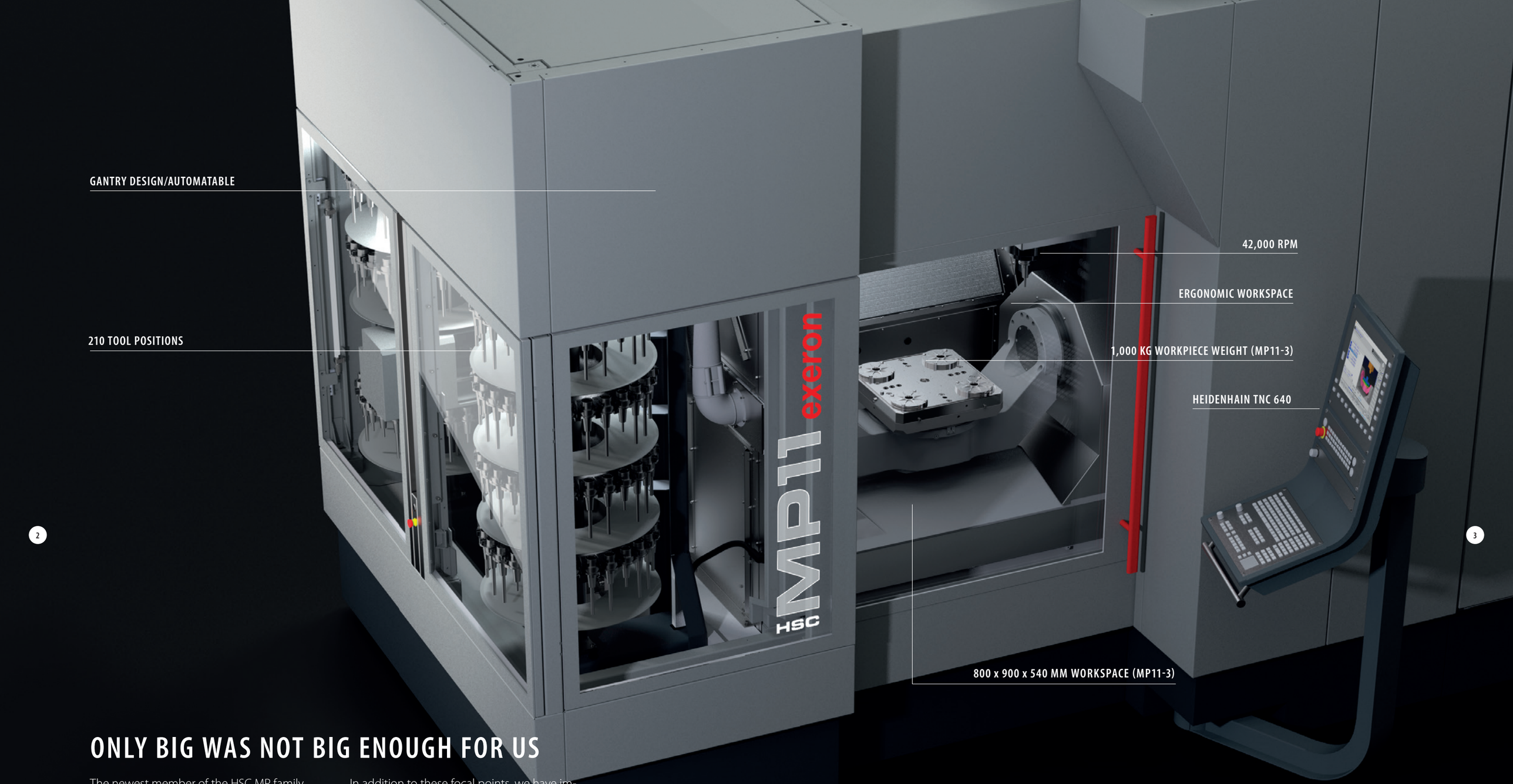
exeron
EXPERTS IN EDM + HSC

HSC MP11
ALWAYS THINKING BIGGER



GANTRY DESIGN/AUTOMATABLE

210 TOOL POSITIONS

42,000 RPM

ERGONOMIC WORKSPACE

1,000 KG WORKPIECE WEIGHT (MP11-3)

HEIDENHAIN TNC 640

800 x 900 x 540 MM WORKSPACE (MP11-3)

