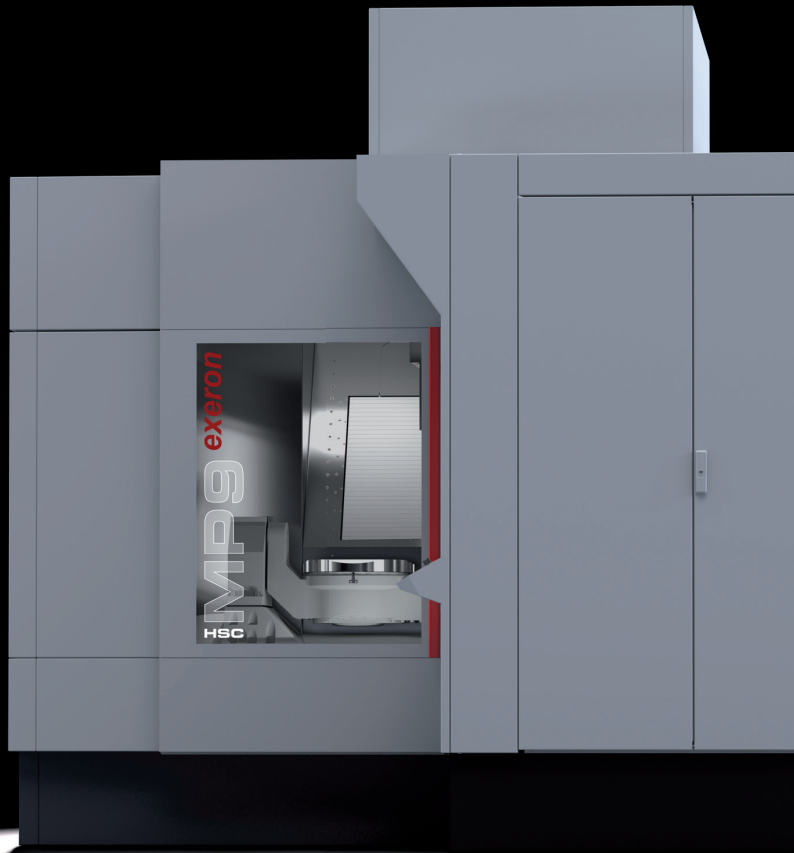


EXERON SMART HSC

**exeron**  
EXPERTS IN EDM + HSC

**HSC MP9**  
**ALWAYS STAYING COOLER**



AUTOMATABLE

120 TOOL POSITIONS

42,000 RPM

ERGONOMIC WORKSPACE

250 KG WORKPIECE WEIGHT

Touchscreen

HEIDENHAIN TNC 640

WORKSPACE 650 x 625 x 400 MM

## LARGE-SCALE IN A SMALL SPACE

Our latest family member, the HSC MP9, combines microprecision and a big idea in an innovative range that provides the right solution for any requirement. With no ifs or buts.

