

ACCURACER[®]

by GMTK



Integration of machining processes and strategies

the end over the means



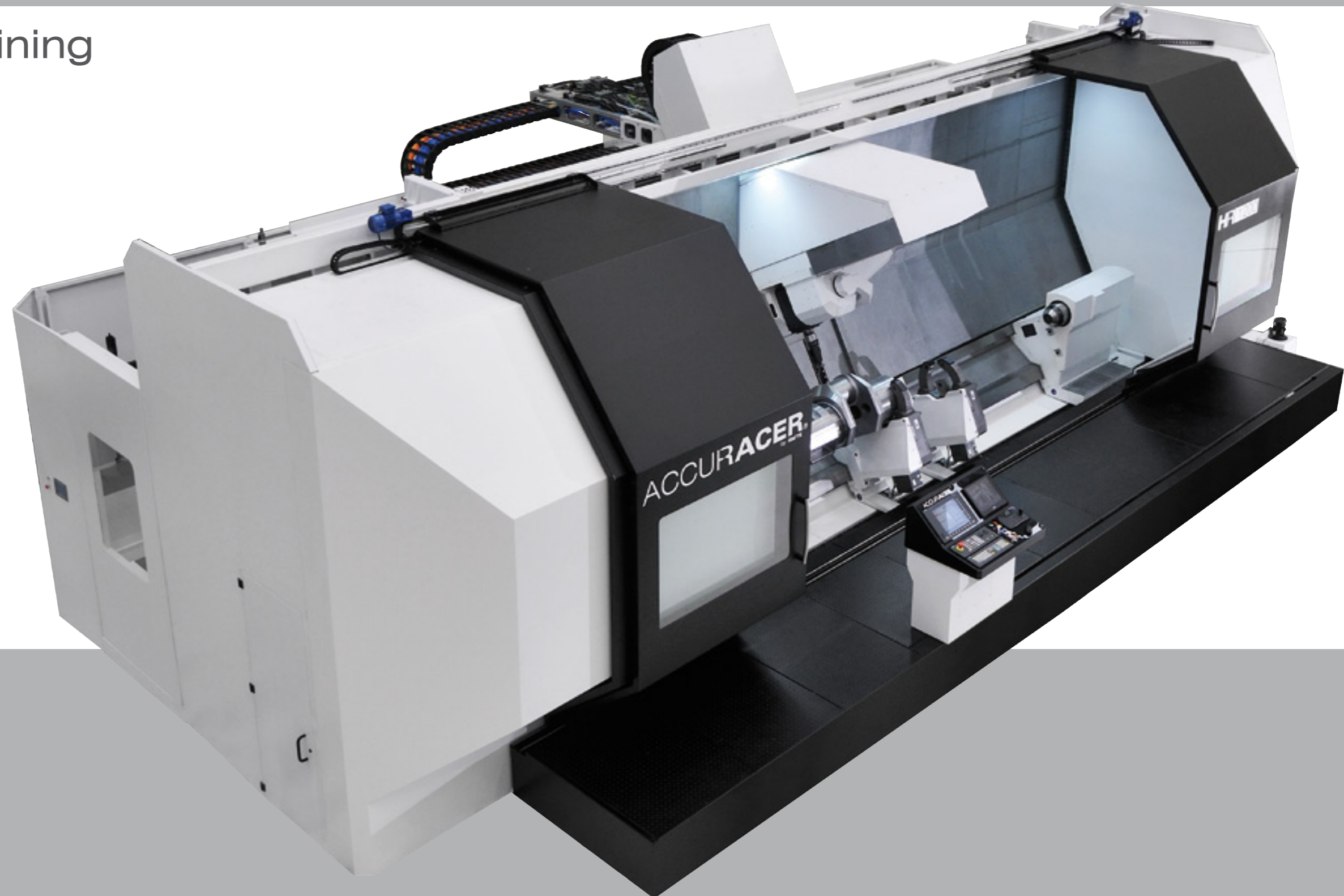
GMTK Multi-Process Machining S.A. is a manufacturer that upon a base of experience and high technology, works actively in the development of machining solutions which allow improving the efficiency and profitability of the users of its machine tools.