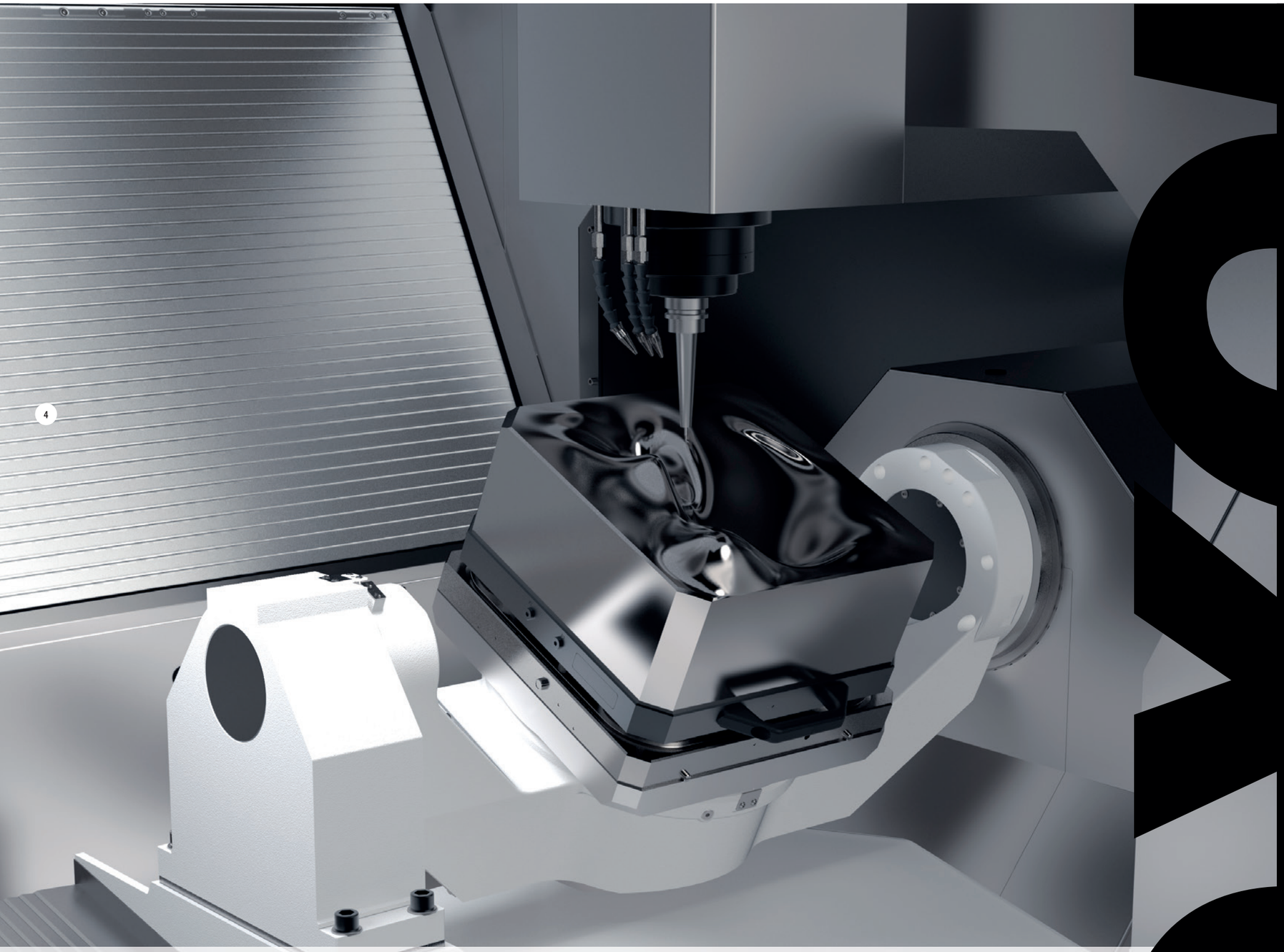
ONLY BIG WAS NOT BIG ENOUGH FOR US

The newest member of the HSC MP family rounds off the size of the line upwards without leaving the HSC workspace.

For machine development, we spoke intensively with users and subsequently implemented the identified customer requirements for the MP line. This confirms that we have clearly focused on accuracy, large machining volumes, efficiency, reliability and longevity.

In addition to these focal points, we have implemented many smart ideas in the new large family member. We have rethought some things and created further innovative improvements – and combined everything into a system that stands for maximum precision and maximum efficiency. The result is the HSC MP11. Smart HSC from **exeron**. The new size.

LARGE SPACE.
THE NEW HSC MP11



The workspace of the HSC MP11 offers ideal accessibility and high tightness and is made of stainless steel for easy cleaning.

Versatile, extremely precise and highly efficient: The new HSC MP11 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 MP11, which is constructed in the gantry design, is available in a 3-axis and 5-axis configuration. The 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 of the HSC MP11. 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, the HSC MP11 stands for optimum dynamics, maximum precision and perfect workpiece quality in finishing, electrode and part production.

MORE SPACE FOR GREAT IDEAS
THE NEW HSC MP11

THE NEW EXERON DESIGN LANGUAGE.
FUNCTIONAL. CLEAR. AESTHETICAL.

The modern machine cladding of the new HSC MP11 underlines the clear focus on the future. The design is characterised by functionality, clear structures and dynamic lines. It visualises the high **exeron** claim to precision and high quality.

