

HSC line



HSC 200 HSC 300 HSC 500 HSC 600 HSC 800

HSC MP line



HSC MP7

EDM line



EDM 310 EDM 312 EDM 313 EDM 314 EDM 316

exeron

experts in EDM + HSC

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HSC LINE

General overview



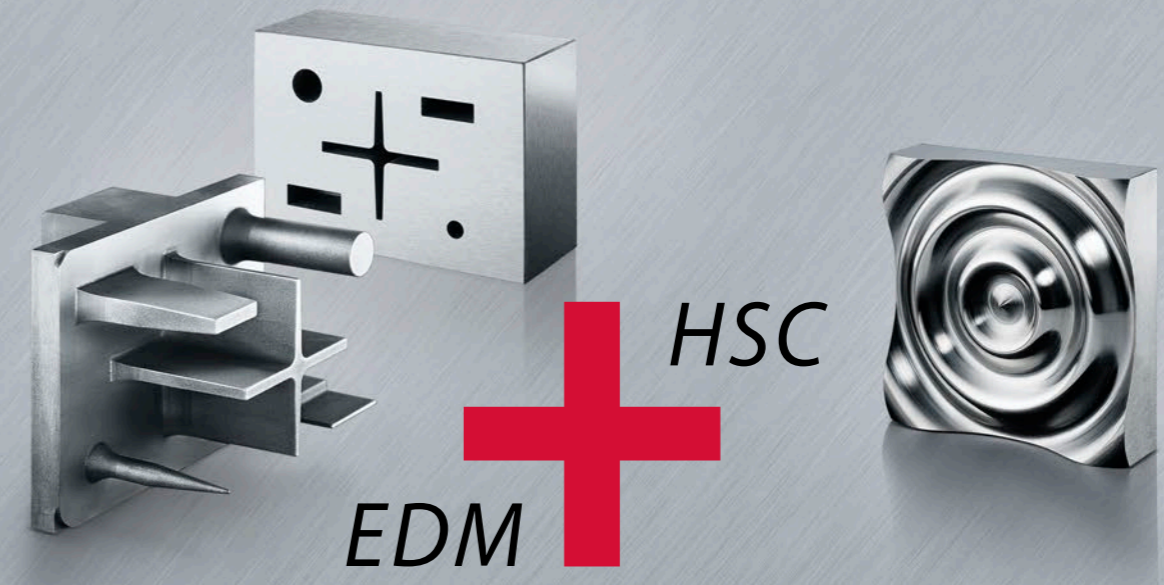
exeron

experts in EDM + HSC

Even better together.

EDM and HSC from one brand.

Milling and eroding – two technologies which are more powerful when combined rather than being used on their own. exeron offers you the highest quality, made in Germany, solution for both technologies. With overall competence and a passion for perfection, we develop high tech HSC and EDM solutions as well as automated systems which suit your tasks perfectly, giving you the benefit of having only one overall-thinking partner for your tool and mould construction: exeron.



History

1966 Foundation of the third-party erosion company Herbert Walter GmbH, development work for AEG-Elotherm.

1978 First independent product – vertical erosion machine HW 100.

1981 Development of the first CNC 4-axes eroding machine. Type series 200.

1982 The first DE 10C with CNC control incl. automation, C-axis and 6-fold tool changer.

1985 Introduction of the portal eroding centre exeron 304E at EMO Hannover. Today still known as a worldwide trendsetter.

1992 Founding of DIGMA GmbH. Goal: digitalisation machine for the mould and tool production.

1995 mafell Maschinenfabrik Oberndorf (market leader in professional wood processing machines) takes over Herbert Walter GmbH as a 100% shareholder. Rebranding into Walter-exeron GmbH.

1997 First wire eroding machine D603 made in Germany at the EMO Hannover. Expansion by adding the large portal eroding centre exeron 306K.

1998 Walter-exeron GmbH obtains all rights to the Multiform Erodieretechnik GmbH (formerly Deckel Erodieretechnik). Incorporation into the newly established exeron-Multiform GmbH as a full subsidiary company.

1999 Walter-exeron and exeron-Multiform merge and become exeron GmbH; headquarters: Fluorn-Winzeln. The subsidiary Wolfratshausen remains the service and distribution centre.

2005 exeron takes over the brand DIGMA from the Chiron-Werke Tuttlingen. Supplementation of the CNC vertical erosion centres manufactured until now with a completely new type series of HSC machining centres.

2008 New factory in Oberndorf. 30 years of eroding machines and 3 years of HSC machines provided by exeron. Delivery of the first HSC machine HSC 600 entirely developed by exeron, as a 3- and 5-axis machine.

2013 35 years of erosion machines by exeron.

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The compact one

HSC 200

Quick, reliable, space-saving: with small space requirements, the high-speed cutting centre HSC 200 offers you all the important characteristics you require in a highly flexible hard machining and electrode production centre for mould and tool production. With its space requirements of less than two square meters, the compact milling machine stands for excellent surfaces, perfect reproducibility as well as high efficiency. And: thanks to an individual automation solution, the HSC 200 becomes a powerful electrode manufacturing plant.

