

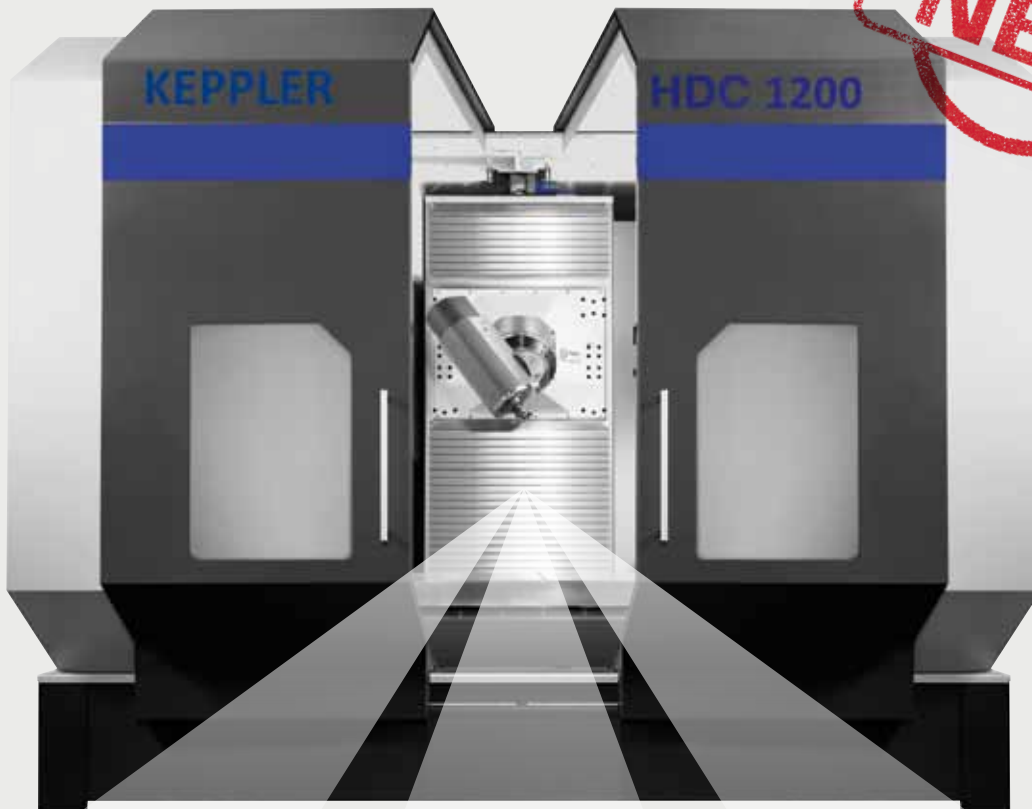
HDC 1200

HIGH DYNAMIC MILLING
AND HEAVY MACHINING –
FOR EVERY SCOPE THE **BEST** SOLUTION

KEPPLER
MASCHINENBAU

NEW

View without pallet changer



FLEXIBILITY

2-axis-NC-
Universal-
milling head

DYNAMIC

5 m/s²
50 m/min

POWER

Fmax (X/Y/Z)
15,000 N

6-axis

Universal-machining-centre

HDC

Pallet-
changer

A class of its own

Since founding in the year 1965, KEPPLER Maschinenbau dedicates for the production of tailor-made special machines and innovative clamping fixtures. As a logical consequence from years of experience in the metal working sector, KEPPLER produced the first 6-axis bed-type milling machine in 2007. Through steady, on going development, Keppler presents a reliable and innovative Universal-machining-centre now.

Accompany us true to the motto **“fascinating mechanical engineering”** on the following sites and dive into the world of KEPPLER Maschinenbau.