Due to the segment of market to which GMTK is addressed, the identification values of its products are accuracy, reliability and productivity. Therefore, GMTK has a highly qualified and experienced human capital specially enhancing the Applications and Development Areas.

The founding partners of GMTK are the Technological Centre Tekniker and the industrial group Grupo Maherholding that joined to Public Venture Capital Funds contribute for the soundness and stability of the company.

GMTK's object is to cooperate in increasing competitiveness and profitability of the final users of its products and services through designs adapting to the real needs of each production process and by offering ground-breaking products as far as applied technology is concerned.

integration of machining processes and strategies



ACCURACER HR is a multi-process machine developed in order to obtain the highest performance in the machining of complex, accurate and high precision and added value pieces.

The applied technology allows a combination of exceptional dynamics and strength. This compromise between DYNAMICS and POWER gives the users of ACCURACER HR the possibility of:

1.- Approaching to the machining of a piece with the most appropriate machining strategy.

- Conventional cutting.
- High feed cutting.
- High speed cutting.
- Combination between high feed cutting and high speed cutting.

2.- Integrating different machining processes.

- Complete machining solution.
- Machining processes adapted to their optimal cutting conditions.

All this results in HIGHER PRODUCTIVITY FOR THE CUSTOMER.

description ACCURACER HR



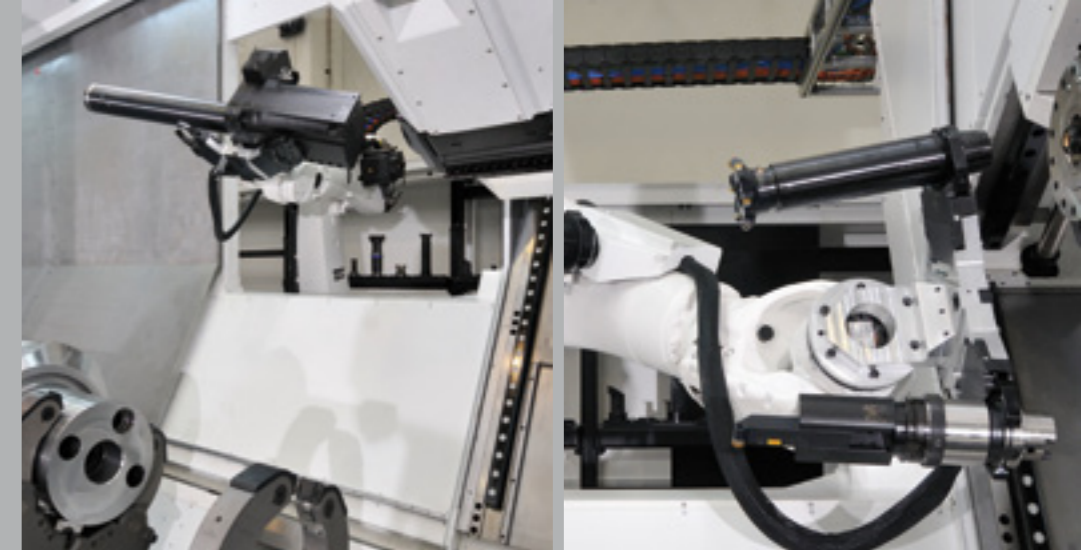
The ACCURACER HR range has been developed on a knowledge base of machining processes and the optimal cutting conditions of different processes and materials.

This knowledge in Applications Engineering has resulted in a configuration of a rigid and at the same time dynamic machine, where each axis is able to offer drives with high cutting and dynamics capacity (up to 40 m/min speed with accelerations up to 3,5 m/sec²). Compromise between dynamics and power results in an important improvement of productivity, due to the fact that the ACCURACER HR adapts to the cutting conditions of each process and material. In addition to this, times for empty movements are significantly reduced (changing of tools and accessories, measuring, a.s.o.). The more complex the working piece is and the higher added value it has, the more efficient and competitive the ACCURACER HR becomes.

The rigidity of the ACCURACER HR, together with the optimized drives and guidings, grants the highest accuracy and reliability for approaching complex and high added value machining.