The HSC 200 offers you:

- > Coordinate table with a high stiffness for optimum machine dynamics, high precision and perfect workpiece quality
- > Monobloc machine bed made of mineral cast for maximum damping and a low temperature drift
- > Accessible work space, easy to clean
- > Digital drives in all axes
- > Path measurement system with a resolution of up to 0.1 μ
- > Vector-controlled high-frequency spindles for the use of tools from \varnothing 0.2 mm – 16 mm
- > ITS chuck or a different chuck as required
- > CNC control: user-friendly PC control (Beckhoff)
- > Integrated exhaust system for an easy graphite and copper processing
- > Prepared for automation and cell integration



HSC 200	
Traverse paths X x Y x Z	200 x 250 x 250 mm
Workpiece clamping table	200 x 250 mm
Distance table/spindle nose	390 mm
Workpiece weight max.	100 kg
Dimensions, total W x D x H	2,300 x 1,800 x 2,700 mm
Spindle speed	42,000 min ⁻¹
Spindle performance S1/S6 – 40%	10/13 kW
Tool magazine	20/40 HSK 40-E
Rapid traverses X x Y x Z	12 m/min
CNC control	3D path control Twin Cat Beckhoff

The universal one

HSC 300/3

Compact, high-precision, versatile: as a true all-rounder, the high-speed cutting centre HSC 300 ensures an excellent performance. The gantry machine also offers optimum results in graphite and hard machining. All of this thanks to its low space requirements and reasonable investment costs.

The HSC 300/3 offers you:

- > Gantry construction with a high stiffness for optimum machine dynamics, high precision as well as perfect workpiece quality
- > Gantry and machine bed made of mineral cast for maximum vibration dampening
- > Digital drives in all axes
- > Direct path measurement systems – resolution 0.1 μ
- > Vector-controlled high-frequency spindles for the use of tools from \varnothing 0.2 mm – 16 mm
- > Heidenhain CNC control, specially designed for the HSC technology
- > Integrated graphite processing
- > Prepared for automation and cell integration



HSC 300/3	
Traverse paths X x Y x Z	480 x 340 x 355 mm
Workpiece clamping table	470 x 400 mm
Distance table/spindle nose	495 mm
Workpiece weight max.	500 kg*
Dimensions, total W x D x H	2,200 x 2,200 x 2,500 mm**
Spindle speed	42,000 min ⁻¹
Spindle performance S1/S6 – 40%	10/13 kW
Tool magazine	16/40 HSK 40-E
Rapid traverses X x Y x Z	30 m/min
CNC control	Heidenhain iTNC 530

* with reduced dynamics
 ** installation dimensions for the machine with 16-fold tool changer depth for 40-fold tool changer: 2,500 mm

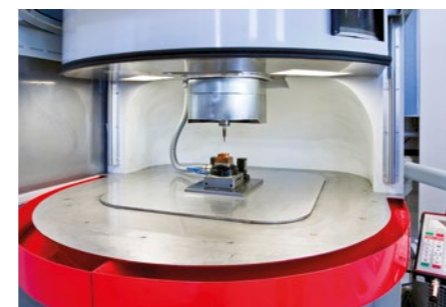
ITS chuck
 Or a different chuck as required.



PC control Beckhoff
 Control panel with manual control bar for easy operation.



Working space
 Accessible and easy to clean.



Machine bed made of mineral cast
 in gantry construction.



16-fold tool changer
 A 40-fold tool changer is available as an option.



Standard: Heidenhain iTNC530
 Best accessibility and ergonomics for control and work space.





The integrated one

HSC 300/P

Complete, economical, future-oriented: the HSC 300/P is the comprehensive system solution for the fully automated and high-precision production of electrodes or parts. The high-speed cutting centre is equipped with an integrated workpiece handling system which is separated from the work space by a magazine door. With this workpiece changer unit, this machine offers you a significantly increased autonomy.

The HSC 300/P offers you:

- > Gantry construction with high stiffness for optimum machine dynamics, high precision and perfect workpiece quality
- > Gantry and machine bed made of mineral cast for maximum vibration dampening
- > Two magazine discs, each 20 pieces Erowa IT/System 3R Macro 52/Hirschmann
- > Activation directly via Heidenhain iTNC 530
- > Digital drives in all axes
- > Direct path measurement systems – resolution 0.1 μ
- > Vector-controlled high-frequency spindles for the use of tools from Ø 0.2 mm – 16 mm
- > Heidenhain CNC control, specially designed for the HSC technology
- > Integrated graphite processing



HSC 300/P	
Traverse paths X x Y x Z	425 x 340 x 355 mm
Workpiece clamping table	470 x 400 mm
Distance table/spindle nose	495 mm
Workpiece weight max.	500 kg*
Dimensions, total W x D x H	2,300 x 2,200 x 2,500 mm**
Spindle speed	42,000 min ⁻¹
Spindle performance S1/S6 – 40%	10/13 kW
Tool magazine	16/40 HSK 40-E
Rapid traverses X x Y x Z	30 m/min
CNC control	Heidenhain iTNC 530

* with reduced dynamics

** dimensions for machines with 16-fold tool changer, depth for 40-fold tool changer: 2,500 mm

Tool changer

Two discs for 20 workpieces each – max. diameter 80 mm.

