



New design, ideal ergonomics:  
Both the work space and the control of the HSC MP7 impress with an excellent ease of operation. The tool changer can also be operated easily from the front thanks to a pivoting control desk, and the screen remains visible at any time.

## EDM line

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EDM 310



EDM 312



EDM 313



EDM 314



EDM 316

## HSC line

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HSC 300



HSC 500



HSC 600



HSC 800

## HSC MP line

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HSC MP7

**exeron**  
experts in EDM + HSC

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# HSC MP7

High Speed Cutting – Micro Precision



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# “If better, then at its best.”

There are different ways to further develop a machine. At exeron, we believe that the best way is to think in many different directions in doing so – instead of focusing on only one of them.

For the development of our new HSC machine, it was also one of our goals to not only improve selectively what we already had, but rather to design a machine which combines the best characteristics of every machine.

Therefore, we have not just equipped our new high-end machining solution with linear drives, but we have also applied them to many different points. We have implemented some totally new ideas, and in doing so, we have achieved many innovative improvements – and we combined everything in a system which represents total maximum precision and highest efficiency. The result is the new HSC MP7.

**Because if we do something better, then we do it at its best.**



## The HSC machine which combines the best characteristics: the new HSC MP7

### Versatile, extremely precise and highly efficient:

When it comes to modern milling machines in the high-end sector, the new HSC MP7 sets a new standard.

It offers everything to make a modern HSC centre a pioneering and economical solution. That includes numerous innovative further developments, among others in the field of temperature regulation, through which the recognised precision and high availability of exeron machines have been improved again.

The HSC MP7, designed in the reliable gantry-structure, is available in a 3- and a 5-axes version.

The possibilities of the wet and graphite machining make the wide range of applications of the HSC MP7 perfect. The latest generation of Heidenhain control and axis regulation technology ensures the best results combined with maintenance-free linear direct drives.

The HSC MP7 represents total optimum dynamics, highest precision and perfect workpiece quality in the finishing, as well as in the electrode and components manufacture.

### High-quality interior design:

The work space of the HSC MP7 offers ideal accessibility, as well as high density and it is implemented in stainless steel in an easy-to-clean way.





#### The control: Heidenhain iTNC 530 HSCI FS

The Heidenhain contouring control iTNC 530 provides an optimized path control, short block processing times and special drive strategies. In conjunction with the completely digital construction and the integrated digital drive control, including converter, the highest machining speeds are achievable with the greatest possible contouring accuracy. Moreover, the control offers state-of-the-art technology regarding the integrated functional safety for extended operating modes.

#### The design: clearly higher level

The modern machine casing of the new HSC MP7 is clearly heading for the future. It is characterised by functionality, clear structures and dynamic contours. Therefore, the design of the new machine presents the high exeron standards of precision and premium quality also on the surface.

#### The HSC MP7 offers you:

- > Optimum machine construction for linear direct drives by means of a gantry-structure with a high level of stiffness and damping – for optimum machine dynamics, high precision and perfect workpiece quality
- > Integrated concept for active temperature regulation of the entire machine structure
- > Preparation for very different automation solutions and cell integration
- > High-quality interior design in stainless steel
- > Large distance between spindle nose and table, as well as generous Z travel path – for the machining of high workpieces with long tools even for larger clamping device installation height and pallets adaption
- > Comfortable and powerful CNC control and regulation technology of the latest generation – Heidenhain iTNC 530 with HSCI and FS technology
- > Automated and covered measurement laser with integrated tool cleaning system
- > Inner spindle elongation sensor technology – prevents collision contours and it is resistant to contamination



The minimum interference contour enables the machining also close to the axis of rotation – even for small tool lengths – and in both pivoting directions.





Active structure temperature regulation with nine cooling circuits in total – including the cooling water distributor.



The large degree of freedom in the Z-direction enables the machining of high workpieces also for the pallets adaption.



The laser enclosure prevents erroneous measurements linked to contamination and it is optionally available for the HSC MP7.



The fast tool change by means of a double gripper is a standard at exeron. The tool magazine offers space for 30, 60 or 90 tools.



## The technical data of the HSC MP7

### HSC MP7

	HSC MP7/3 3-axes version	HSC MP7/5 5-axes version
Traverse paths X x Y x Z	730 x 340 x 400 mm	730 x 250 x 400 mm
Traverse paths B x C		B +/- 105° x C endless
Operating range X x Y x Z	640 x 340 x 400 mm	640 x 250 x 400 mm
Workpiece clamping table	580 x 460 mm	Ø 185 mm
Distance table/spindle nose	550 mm	450 mm
Workpiece weight max.	550 kg*	60 kg
Total dimensions W x D x H	2,400 x 2,370 x 3,000 mm	2,400 x 2,370 x 3,000 mm
Spindle speed	42,000 min <sup>-1</sup>	42,000 min <sup>-1</sup>
Spindle performance S1/S6 – 40 %	10/13 kW	10/13 kW
Tool magazine	30/60/90 HSK 40-E	30/60/90 HSK 40-E
Rapid traverses X x Y x Z	100/40 m/min**	100/40 m/min**
Turning speeds B x C		190/250 r.p.m.
Accelerations X x Y x Z	10 m/s <sup>2</sup>	10 m/s <sup>2</sup>
Turning accelerations B x C		170/260 rad/s <sup>2</sup>
CNC control	Heidenhain iTNC 530 HSCI FS	Heidenhain iTNC 530 HSCI FS

\* with reduced dynamics

\*\* for safety reasons, limited to 40 m/min upon delivery

