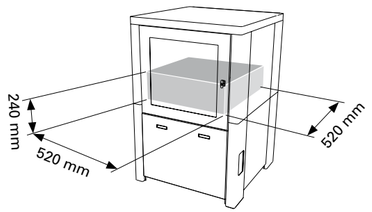
DATRON **M7**

High-performance HSC machining system
The DATRON M7 machining system can considerably improve the manufacturing speed and quality when using small tools. With a footprint of only 1,300 mm x 1,300 mm, this compact machine offers a traverse path of 520 mm x 650 mm x 240 mm. The solid granite construction allows highly-dynamic CNC machining and, at the same time, ensures impressive surface quality.

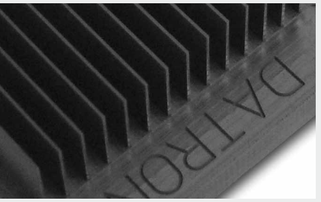
- Traverse path: 520 mm x 650 mm 240 mm (X, Y, Z); with tool change useable in Y 520 mm
- High precision due to compact design and granite table
- Efficient machining of small CNC parts



DATRON **M7HP**

Maximum speed and precision during milling, drilling and engraving with small tools
The M7HP machining system has an even higher machining accuracy than the "M7" model. With selected ball screws, accurate calibration and closely-monitored software compensation, this machine allows you to achieve exceptionally high-quality machining results at a very attractive price.

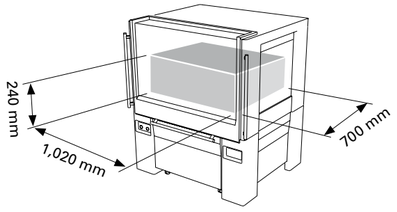
- Traverse path: 520 mm x 650 mm x 240 mm (X, Y, Z); with tool change useable in Y 520 mm
- Precision HF spindle with HSK-E 25 inserts 1.8 kW with speeds up to 48,000 rpm, or 3 kW with a speeds up to 40,000 rpm



DATRON **M8**

Powerful and versatile
A long-standing flagship product for DATRON, the M8 machining system allows you to benefit from our decades of experience in developing technology for the cost-effective and high-quality machining of aluminum and plastics! Plus, our wide range of clamping options, 3D surface sensors, rotary and swivel axes, integrable VisionSystem and automation units make this machining system perfectly adaptable to almost any CNC machining task.

- Traverse path 1,020 mm x 800 mm x 240 mm (X, Y, Z); with tool change useable in Y 700 mm
- Solid concrete-polymer table for vibration dampening
- Large swing door for easy access
- High flexibility due to modular configurability

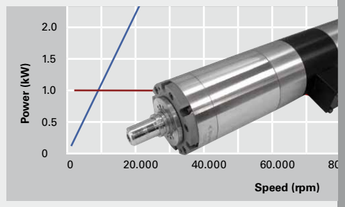


DATRON **M8 Powerpack**

High performance cutting with powerful and precise HSK-E 25 synchronous high-frequency spindle
When equipped with the "Power Synchro" 3 kW HF spindle, the multi-purpose M8 machining system is a real HSC "power pack". Due to its extremely sturdy design, this spindle can withstand even the highest load in daily production. An extensive sensor system leads to high fault tolerance. In many applications, the synergy between the solid machine construction and the high-frequency spindle results in significant time savings that lower production costs.

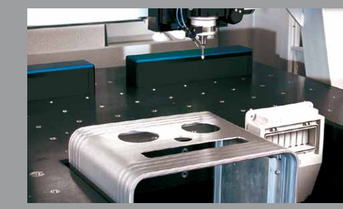
With the Power Synchro 3 kW HF spindle, the M8 machining system offers the following additional advantages:

- High performance for a high cutting volume
- Maximum operating safety due to large size and process monitoring of the HF spindle
- Very high surface quality through optimal concentricity
- Quicker tool change due to high acceleration/ braking deceleration



Sensor technology

DATRON delivers production efficiency through intelligent sensors and probes that monitor the mechanics and control. With the unique DATRON XYZ sensors even material tolerances and irregularities are compensated for automatically.