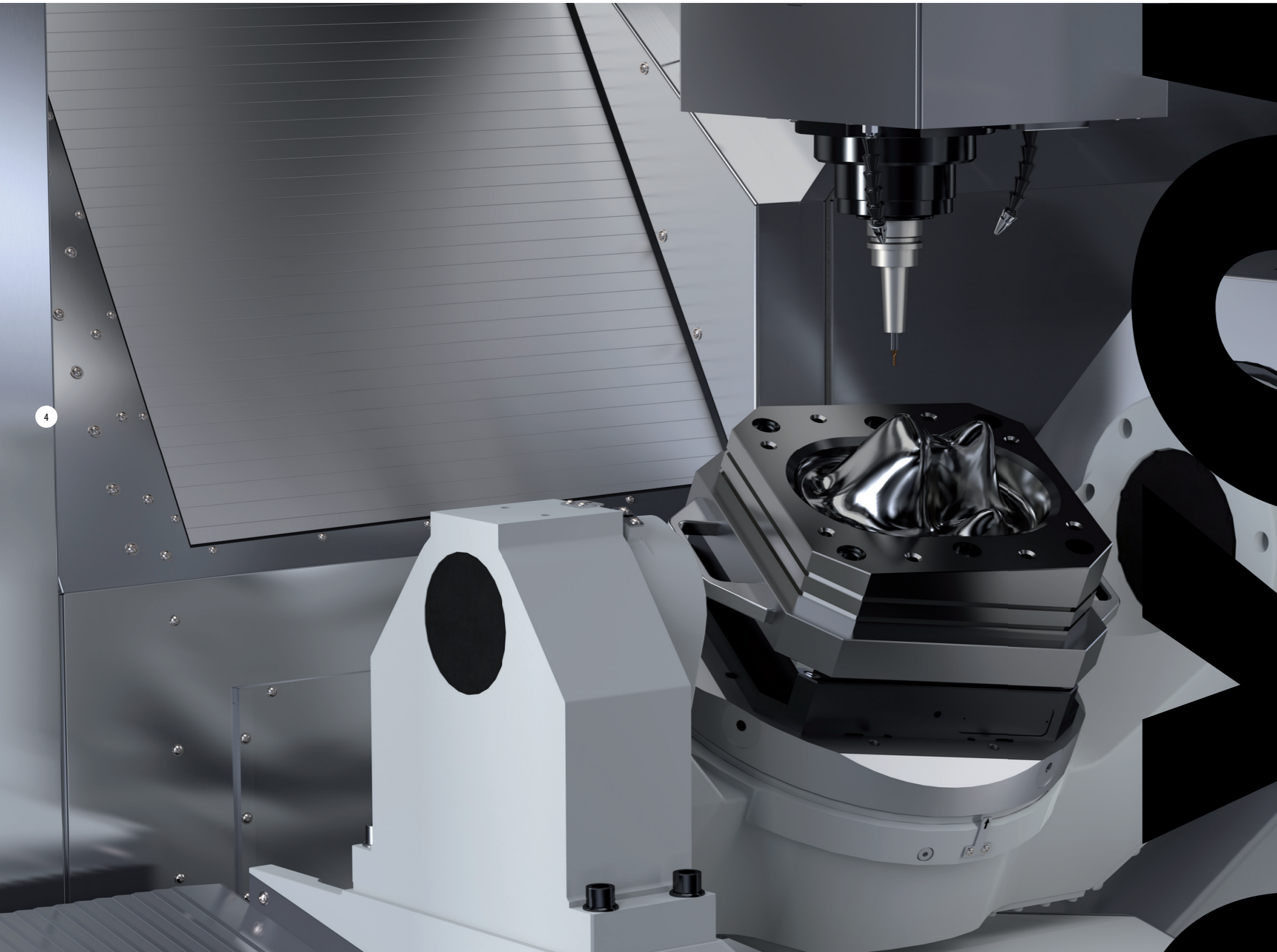
For machine development, we once again spoke intensively with users and subsequently implemented their requirements. The HSC MP9 is characterised by maximum accuracy, large machining volumes, efficiency, reliability and longevity. In a nutshell: all-round efficiency!

As part of our model upgrades, we have introduced numerous innovative improvements to our MP line to ensure maximum precision. The result is highly interesting for our customers: our HSC MP9. Something brand new in our midst. With comprehensive linear drive technology. That is Smart HSC from exeron.



# OUR DEFINITION OF PRECISION THE HSC MP9

EXERON SMART HSC



Versatile, extremely precise and highly efficient: like the entire MP line, the new HSC MP9 sets the benchmark for modern high-speed milling machines in the high-end range.

Forward-looking and economical like never before. This includes numerous innovative developments, including in the area of temperature control, automation and workspace design which have further increased the acknowledged precision and high reliability of the exeron machines.