ACCURACER HR includes technical solutions which take it to the top regarding applied technology. This results in a geometric accuracy and surface finishing that satisfies the specific requirements of the most demanding sectors.





integral system for the changing of tools, heads and accessories

The ACCURACER HR range includes an innovative integral system for the changing of tools, toolholders and heads that offers, among others, the following advantages:

Productivity: the changing of tools, heads and accessories is done through the same device and the changing times are significantly improved.

Flexibility: the integral changing system allows the user to adapt the changer according to the needs of tools and accessories in each application. Furthermore, a sole integral changing system can be shared by more than one machine.

Reliability: the integral changing system included in the ACCURACER HR range uses a standard robot used in sectors of highest productivity such as automotive. This grants reliability, availability and technical assistance.





applications



The philosophy of the ACCURACER HR range is based on an integral and efficient solution for the machining of complex pieces. The knowledge of GMTK's technicians on components manufacturing processes for different sectors results in a machine adapted to each user and application.

The job of our Applications Engineering Office focuses on approaching the machining of complex pieces with the highest compromise for reliability, accuracy and productivity, in order to improve profitability and competitiveness of end users of the ACCURACER HR.

The integration of machining processes and strategies makes the ACCURACER HR a really versatile machine which suits to the needs of each application through the configuration of the different accessories required.

GMTK's Application Engineering Office works actively in searching for new applications and in the study of their manufacturing processes. Depending on the requirements of each application, accessories are developed to grant a complete machining solution.

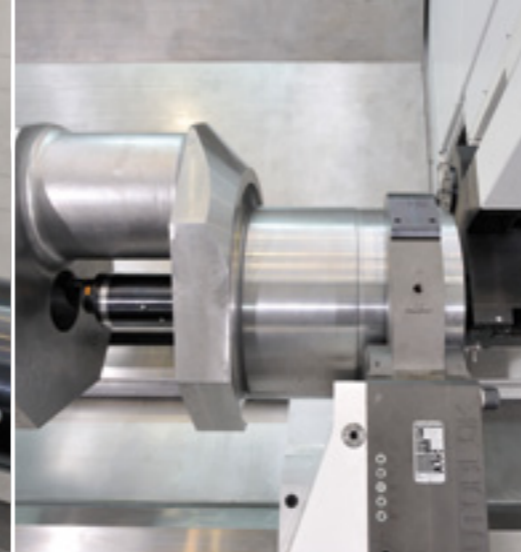
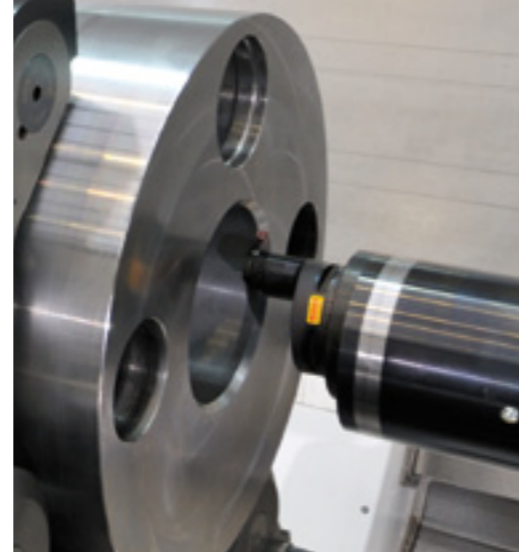
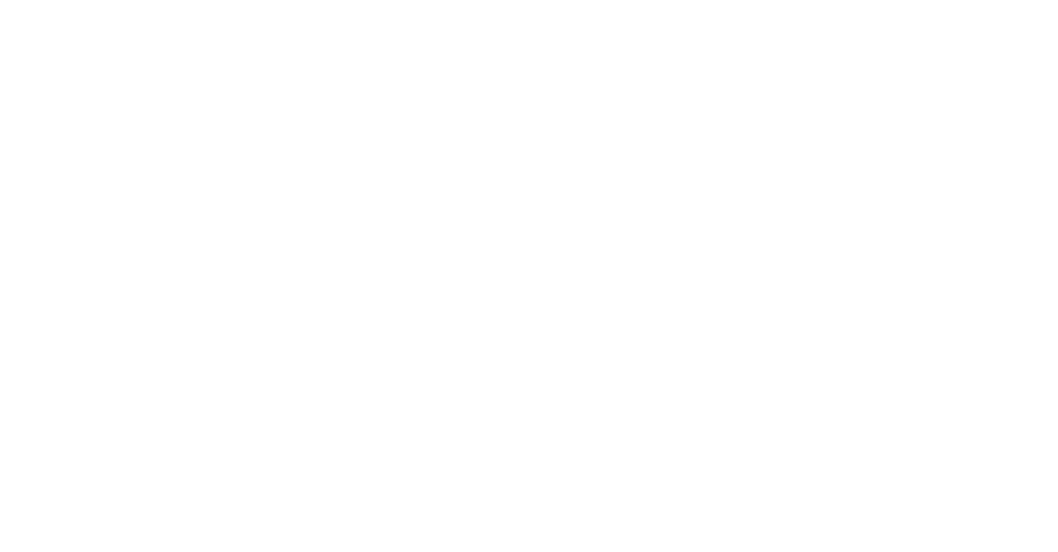