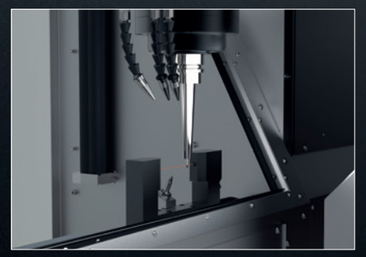
THE CONTROL:
HEIDENHAIN TNC 640

The Heidenhain path control TNC 640 has an optimised motion guide, short set processing times and special control strategies. In conjunction with the consistently digital structure and integrated digital drive control including inverter, the highest machining speeds are possible with the greatest possible contour precision. It is also optionally possible to resolve the control accuracy to 0.01 µm.

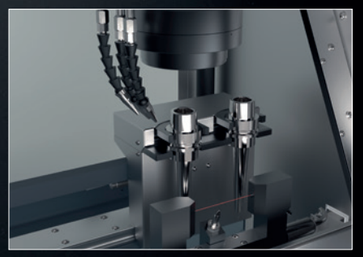
TRUE GREATNESS. INSIDE AND OUT.
HSC MP11

- 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
- New milling spindle HVC140 in oil-tight design ('desert night') up to 42,000 rpm. Dry as the desert and cold as the desert at night.
- 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 210 tool positions and consistent preparation for a wide variety of automation and cell solutions with tool and workpiece integration. The tools and pallets are exchanged by means of a common, tight access. Quick tool changes ensure short non-productive times
- 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
- Comfortable and powerful CNC control technology of the latest generation – Heidenhain TNC 640. Among other things 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
- Design for graphite machining with high-energy cross-flow in the machining area for defined dust extraction

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.

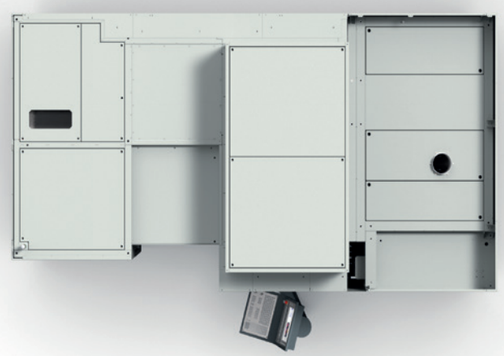


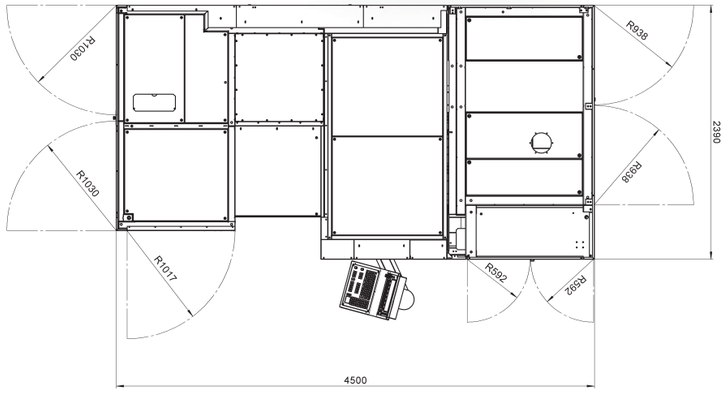
The quick tool change by a double gripper is standard at exeron.
The tool magazine offers space for 30 to 210 tools.

TECHNICAL DATA
HSC MP11

HSC MP11

	HSC MP 11/3 three axes	HSC MP 11/5 five axes
Travel distances X x Y x Z	1,055 x 900 x 540 mm	1,055 x 760 x 540 mm
Travel distances B x C		B ±105° x C infinite
Work area X x Y x Z	800 x 900 x 540 mm	800 x 760 x 540 mm
Tool clamping table	850 x 1,070 mm	412 x 412 mm
Distance table/spindle nose	720 mm (HSK 40-E) 706 mm (HSK 50-E / HSK 63-F)	720 mm (HSK 40-E) 706 mm (HSK 50-E / HSK 63-F)
Tool weight max.	1,000 kg	350 kg
Total dimensions (W x D x H)	2,390 x 4,500 x 3,350 mm	2,390 x 4,500 x 3,350 mm
Spindle speed	42,000 rpm (HSK 40-E) 36,000 rpm (HSK 50-E / HSK 63-F)	42,000 rpm (HSK 40-E) 36,000 rpm (HSK 50-E / HSK 63-F)
Spindle power S1/S6–40%	10 kW / 13 kW (HSK 40-E) 24,8 kW / 33 kW (HSK 50-E / HSK 63-F)	10 kW / 13 kW (HSK 40-E) 24.8 kW / 33 kW (HSK 50-E / HSK 63-F)
Tool magazine	max. 210 HSK 40-E max. 189 HSK 50-E max. 154 HSK 63-F	HSK 40-E max. 210 HSK 50-E max. 189 HSK 63-F max. 154
Rapid traverse X x Y x Z	100/40 m/min	100/40 m/min
Rotation speeds B x C		100/100 rpm
CNC control	Heidenhain TNC 640 HSCI	Heidenhain TNC 640 HSCI





exeron
EXPERTS IN EDM + HSC

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 40th ANNIVERSARY

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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.

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