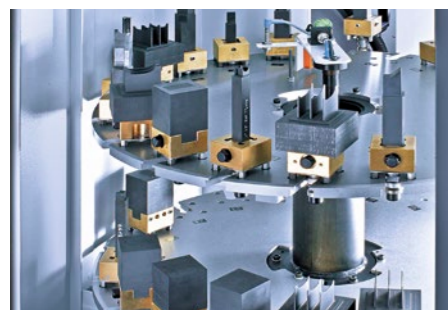


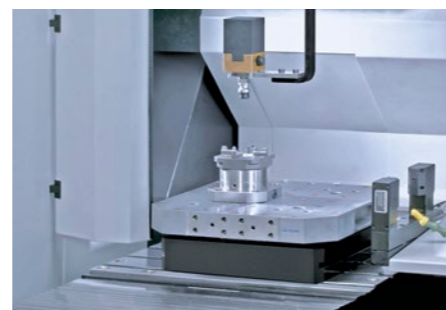
Table chuck

You will receive this according to the selected clamping system.



Workpiece change

Via the Z-axis with exchangeable gripper.



The mid-range

HSC 500

Strong, flexible, versatile: the powerful high-speed cutting centre HSC 500 is the universal solution for tool and mould making. Its gantry construction with a high stiffness ensures optimum machine dynamics, high precision and a perfect workpiece quality.

The HSC 500 offers you:

- > Gantry construction with high stiffness for optimum machine dynamics, high precision and perfect workpiece quality.
- > Digital drives in all axes
- > Direct path measurement systems – resolution 0.1 μ
- > Vector-controlled high-frequency spindles for the use of tools from Ø 0.2 mm – 16 mm
- > Heidenhain CNC control, specially designed for the HSC technology
- > Integrated graphite processing
- > Prepared for automation and cell integration



HSC 500	
Traverse paths X x Y x Z	620 x 570 x 350 mm
Workpiece clamping table	650 x 600 mm
Distance table/spindle nose	520 mm
Workpiece weight max.	700 kg*
Dimensions, total W x D x H	3,250 x 2,100 x 3,000 mm
Spindle speed	42,000 min ⁻¹
Spindle performance S1/S6 – 40%	10/13 kW
Tool magazine	30/60/90 HSK 40-E
Rapid traverses X x Y x Z	30 m/min
CNC control	Heidenhain iTNC 530

* with reduced dynamics

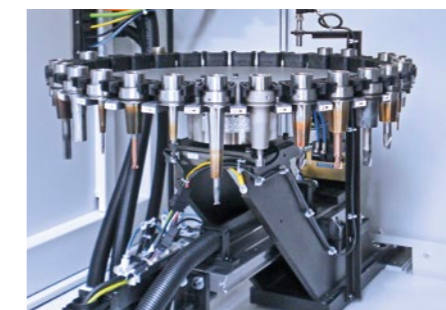
Optimum accessibility

Also for crane loading.



30-fold tool changer

A 60-fold and a 90-fold tool changer are available as an option.



Large clamping table

The laser measurement of the tools is a standard.



The 5-axis one

HSC 600

Space-saving, dynamic, universal: for the universal 5-axis use in tool and mould processing production, the HSC 600 is a powerful high-end processing manufacturing solution. Thanks to its extremely small installation space requirements, this high-end machine can also be installed in confined spaces.

The HSC 600 offers you:

- > Optimised work space for 5-axis processing
- > Highest dynamics due to torque drive in the swivel axes for the simultaneous 5-axis processing
- > Extremely small installation space
- > Ideal accessibility for operator and automation devices
- > Gantry construction with high stiffness for optimum machine dynamics, high precision and perfect workpiece quality
- > Gantry and machine bed made of mineral cast for maximum vibration dampening
- > Digital drives in all axes
- > Direct path measurement systems – resolution 0.1 μ
- > Vector-controlled high-frequency spindles for the use of tools from \varnothing 0.2 mm – 16 mm
- > Heidenhain CNC control, specially designed for the HSC technology



HSC 600	HSC 600/3	HSC 600/5
Traverse paths X x Y x Z	650 x 550 x 400 mm	650 x 550 x 400 mm
Workpiece clamping table	530 x 900 mm	\varnothing 410
Distance table/spindle nose	600 mm	600 mm
Workpiece weight max.	600 kg*	200 kg
Dimensions, total W x D x H	2,200 x 2,400 x 2,900 mm	2,200 x 2,400 x 2,900 mm
Spindle speed	42,000 min ⁻¹	42,000 min ⁻¹
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	50 m/min	50 m/min
CNC control	Heidenhain iTNC 530	Heidenhain iTNC 530

*with reduced dynamics

The large one

HSC 800

Spacious, user-friendly, versatile: with its large work space, the HSC 800 is firmly established in tool and mould making. The various processing tasks it can carry out are only one reason why it is a very economical solution. Excellent visibility and a user-friendly CNC control during setup ensure high process-reliability during processing.