the end over the means



“GMTK: your strategic partner for efficiency in complex and high added value applications”



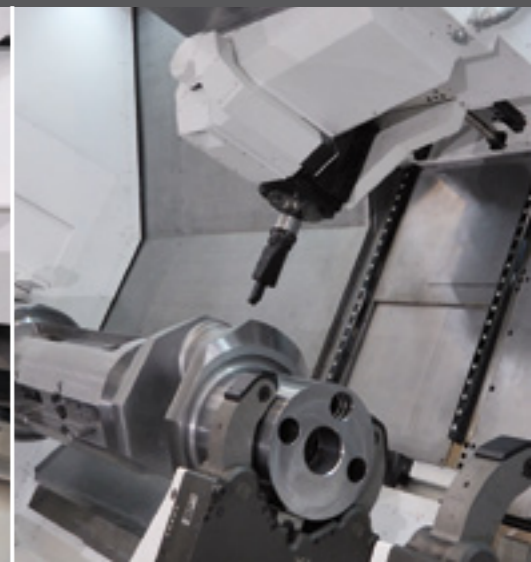
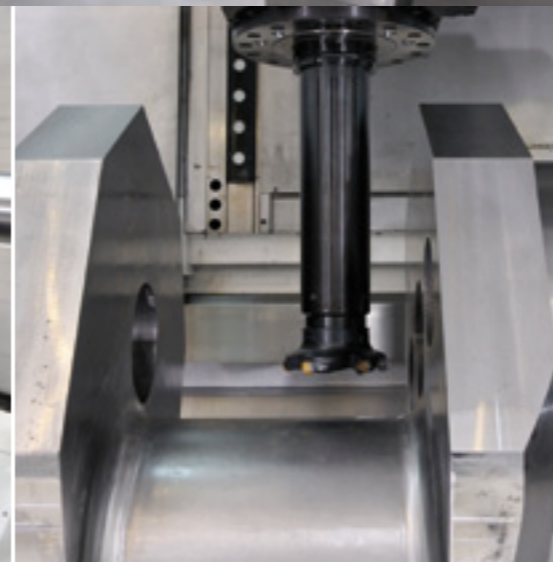
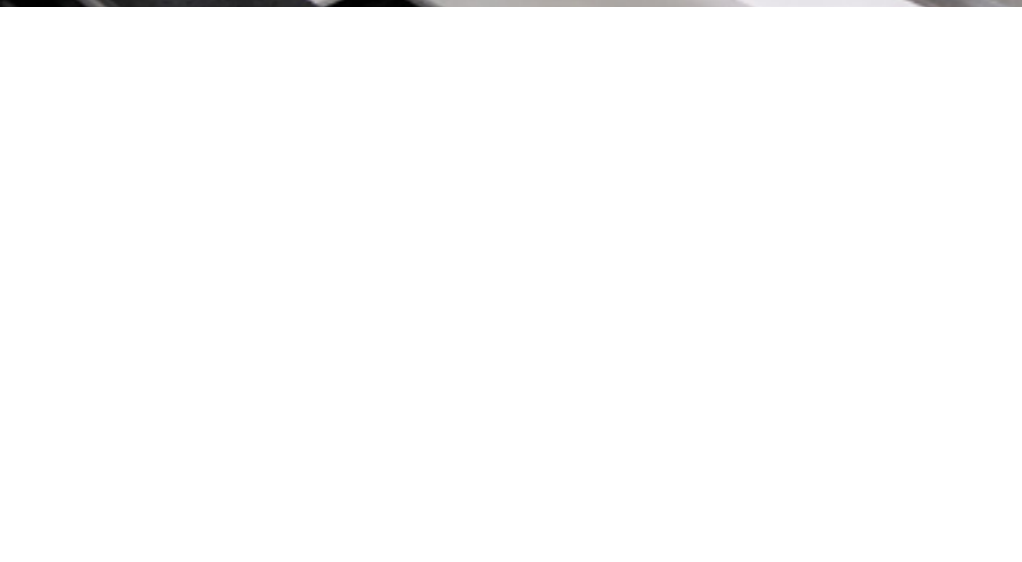