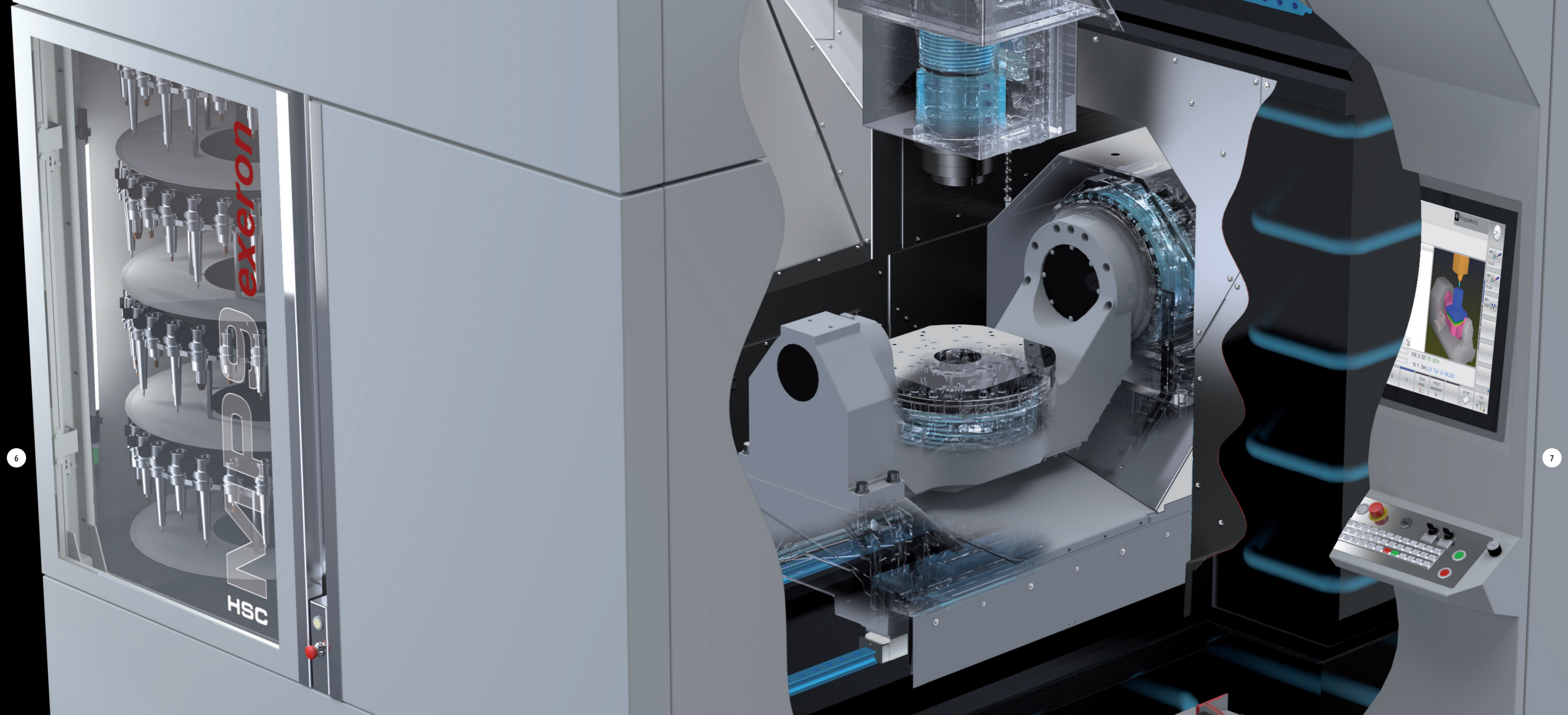
The HSC MP9, which is constructed in the gantry design, is only available in a high-performance 5-axis configuration. This 5-axis version deliberately relies on the counter bearing solution for the 4th and 5th axes. The possibilities of wet and graphite machining round off the wide range of applications. The latest generation of Heidenhain control and axis control technology ensures the best results in interaction with the maintenance-free linear direct drives.

In sum, also the HSC MP9 stands for optimum dynamics, maximum precision and perfect workpiece quality in finishing, electrode and part production. With these features, it firmly builds on the great success of our HSC 600.

The workspace of the HSC MP9 offers an ideal ratio of size to footprint. The machine remains compact, optimally accessible and easy to clean thanks to easy-clean.



## STAYS COOL, EVEN WHEN THE HEAT IS ON THE HSC MP9



### OUR COOL BASE SYSTEM: COOL INSIDE AND OUT

Meeting the highest standards during daily operation requires a sophisticated cooling system so that you can keep a cool head at all times, even during the hottest production phases. The pioneering exeron cooling concept consists of:

- Combined gantry and bed cooling
- Spindle and surface cooling
- Cooling of all axes, including slides, linear guides and drives

More power, more precision, more durability: our HSC MP9 leaves nothing to be desired!