The HSC 800 offers you:

- > High-speed milling centre with excellent performance characteristics and optimum traverse paths in X/Y/Z
- > Perfect machine dynamics, high precision and excellent workpiece quality
- > Water-cooled gantry as well as machine bed made of mineral cast with extreme stiffness and high thermal inertia
- > Digital drives in all axes with direct path measurement systems
- > Vector-controlled high-frequency spindles for the use of tools from \varnothing 0.2 mm – 16 mm
- > Heidenhain CNC control specially designed for the HSC technology



HSC 800/3	
Traverse paths X x Y x Z	900 x 800 x 520 mm
Workpiece clamping table	1,000 x 900 mm
Distance table/spindle nose	640 mm
Workpiece weight max.	800 kg
Dimensions, total W x D x H	3,500 x 2,500 x 3,650 mm
Spindle speed	40,000 min ⁻¹
Spindle performance S1/S6 – 40%	20/25 kW
Tool magazine	27/54/81 HSK 50-E
Rapid traverses X x Y x Z	60 m/min
CNC control	Heidenhain iTNC 530

Machine bed made of mineral cast
For optimum dampening and temperature stability.



Rotary/pivoting table
With torque drives for highest dynamics.



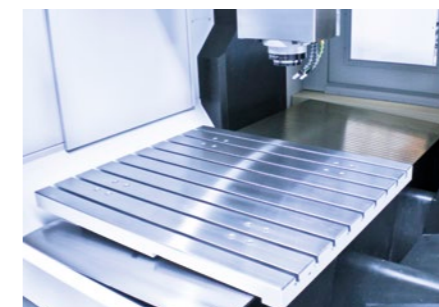
Wet processing
For a longer service life of the cutting tools.



Machine bed made of mineral cast
For optimum dampening and temperature stability.



Large working table
Dimensions: 1,000 x 900 mm.



With high-frequency spindle
Step-Tec HVC 150





Options HSC

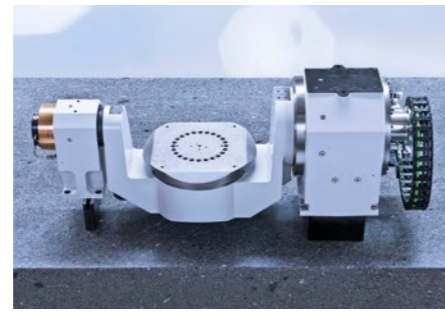
Slat-band chain conveyor for dry processing

Slat-band chain conveyor with ejection from inclined position directly into the chipping carriage.



4th and 5th axis

- > Torque motors
- > Speeds up to 200 r.p.m.



Remote diagnostics via Internet

- > Connection of the milling spindle to the Internet for convenient remote monitoring from any PC, Smartphone or Tablet PC, worldwide.



Infrared measuring sensor

The following makes are available: Renishaw OMP-400, m&h 40,000-TX/RX or Heidenhain TS 440.



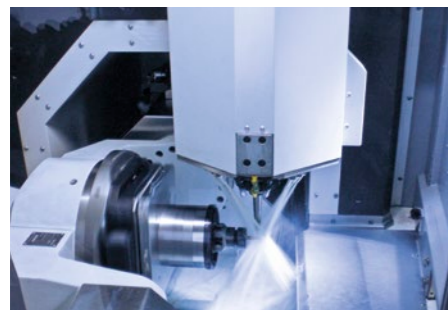
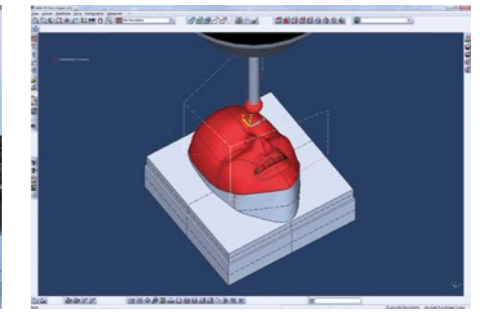
Oil mist exhaust

For the exhaust of the minimum lubricant. Consisting of pre-filter and post-filter. Air capacity 600 m³/h, filter efficiency up to 99%, motor capacity 0.5 kW.



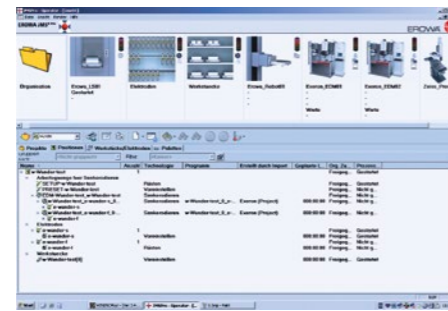
Measurement software

Easy handling – designed for the operator of the machine. Practice-oriented measurement functions. Highest precision through m&h measuring sensors and patented calibration strategy. Swivel error compensation of the 4th and 5th axis (patented).



External/internal coolant supply with fine cleaning (also suitable for graphite)

Chipping carriage with integrated oil drain cock. Water tank with 400l content, level monitor, wedge wire filter for separation 100 µm in the slat-band chain conveyor, cooling coils with agitator for the temperature control of the cooling water, external coolant supply + bed rinsing with rinsing gun.



Job management

The job management controls and monitors an entire production cell. This enables an automatic, flexible production of series and individual orders without any adjustment or changeover times. All relevant production and process information is available online. Optionally with a connection of identification and CAD data takeover.



High-frequency spindle

Ceramic ball bearing with minimum amount oil mist lubrication, autom. tool clamping
HVC 140-SB tool holder:
 HSK 40 E for tools up to Ø 16mm
HVC 150 tool holder:
 HSK 50 E



Fault message information

Display of messages on a mobile phone via GSM network SMS messages:
 > Machine error message
 > Fault main program
 > End main program



Tool changer

Depending on the spindle and machine type, the tool changer is available as 16-fold, 20-fold, 27-fold, 30-fold, 40-fold, 54-fold, 60-fold, 81-fold or 90-fold changer.



