

# DATRON

Smart Manufacturing Solutions

World  
premiere



## DATRON C5

### CNC milling machine DATRON C5

The DATRON C5 has been specifically designed for 5-axis machining of small parts. Powerful servo and torque motors ensure high dynamics and speed.

### Compact 5-axis CNC milling machine at an affordable price.

- Full 5-axis simultaneous milling of small parts
- Very small footprint
- Low power consumption and operating costs

### Materials:

- Steel
- Alloy steel
- Non-ferrous metals
- Plastics
- Zircon, CoCr
- Composites

### Features:

- 1.8 kW spindle with HSK-E 25 collets, up to 48,000 rpm
- high precision 4th/5th axis
- automatic 22fold tool changer
- Heidenhain linear positioning measuring system
- integrated tool length sensor
- integrated zero-point clamping system
- programme-controlled minimum-quantity cooling lubrication system



**Applications for CNC milling machine DATRON C5**

- Micro parts
- Medical parts
- Moulds, prototypes
- Dental technology
- Micro system components
- Jewellery



Workspace	DATRON C5
Traverse path (X x Y x Z)	153 mm x 100 mm x 100 mm
Workpiece size (Examples)	<b>Cylindric:</b> Diam. 60 mm, height 60 mm Diam. 100 mm, height 30 mm <b>Cubic (X x Y x Z):</b> 96 mm x 75 mm x 20 mm 50 mm x 50 mm x 50 mm
Usable tool length	35 mm
Machine dimensions	
Machine design	Massive steel frame, aluminium cast 4th/5th axis
Footprint (W x D x H) without terminal	94 cm x 119 cm x 191 cm
Weight	approx. 900 kg
Supply	
Voltage	3 x 400 VAC/16A
Power consumption	4,000 VA (max. fuse protection 3 x 16A)
Air connection	7 - 10 bar, dry, clean, oil free
Ambient temperature	15 - 30 °C
Protection cabin	Compact cabin with easy access for comfortable maintenance
USB Interface	✓
Ethernet Interface	✓
Easy-to-use hand-held control unit	✓
Minimum quantity lubrication	✓
Integrated zero-point clamping system	✓
Linear position measuring system in all axes	✓ Resolution 40 nm
Tool change unit	22-fold with tool length sensor
Machining spindle	1.8 kW, up to 48,000 rpm with HSK-E 25 collets
Repeatability	< ± 2.5 µm
Absolute accuracy	± 5 µm
<b>Article number</b>	<b>0A03010</b>

Drive System
<ul style="list-style-type: none"> <li>■ Digital servo drives</li> <li>■ Encapsulated linear position measuring system in all axes</li> </ul>
Control
<ul style="list-style-type: none"> <li>■ Fast digital servo control with Microsoft® Windows® control software</li> <li>■ CNC user interface and hand-held control unit</li> </ul>
Coolant System
<ul style="list-style-type: none"> <li>■ Minimum quantity, electronically, controlled spray-mist coolant system</li> </ul>
CAM Interfaces (optional)
<ul style="list-style-type: none"> <li>■ CAM postprocessors e.g. for Mastercam</li> <li>■ DIN 66025 (G-Code)</li> </ul>

The information in this brochure includes current descriptions or performance features which are subject to change due to further development of the products. The descriptions and performance features are binding only if they are expressly agreed upon in writing at the time of contract.

DATRON\_C5\_EN\_TD\_120911