

High precision on small floor space

Flexibility, precision and speed

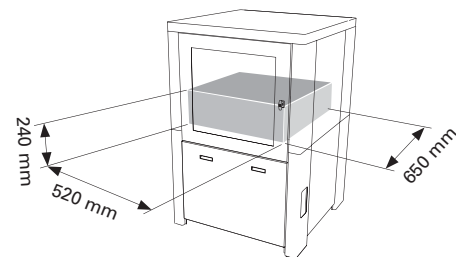


DATRON M7

High-performance HSC machining system at a favourable price

The DATRON M7 machining system can considerably improve the manufacturing speed and quality when small tools are used. With a floor space 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 a high surface quality.

- Traverse path: 520 mm x 650 mm x 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
- 3D rapid prototyping, 3D engraving

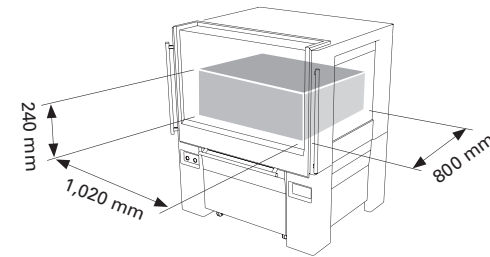


DATRON M8

Powerful and versatile

Use our M8 machining system to benefit from our long experience in the particularly cost-effective and high-quality machining of aluminium and plastics! With our wide range of clamping options, 3D surface sensors, rotary and swivel axes, integrable VisionSystem and automation units, this machining system can be perfectly adapted 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 damping
- Large swing door for easy access
- High flexibility due to modular configurability

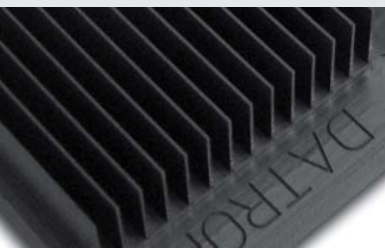


DATRON M7HP

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 a speed of up to 50,000 rpm, or 3 kW with a speed of up to 40,000 rpm



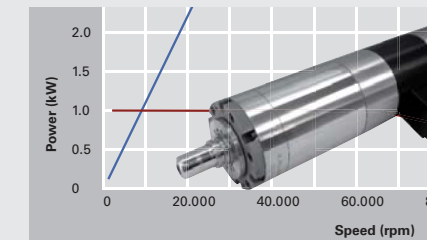
DATRON M8 Powerpack

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 practice. An extensive sensor system leads to high fault tolerance. In many applications, this combination of solid machine construction and high-tech high-frequency spindle results in significant time savings in production.

With the Power Synchro 3 kW HF spindle, the M8 machining system additionally offers the following 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

Maximum production safety is a matter of standard with DATRON. Intelligent sensors monitor all operating states of the mechanics and control. With the unique DATRON XYZ sensors, you even compensate material tolerances fully 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 the DATRON customer service. We offer you custom-made service solutions worldwide over the entire lifetime of your DATRON machine.

DATRON

Precise!

The low cutting forces of the 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 — at the favourable price of a large-series product.





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

- Solid coordinate table with a steel protective cover
- 3D CNC control system for three to six axes
- 17" LCD monitor with Windows control computer
- 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 catalogue:

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

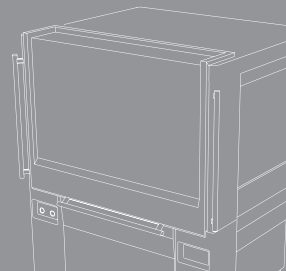
Technical Data	M8	M8 "power pack"	M7	M7HP
				
Coordinate table	Solid concrete polymer table with a steel frame, portal design with double-sided Y drive		Solid granite table with a steel frame, portal design with double-sided Y drive	
Traverse path (X x Y); Z stroke = 240 mm Portal passage 200 mm	1,020 mm x 800 mm; with tool change in Y 700 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)	1,850 mm x 1,450 mm x 1,950 mm		1,300 mm x 1,300 mm x 1,950 mm	
Protective cover	✓	✓	✓	✓
Quick digital servo control system with Microsoft® Windows® control computer	✓	✓	✓	✓
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 16 m/min	up to 10 m/min
Weight	approx. 815 kg/850 kg		approx. 800 kg	
Article number	0A01082A/B	0A01082P	0A01191A	0A01191X

The information in this brochure contains up-to-date descriptions and features which may change due to further product development. The descriptions and features are only binding if they are expressly agreed upon in writing when the contract is concluded.



DATRON Precise

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



Control system and software

Quick, highly dynamic technique and simple, intuitive operation — the DATRON CNC control system combines efficiency with ease of use. You are also well-equipped 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. With our know-how in the area of high-speed machining, we make our customers successful. Only a well-balanced combination of CNC machine, machining strategy, optimal clamping technique, tool and cooling technology leads to perfect results. We know how!



Clamping technique

Clamping raw parts must go quickly and easily! Who can afford long non-productive times nowadays? With DATRON clamping modules and clamping elements, you can fix the parts to be machined quickly, securely and with low vibrations.

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