)
Air connection	7-10 bar dry, clean, oil-free
Ambient temperature	15 - 30 °C
Machine housing	Compact enclosure with easy access for convenient maintenance
USB interface	✓
Ethernet interface	✓
Convenient manual control panel	✓
Minimal quantity coolant system	✓
Built-in zero-point clamping system	✓
Linear positioning measuring system on all axes	✓ Resolution 40 nm
Tool changer	22 station with tool-length sensor
Machining spindle	1.8 kW, up to 48,000 rpm with HSK-E 25 tool holder
Repeatability	< ± 2.5 µm
Absolute accuracy	± 5 µm
Item	0A03010