02 - 03



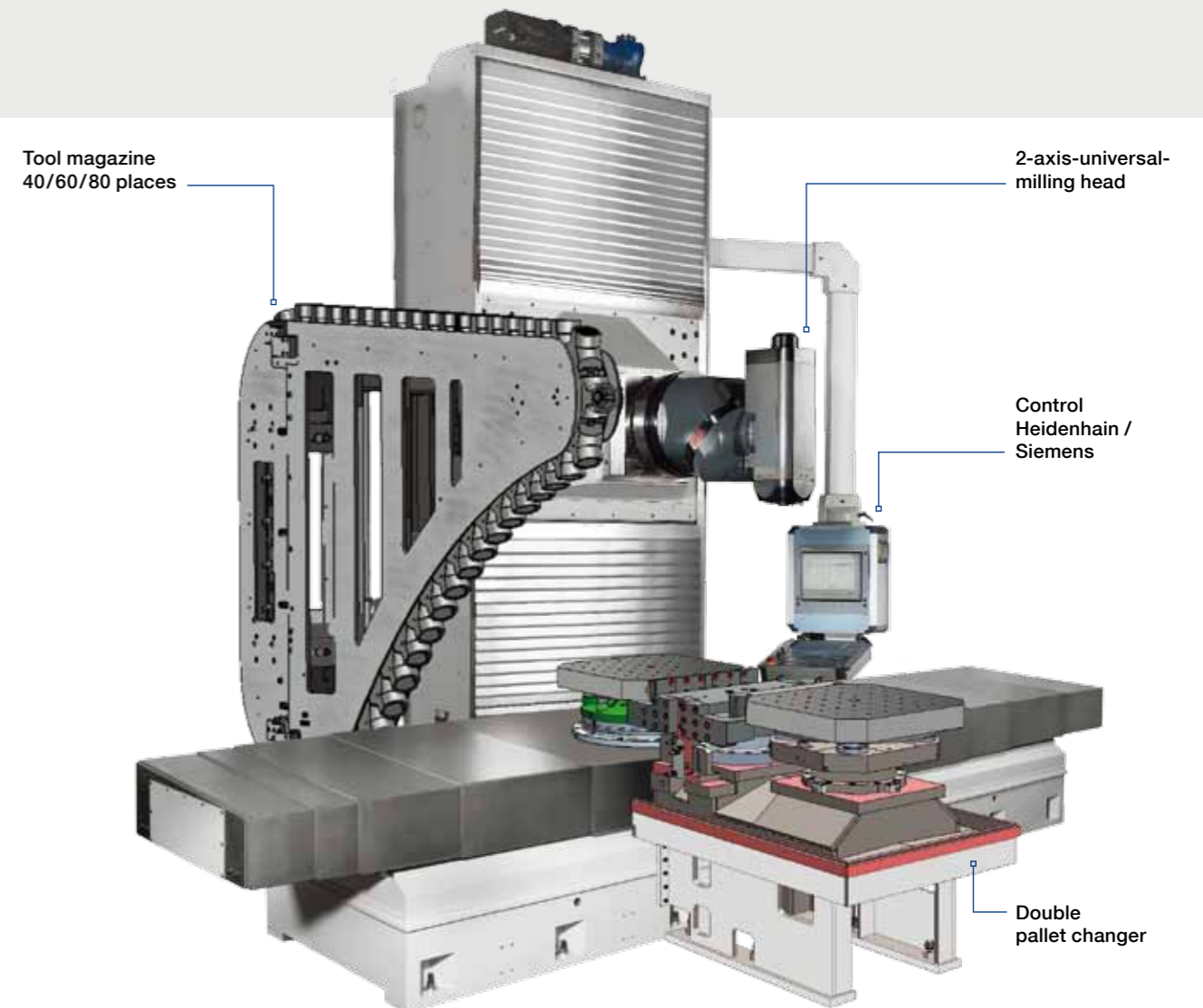
HDC1200P-2014-01-ENG · © Karl Keppler Maschinenbau GmbH · Technical changes or misprints reserved · Significant for design is the order confirmation

No compromises!

As swabian manufacturer of machine tools stands quality on the first position. Therefore KEPPLER machines will only be assembled in the production location Germany. We only use high quality, tried and tested materials and components and there is no compromise in this respect when it comes to the selection of our supplier.

Which philosophy do you prefer?

If high dynamic milling or heavy machining, through a selection of the milling units is the HDC 1200 universally useable and is perfectly fitted for all kind of machining operation.