accessories

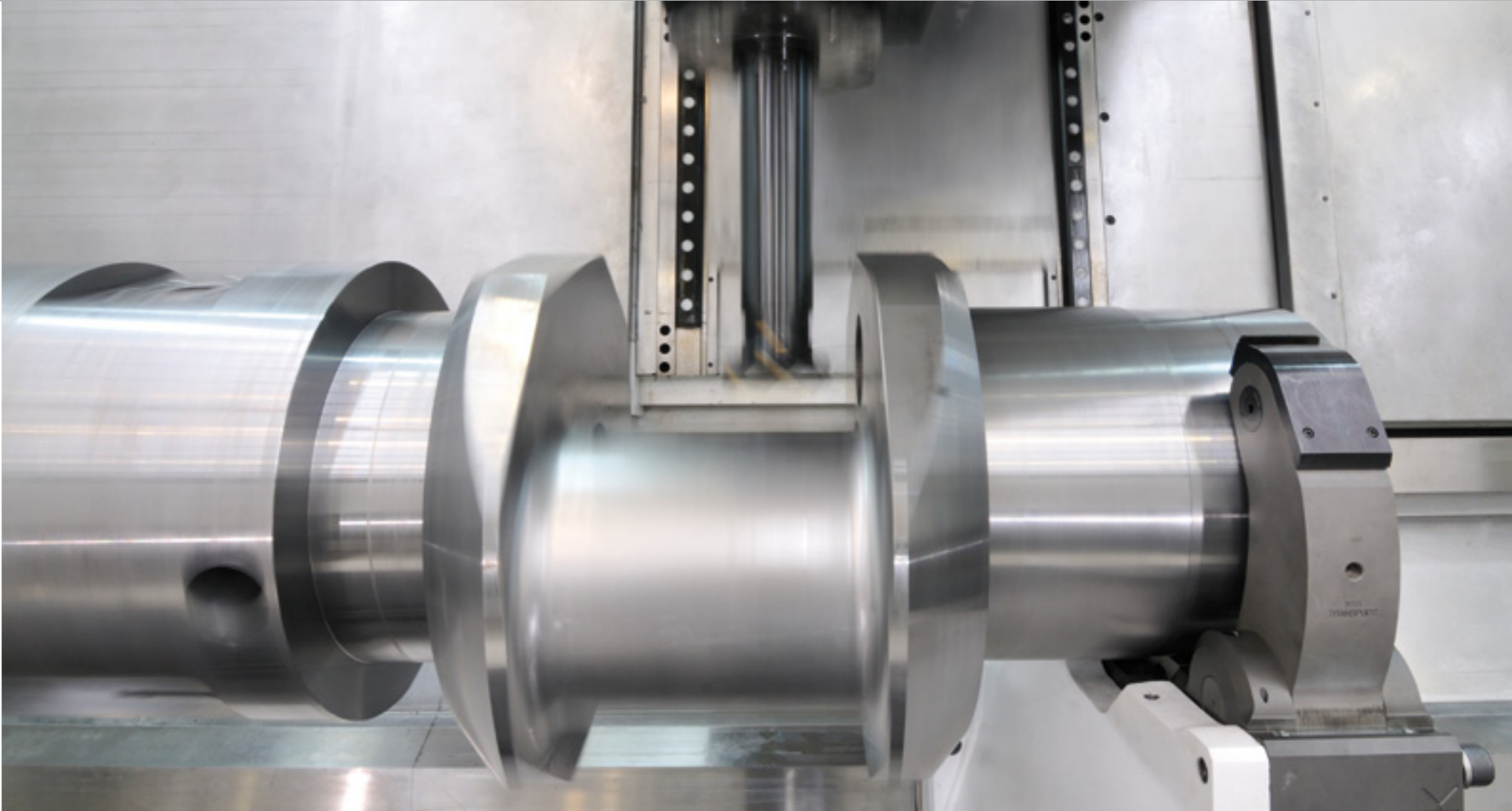
The versatility of the base machine of the ACCURACER HR range allows an approach to the complete machining of complex pieces. This approach is done by the integration of different accessories directly to the head or through a coupling device specially developed by our team of engineers.