High-performance dust exhaustion system

- > For graphite processing
- > Virtually maintenance-free filter elements with a very long service life
- > Automatic cleaning of the filter elements during operation
- > Incl. sound absorber

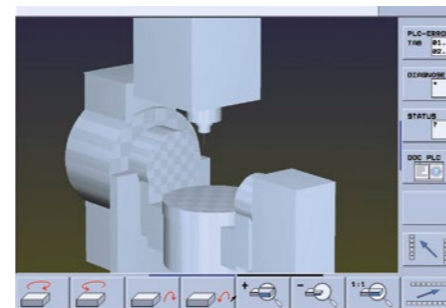
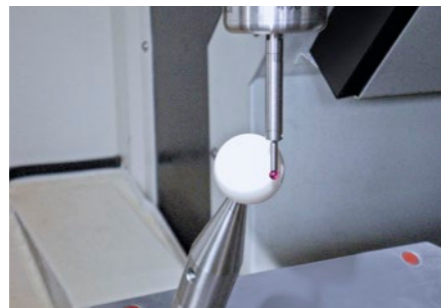


The **HEIDENHAIN** control iTNC530 – The standard in tool and mould making

With regards to control, exeron fully relies on the HEIDENHAIN iTNC530. There are good reasons for this. Thanks to its cleartext programming, it is not only easy to learn; but of all CNC controls it is the most technically advanced.

After all, it “grew up” in tool and mould making, where the requirements to accuracy and surface quality are extremely high.

Another important advantage for you:
We provide the control software iTNC530 to every customer in its national language.



HSC movement at the highest level.

As the only CNC machine on the market, the iTNC530 not only straightens the milling paths, but also analyses the milling path in terms of vibration excitations and therefore it avoids any machine vibration. Furthermore, it always ensures the compliance with the programmed tolerance for vibration-reducing interventions in the movement. This also applies for tool alignments in the room – which leads to unique milling results for the 5-axes simultaneous processing.

Automatic re-calibration of the kinematics transformation

The current version of the control is not only able to calibrate the kinematics fully automatically, but also to optimise it locally in the work space. Thus, complex servicing operations become obsolete.

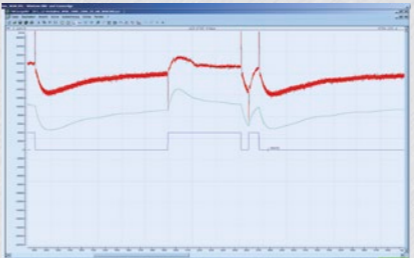
Dynamic collision monitoring

The iTNC530 knows all collision items and initiates a real-time axis stop before a collision can occur. For this function, it is also possible to add or remove different clamping elements to/from the runtime.

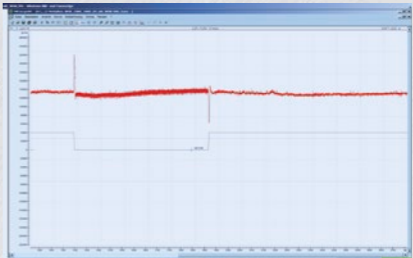
Only at exeron: **ASQ** – Advanced Surface Quality Control

Conventional milling has limits. Therefore, the influence of some physical effects during the milling of complex surfaces could not be avoided until now – for example the “thermal squall effect” of milling spindles. This causes inaccuracies of the surface quality, which had to be compensated subsequently. Our unique ASQ process prevents these inaccuracies and therefore optimises the surface quality of milled parts sustainably.


ASQ (Advanced Surface Quality Control) is an adjustment process based on the state model for the optimisation of surface quality and Z-accuracy. It is able to increase the quality of milled surfaces through adjustment processes like the damping of minimum vibrations in such a way that the post-processing of these milled parts is reduced or becomes unnecessary.



Z-accuracy without ASQ



Z-accuracy with ASQ



How does ASQ by exeron work?
Due to a continuous monitoring of the condition, ASQ is able to actively dampen and therefore compensate physical effects like the thermal squall effect of the milling spindle. Therefore, the Z-accuracy – which is the accuracy of the vertical milling axis Z – is kept within much smaller tolerances than it was possible until now. For example, this is realised through the continuous monitoring of the oscillation of the milling head via the ASQ software. The advantages of the ASQ become obvious very quickly in a very small tolerance range. The Z-accuracy which can be achieved with ASQ is considerably finer

and always stays within this tolerance range after the ASQ calibration phase. In comparison, the oscillations without ASQ very often take place outside the tolerance limits – with clearly higher peaks.

How do parts with ASQ by exeron look?
The surface quality of all workpieces can be improved considerably using ASQ. Therefore, a surface quality of e.g. Ra = 0.03 µm can be achieved for brass, for hard steel with a Rockwell hardness of 58 HRC, it is Ra = 0.08 µm. For a tolerance of S diff.max = 0.4 µm, quadrant transition errors are within the range of the wave-

length of light and are therefore at the visibility limit. These results are usually only known from hydrostatic drive- and bearing technology.