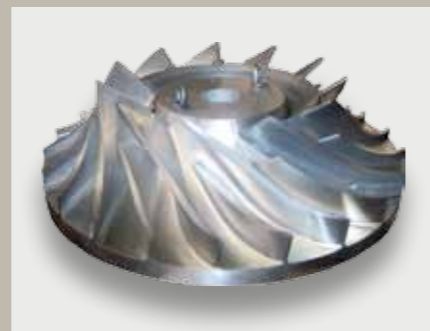
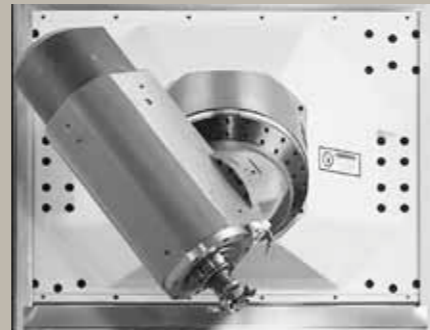


Advantages for your benefit

- **Machine table**
 - integrated index table or pallet changer
 - heavy load
 - Multi-side machining in one clamping
- **Simultaneous 5-axis machining**
- **Milling head**
 - 2-axis-NC-milling head (S6) 220 Nm or
 - Horizontal spindle (S6) 526 Nm
- **High rapid traverse speeds up to 50 m/min**
- **Direct measurement systems**
- **Tool magazine**
 - Full automatic machining with 40/60/80 tools
- **Mineral cast damped Y-stand and Z-slide**
 - Excellent stability for high dynamic machining
- **Guiding system (X-, Y-, Z-axis)**
 - Roller-linear guidance system preclamped, central lubricated

Size X, Y, Z,	55
Carriage (X-axis)	6 pcs.
Carriage (Y-axis)	4 pcs.
Carriage (Z-axis)	4 pcs.
- **Axle drive (X-, Y-, Z-axis)**
 - Precision ball screw, preclamped, central lubricated

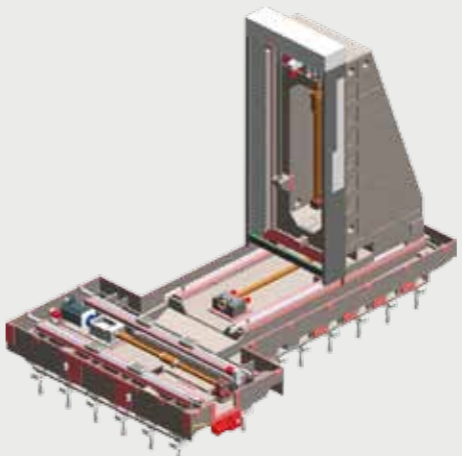
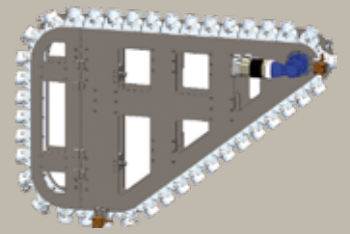
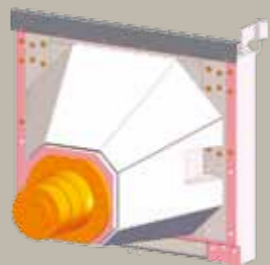
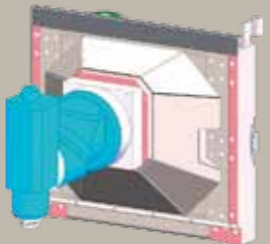
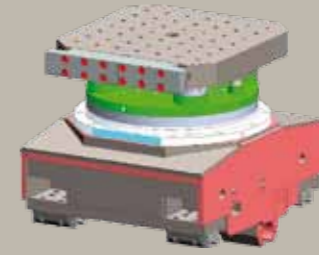
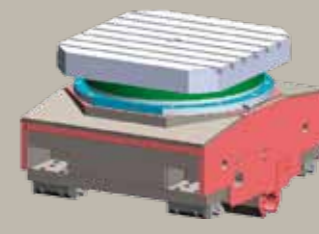


Diameter x gradient	60 x 40 (X-, Y-axis)
Diameter x gradient	80 x 40 (Z-axis)
- **Machine accuracy according to VDI/DGQ 3441**



Modul construction kit HDC 1200

The termo-symmetric base construction as well as with mineral cast damped Y-stand and Z-slide offer excellent stability for high dynamic machining. Therefore the HDC is fitted best for heaviest machining and excellent processing quality.