Design and development of these accessories are carried out in order to fulfill the current requirements in complex pieces analyzed by our Applications Engineering Office. They allow a customized and effective integral solution for each user and application.

The determination for applications engineering makes GMTK to constantly dispose and develop new solutions according to market's needs.



Services



Turnkey projects

The experience and knowledge of GMTK's Applications Engineering Office allows it to offer a wide range of services under turnkey format. This service may include the configuration of investment in machinery, and advice in engineering for foundation, CAM programming, post-processing, simulation and verification of pieces, tooling, training for operators, a.s.o.

Advice for improving the manufacturing processes

GMTK offers to the customers all its knowledge regarding manufacturing processes. This knowledge makes GMTK be the appropriate partner to approach projects for improvements in productivity and efficiency when machining complex and high added value pieces.

Training

GMTK's compromise with its customers goes beyond the delivery and installation of the machines. Convinced by the idea that a good training of the user is essential for improving performance and productivity of installed equipments, GMTK offers standard and customized training programs to grant highest profitability of the investment made.

After Sales Service

GMTK knows about the influence that machine availability has on the profitability and competitiveness of end users. Therefore, the assistance department of GMTK works in preventive and corrective maintenance programs which grant highest reliability and disposability through remote service systems and qualified personnel.



technical characteristics

	HR 800	HR 1000	HR 1200	HR 1500
WORKING AREA				
Swing diameter over slide (mm)	850	1.050	1250	1550
Nominal centre distance (mm)	2.000 / 3.000 / 4.000	2.000 / 3.000 / 4.000 / 6.000 / 8.000	2.000 / 3.000 / 4.000 / 6.000 / 8.000 / 10.000	2.000 / 3.000 / 4.000 / 6.000 / 8.000 / 10.000
Max. part weight (Kg)	3.500	10.000	10.000 / 15.000	10.000 / 15.000
TURNING HEAD				
Max. power 100% (Kw)	34	56	56	102
Max. speed (min ⁻¹)	3.300	2.600	1.600	1.000
Max. torque 100% (Nm)	2.720	5.345	7.640	10.695
Standard chuck diameter (mm)	400 / 500 / 630	500 / 630 / 800	500 / 630 / 800	500 / 630 / 800 / 1000
Spindle nose (DIN 55026)	A11	A15 / B20	A15 / B20	A15 / B20
C- AXIS				
Max. speed (min ⁻¹)	30	20	20	20
Max. torque 100% (Nm)	1.550	4.000	5.700	8.000
Min. programmable angle (degrees)	0,001			
MILLING HEAD				
Max. power 100% (kw)	30	30	30	52
Max. speed (min ⁻¹)	4.000	4.000	4.000	3.300
Max. torque 100% (Nm)	405	405	405	750
Max. pressure of inner coolant (bar)	80			
STROKES AND SPEEDS OF AXIS				
B axis angle stroke (degrees)	-110 / +90			
X axis stroke (mm)	830	1.060	1.060	1.230
Y axis stroke (mm)	400 (+200 / -200)	550 (+350 / -200)	550 (+250 / -300)	660 (+310 / -350)
Rapid speed X / Y / Z (m/min)	40 / 40 / 30			
OTHERS				
Tailstock, shaft diameter (mm)	180	260	260 / 300	260 / 300
Steady rest, max. part diameter between rolls (mm)	460	460	680	800
Tools magazine (n°)	according to customer's requirements			
Heads magazine (n°)	according to customer's requirements			
SIEMENS Control (model)	840 D SL			



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