### THE CONTROL: HEIDENHAIN TNC 640 WITH TOUCHSCREEN

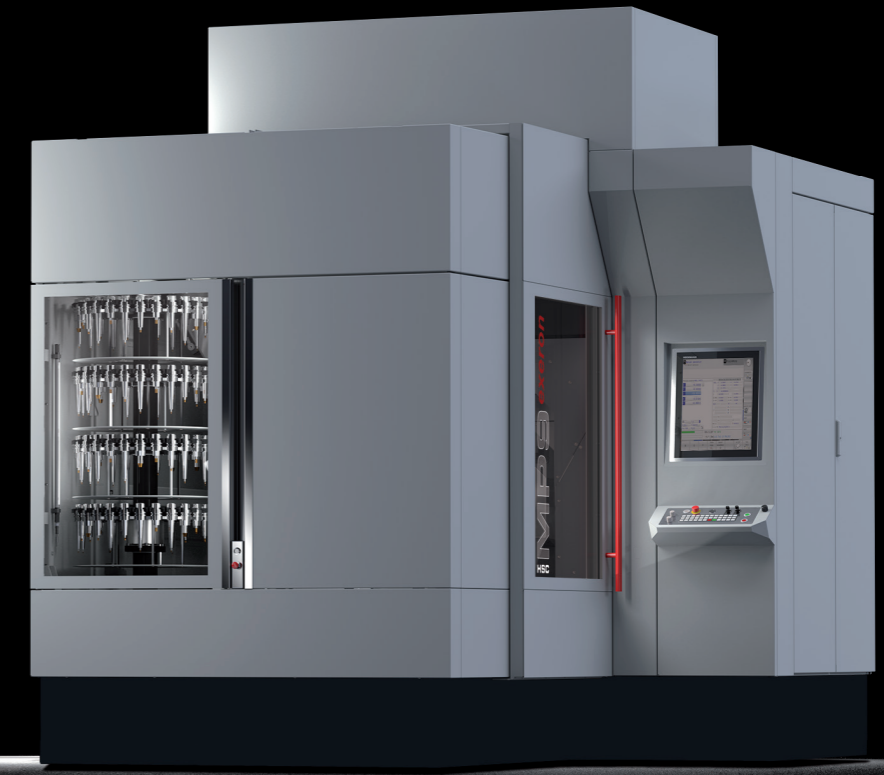
The new Heidenhain path control TNC 640 has an optimised motion guide, short block processing times and special control strategies. In conjunction with the consistently digital structure, the highest machining speeds are possible with the greatest possible contour precision. The innovative operating concept with a touchscreen resembles that of a smart device – tap, swipe and drag. Operators can quickly and intuitively navigate through tables and NC programs or move graphics. This makes machine operation highly straightforward and future-proof.



# TRUE GREATNESS. INSIDE AND OUT.

## THE HSC MP9

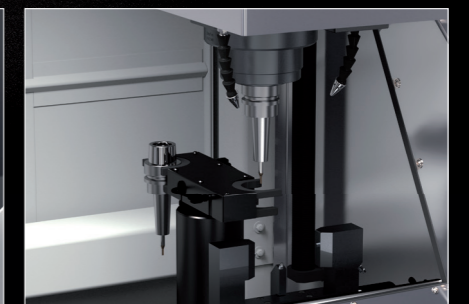
- Optimum mechanical engineering through gantry construction with high stiffness and damping - for optimal machine dynamics, high precision and perfect workpiece quality
- High-quality and easy-to-clean interior design in stainless steel
- Wet tool cleaning in the workspace
- Milling spindle in oil-tight design with up to 42,000 rpm.
- Design for dry, cutting oil, minimum and wet machining
- Integrated concept for active temperature control of the entire machine structure
- Ergonomic workspace with optimum accessibility to the workpiece
- Laser measurement outside the workspace with dry cleaning technology
- Internal spindle length sensor system - prevents collision contours and is insensitive to contamination
- Tool memory for up to 120 tool positions and quick tool changes ensure short non-productive times
- Consistent preparation for various automation and cell solutions with tool and workpiece automation
- Proven large distance between spindle nose and table as well as generous Z-travel - for machining tall workpieces with long tools, even with large clamping device assembly height and pallet adaptations
- Powerful CNC control technology of the latest generation – Heidenhain TNC 640 with more probing cycles in manual mode, groove improvement in corners, improved overview on the user interface, 5th decimal place (0.00001 mm) and many other improvements
- Touchscreen for convenient, intuitive operation
- Design for graphite machining with high-energy cross-flow in the machining area for defined dust extraction
- Machine cladding in a low-noise design  
Noise emission: 62 dB(A)



The high degree of freedom in the Z-direction enables the machining of high workpieces even with pallet adaptation.