Clamping high housings

The DATRON M8, M35 and M8XL CNC machines can clamp particularly high workpieces on a vertical clamping surface. This flexibility is unique and pays off quickly.

Reliable service

Quick and efficient – you can always rely on DATRON customer service. We offer custom-made service solutions worldwide over the entire lifetime of your DATRON machine.

Control system and software

Quick, highly-dynamic, robust and extremely intuitive operation — the DATRON CNC control system combines efficiency with ease-of-use. Positions your operation for the future with the most modern PC technology and the Windows® operating system.

CNC machining technology

DATRON offers more than just machines and accessories. Our specialized technology for high-speed machining addresses very specific applications and situational needs. The well-balanced combination of vanguard CNC machines, application engineering, clamping techniques, optimized tooling and superior cooling systems leads to perfect results.

Clamping technique

Secure parts pneumatically and easily by the touch of a button. This maximizes productivity of the machine operator during each shift. With DATRON clamping modules and clamping elements, they can fix the parts to be machined quickly, securely and with low vibration.

DATRON

Precise!

The low cutting forces of high-speed machining make new machine concepts possible. DATRON CNC machines combine solid and durable mechanical engineering with excellent dynamic properties. Modular system solutions lead to perfect custom-made machines — adaptable to a wide variety of machining applications.

The basic models of the M8 and M7 CNC machining systems include the following features:

- Solid coordinate table with a steel protective cover (enclosure)
- 3D CNC control system for three to six axes
- 17″ LCD monitor with Windows PC
- Network and USB 2.0 interface for exchange of data
- Menu-guided CNC programming software winCNC

DATRON offers a wide range of accessories.

Detailed information can be found in our accessories catalog:

- Clamping systems: manual, pneumatic, vacuum
- Electronic Z correction with XY probing
- High-speed tools
- CAD/CAM and 3D engraving software

Technical Data	M8	M8 "power pack"	M7	M7HP
				
Coordinate table	Solid concrete-polymer table with a steel frame, portal design with double-sided Y drive		Solid granite table with a steel frame, portal design with double-sided Y drive	
Traverse path (X x Y); Z stroke = 240 mm Portal passage 200 mm	1,020 mm x 800 mm; with tool change in Y 520 mm		520 mm x 650 mm; with tool change in Y 520 mm	
Clamping surface	1,160 mm x 780 mm		600 mm x 600 mm	
Installation dimensions without control unit (W x D x H)	1,700 mm x 1,450 mm x 1,950 mm		1,300 mm x 1,300 mm x 2,050 mm	
Protective cover	✓	✓	✓	✓
Quick digital servo control system with Microsoft® Windows® PC	✓	✓	✓	✓
Easy-to-use hand-held control unit	✓	✓	✓	✓
Drive system: Digital servo drives; Ball screw for every axis	✓	✓	✓	Precision ball screw
Minimum quantity lubrication	✓	✓	✓	✓
Machining spindle: HF precision spindles with power ranging from 0.6 kW to 3 kW are available	e.g. 2 kW HF spindle, up to 60,000 rpm	3 kW HF spindle, 1,000 - 40,000 rpm, HSK-E 25	e.g. 2 kW HF spindle, up to 60,000 rpm	e.g. 1.8 kW HF spindle, up to 50,000 rpm, HSK-E 25
Tool change (optional)	max. 30-fold direct shank clamping	max. 10-fold HSK-E 25	max. 15-fold with direct shank clamping	max. 11-fold HSK-E 25
Positioning feed	up to 20 m/min	up to 20 m/min	up to 16 m/min	up to 10 m/min
Weight	approx. 800 kg	approx. 800 kg	approx. 720 kg	approx. 720 kg
Article number	**0A01082A/B**	**0A01082P**	**0A01191A**	**0A01191X**

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CNC machines for precise and efficient machining up to 60,000 rpm!