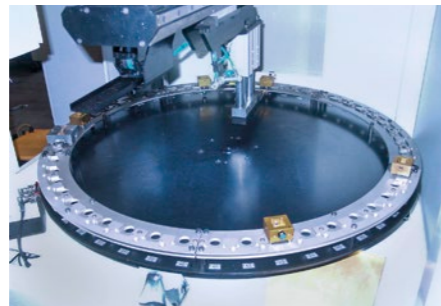
In short: with ASQ, we demonstrate the true meaning of excellent engineering at a perfect price-performance ratio.

Automated systems: stay flexible for growing tasks

Automated systems by exeron create a highly powerful production cell due to the integration of additional peripherals consisting of several machines. Since the structure of the individual machines and controls is open, an automation of the machines, for example by means of electrode and pallet changer systems, is very easy. The linking of several machines via linear robot systems including the connection to a job management, measurement data or CAD system is also a clear advantage in flexibility and machine efficiency which can grow with your operational requirements.



Pallet changer
AWEX 5 | AWEX 8
For 5 or 8 pallets, maximum transfer weight 100 kg. Mounting to HSC 300, HSC 500, HSC 600 and HSC 800 possible. Available pallets by Hirschmann, Erowa and System 3R possible, other systems on request.



Electrode changer
AWEX 40 | AWEX 60
For 40 or 60 electrodes ITS 50, maximum transfer weight 15 kg, incl. 40 holders for ITS 50 on magazine disc. Other systems on request or for 20 electrode holders ITS 100.



AWEX 99 ERC
Productivity in smallest spaces:
In an area of only 2 m², the AWEX 99 ERC offers space for max. 154 electrodes or small workpieces. Thanks to the symmetrical design, the device can be positioned at the right or left side of the machine. The monobloc design simplifies the assembly significantly.



Multi-Loader AWEX 50/5
A fully automatic electrode and pallet change system which can handle 50 electrodes and 5 pallets in the basic configuration. In the basic conception, it can be adapted to the HSC 300, HSC 500 and HSC 600. Pallet changers for all common pallets which are available on the market (Erowa, 3R, Mecatool).



exo-cell 150/10 ERM
A fully automatic electrode and pallet change system for the two-machine operation with a flexibly configurable rotary magazine as workpiece storage. The use of the buckling arm robot enables the achievement of highest flexibility and reliability.



exo-cell ERSL
An automation system which connects various machines, processes and technologies. It supplies up to 8 machines with workpieces and electrodes. If required, the exo-cell ERSL can be extended with machines, magazine capacity and other processed at any time.

The exeron partners for automation solution



Together with our partners Erowa and Certa, we offer you the optimum automation

solution for every requirement. Whether a simple pallet changer or a highly complex system for several machines: we create an optimised package for your application from a wide range of hardware and software solutions. Not only for the HSC range, but of course also for the combination of EDM and HSC.

Talk to us about your requirements – we offer the solution.

Happy exeron customers



Hans Keller
Manager R&D experimental
workshop/tool making,
Aesculap AG, Tuttlingen

“As a manufacturer of medicine technology, we have been using various exeron vertical erosion machines for years, especially because of the tool-variety. Tuttlinger Werkzeugbau also uses the HSC milling machines by exeron/DIGMA. The big advantage of exeron is that both technologies come from one place. Therefore, our vision of the future, HSC milling, electrode measurements and sinking erosion with handling systems without interfaces, can be realised without problems.

We are all very happy with the customer service and the support.”



“The HSC milling machine by exeron convinces with a high availability and high precision during the daily work. Both the graphite processing and the hard milling are carried out at the same high quality level.”

Michael Heitmann, Pöppelmann GmbH & Co. KG, Lohne



“What we value in exeron is the excellent machine range on the one hand – and the very reliable service, which always provides a solution, on the other hand. Both on the phone and on-site. This is especially important if you are operating more than ten exeron machines.”



Uwe Gunzenheimer
GKT Gräfenthaler Kunststofftechnik GmbH,
Gräfenthal



“We decided on the HSC line of exeron because the price-performance ratio convinced us. It was also important to us that the machine control Heidenhain iTNC 530 fits into our uniform control concept. The accessibility as well as the small space requirements were also important criteria for us.”

Norbert Schlarmann, Pöppelmann GmbH & Co. KG, Lohne



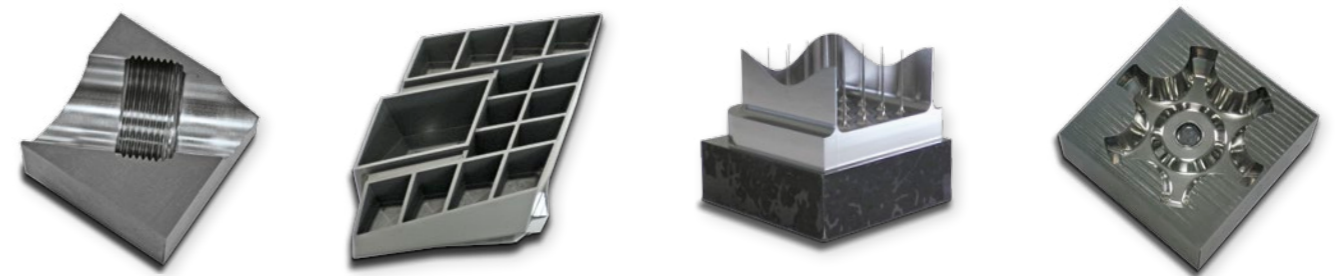
Our application technology: expertise live