The laser measurement is outside the working range and prevents incorrect measurements due to contamination.

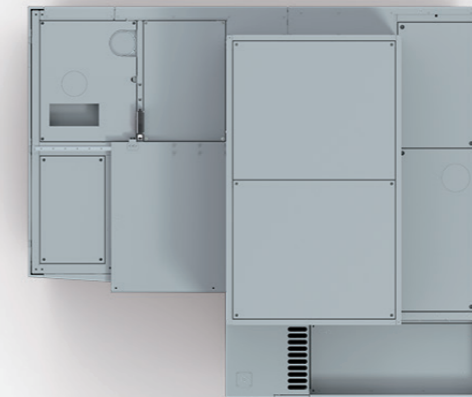


The quick tool change by a double gripper is standard at exeron. The tool magazine offers space for 30 to 120 tools.

# TECHNICAL DATA

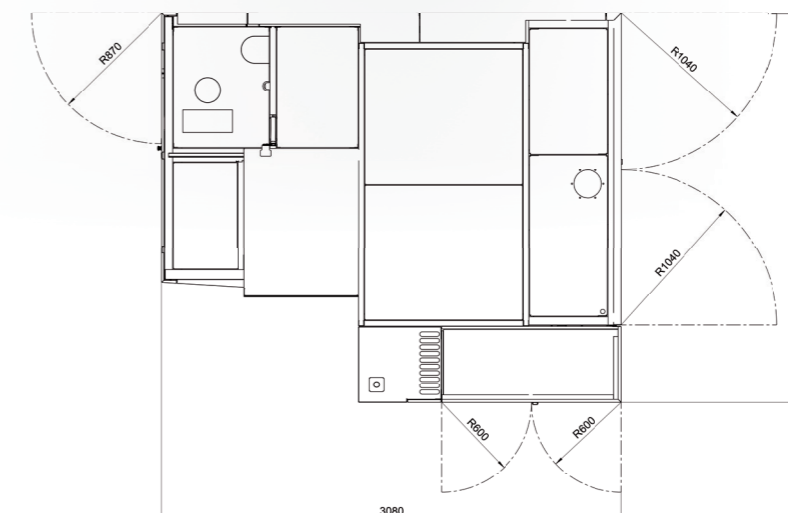
## HSC MP9

EXERON SMART HSC



### HSC MP9

|                              | HSC MP9<br>five axes                                 |
|------------------------------|--|
| Travel distances X x Y x Z   | 955 x 625 x 400 mm                                   |
| Travel distances B x C       | B $\pm 105^\circ$ x C infinite                       |
| Work area X x Y x Z          | 650 x 625 x 400 mm                                   |
| Faceplate                    | $\varnothing 412$ mm                                 |
| Distance table/spindle nose  | 600 mm (HSK-E40)<br>586 mm (HSK-E50)                 |
| Workpiece weight max.        | 250 kg   |
| Total dimensions (W x D x H) | 2610 x 3080 x 3150 mm                                |
| Spindle speed                | 42,000 rpm (HSK-E40)<br>36,000 rpm (HSK-E50)         |
| Spindle power S1/S6-40%      | 10 kW / 13 kW (HSK-E40)<br>24.8 kW / 33 kW (HSK-E50) |
| Tool magazine                | 30/60/90/120 (HSK-E40)<br>27/54/81/108 (HSK-E50)     |
| Rapid traverse X x Y x Z     | 40 m/min   |
| Rotation speeds B x C        | 100/100 rpm  |
| CNC control                  | Heidenhain TNC 640                                   |



## SMART HSC. MADE IN GERMANY.

exeron combines EDM and HSC competence to sustainable success for its customers and offers this as a manufacturer of efficient, reliable and durable eroding machines (EDM) and high-speed milling machines (HSC) as well as handling systems (automation) "Made in Germany". exeron stands for professionalism, quality, customer orientation, flexibility and service competence.



**exeron** GmbH  
Beffendorfer Straße 6  
D-78727 Oberndorf  
+49 74 23 86 74-0  
info@exeron.de  
www.exeron.de

We reserve the right to make design changes and other changes to technical data and performance features insofar as they serve technical progress, mistakes, printing, calculation, writing and calculation errors.

Status: 09/2020