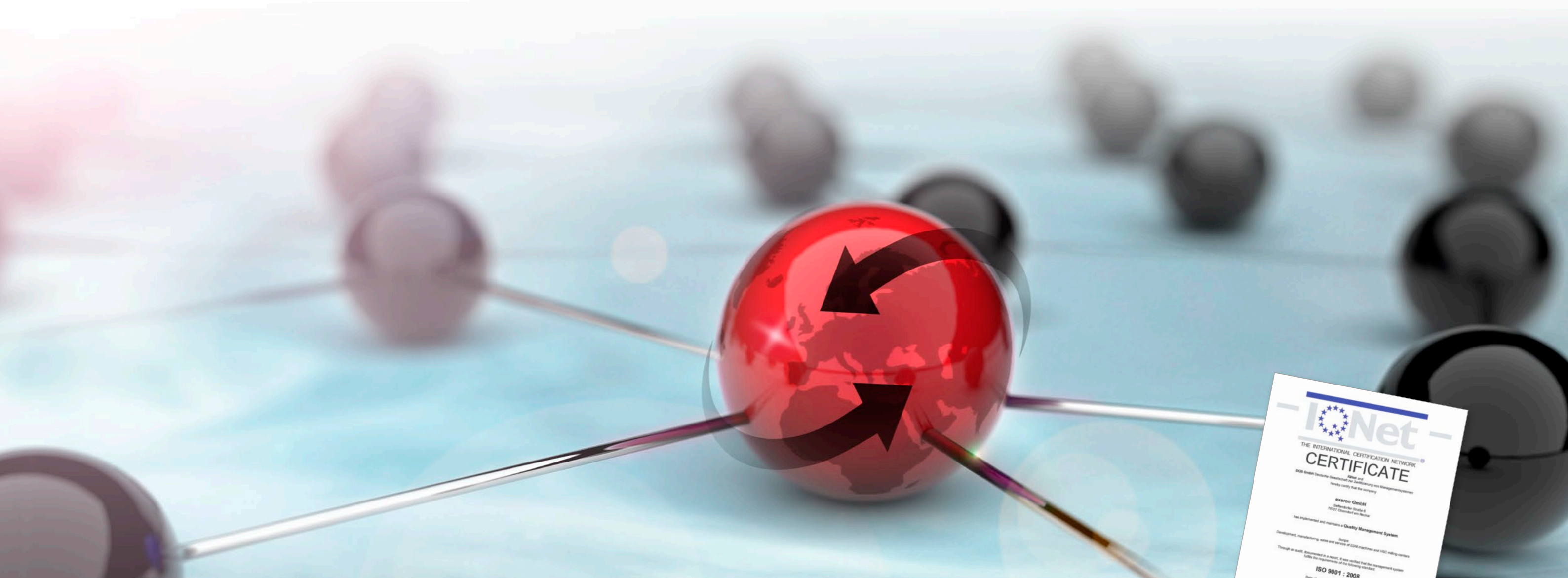
Our application technology is basically the centre of our company and it is an important interface to you, our customers and potential buyers. Here, we develop and test for you new technologies, we carry out extensive tests on new strategies and if possible, we always transform the requirements of the industries into new ideas.

At the same time, our application technology is the ideal place to convince you of our capabilities. Because here, we carry out test processing for you on request which will make it easier for you to decide on exeron. In doing so, the modern Zeiss measuring centre

G2, which confirms the highly precise operation of our products and which serves our own quality assurance at the same time, is facilitating our work.

Once you decide on exeron, you can gain extensive know-how within the framework of operator training in order to use your new machine optimally for your success. And later, you can extend your know-how via advanced training courses. We look forward to your visit!





Our service: very close to you

The name exeron not only stands for well-engineered high-tech solutions, but also for a consistent and competent support in all matters of erosion technology. This ranges from the joint realisation of your requirements to a complete service. Not least because of this, machines by exeron have an excellent reputation worldwide.

For example, in case of service calls on-site, you can rely on our Germany-wide network of in-house exeron technicians who always have available many spare parts and one of which surely lives close to you. This is how we can be at your premises immediately. Additionally, we are storing thousands of other parts in a separate spare parts warehouse in Oberndorf, available to you at any time. Hence, in the worst-case scenario, a delivery is possible within 24 hours.

In addition, we offer you a remote control and remote maintenance via the Internet and for smaller requests, our telephone service is of course also happy to assist you. Furthermore, regular training courses ensure that all service technicians are always up-to-date.

Our trade partners in Europe, Asia, as well as North and South America are also efficiently supported by exeron specialists in terms of technology and service. Therefore, customers in Asia or America receive the same attention as customers in Germany and Europe.

For an overview of our partners, please see www.exeron.de/Contact/Salespartners

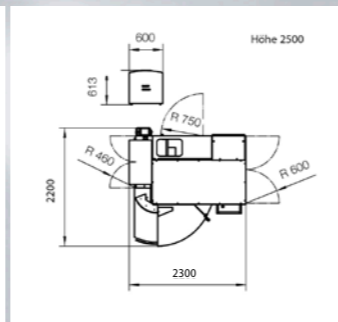
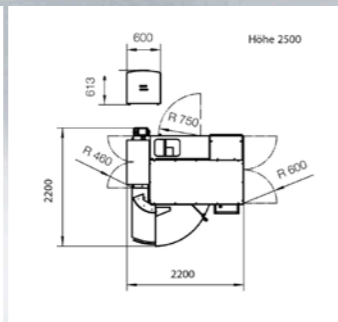
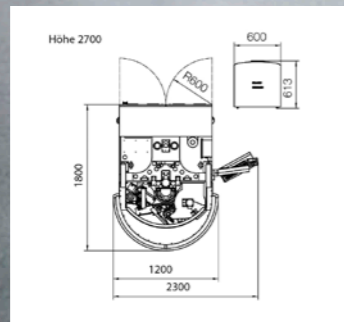
exeron implemented an effective quality management system which is certified to ISO 9001:2008 standard.





Technical data – An overview of the HSC milling machines

	HSC 200	HSC 300/3	HSC 300/P
Traverse paths X x Y x Z	200 x 250 x 250 mm	480 x 340 x 355 mm	425 x 340 x 355 mm
Workpiece clamping table	200 x 250 mm	470 x 400 mm	470 x 400 mm
Workpiece clamping table	390 mm	495 mm	495 mm
Workpiece weight max.	100 kg	500 kg*	500 kg*
Dimensions, total W x D x H	2,300 x 1,800 x 2,700 mm	2,200 x 2,200 x 2,500 mm**	2,300 x 2,200 x 2,500 mm**
Spindle speed	42,000 min ⁻¹	42,000 min ⁻¹	42,000 min ⁻¹
Spindle performance S1/S6 – 40%	10/13 kW	10/13 kW	10/13 kW
Tool magazine	20/40 HSK 40-E	16/40 HSK 40-E	16/40 HSK 40-E
Rapid traverses X x Y x Z	12 m/min	30 m/min	30 m/min
CNC control	3D path control Twin Cat Beckhoff	Heidenhain iTNC 530	Heidenhain iTNC 530

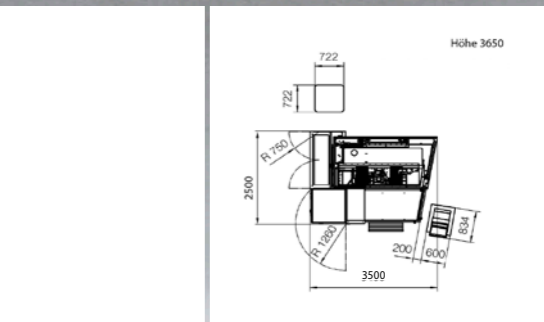
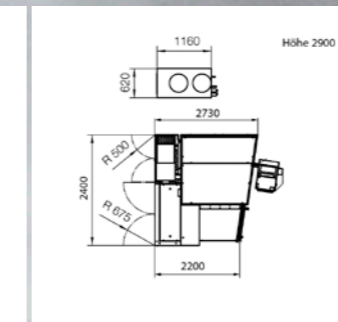
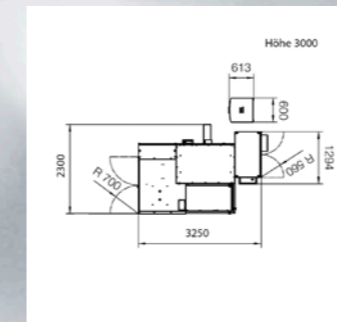


Subject to technical changes

* with reduced dynamics

** installation dimensions for the machine with 16-fold tool changer depth for 40-fold tool changer: 2,500 mm

HSC 500	HSC 600/3	HSC 600/5	HSC 800/3
620 x 570 x 350 mm	650 x 550 x 400 mm	650 x 550 x 400 mm	900 x 800 x 520 mm
650 x 600 mm	530 x 900 mm	Ø 410	1,000 x 900 mm
520 mm	600 mm	600 mm	640 mm
700 kg*	600 kg*	200 kg	800 kg
3,250 x 2,100 x 3,000 mm	2,200 x 2,400 x 2,900 mm	2,200 x 2,400 x 2,900 mm	3,500 x 2,500 x 3,650 mm
42,000 min ⁻¹	42,000 min ⁻¹	42,000 min ⁻¹	40,000 min ⁻¹
10/13 kW	10/13 kW	10/13 kW	20/25 kW
30/60/90 HSK 40-E	30/60/90 HSK 40-E	30/60/90 HSK 40-E	27/54/81 HSK 50-E
30 m/min	50 m/min	50 m/min	60 m/min
Heidenhain iTNC 530	Heidenhain iTNC 530	Heidenhain iTNC 530	Heidenhain iTNC 530



Subject to technical changes

* with reduced dynamics

All HSC machines by exeron with the relevant data are listed on these pages in a direct and clear comparison. We reserve the right to technical changes which serve the further development of our machines. Have you got further questions – for example regarding special requirements or regarding the implementation of individual specifications?

Then please contact us. Our experts will take the time to consult with you. We look forward to talking to you.

We reserve the right to constructional changes as well as other changes to technical data and performance characteristics – provided that they serve the technical progress – errors, misprints, miscounts, misspellings and miscalculations.