For even more flexible application ranges, we offer the HDC as a modul construction kit.

<p>Base unit</p> 	<p>Tool magazine</p>  <p>Chain magazine 40/60/80 tools HSK100 / SK50</p>	
<p>Milling unit</p>  <p>Horizontal spindle</p>  <p>2-axis-milling head</p>	<p>Work piece carrier</p>  <p>Index table with pallet</p>  <p>Index table with plate field</p>	<p>Loading unit</p>  <p>Loading position with pallet changer</p>  <p>Direct loading</p>

Impressive data

HDC 1200 – TECHNICAL DATA

Working range	
X-axis (mm)	1,200
Y-axis (mm)	1,000
Z-axis RT with plate field (mm)	1,000

Machine table	
Table size (mm)	800 x 800
Load capacity (kg)	1,500 (opt. 2,500)
Optional Pallet changer	
Pallet (mm)	800 x 800
Load capacity (kg)	1,250 (opt. 2,000)
Pallet change time (s)	13

Feed rate	
Max. rapid traverse speed X/Y/Z (m/min)	50
Max. axis acceleration X/Y/Z (m/s ²)	5
Max. feed force X/Y/Z (N)	15,000

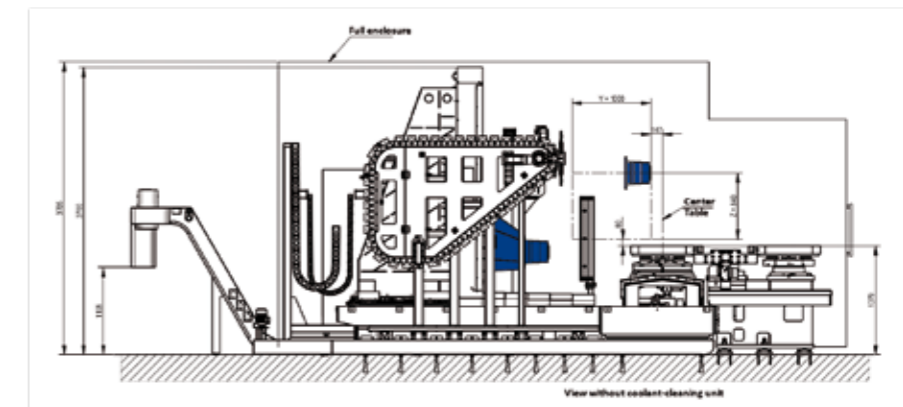
2-axis-NC-milling head – Technical data

Main drive motor spindle	
Rated power S1 / S6 (kW)	34 / 43
Rated torque S1 / S6 (Nm)	160 / 220
Max. rotational speed (rpm)	10,000
Option:	
Rated power S1 / S6 (kW)	40 / 46
Rated torque S1 / S6 (Nm)	127 / 140
Max. rotational speed (rpm)	16,000

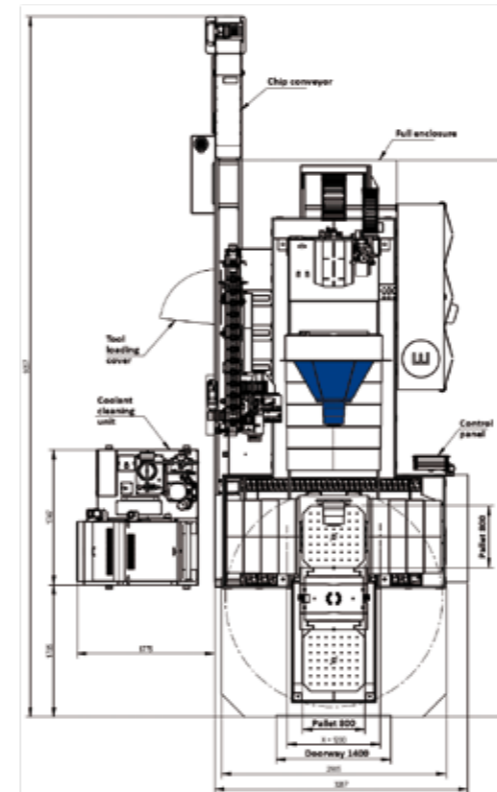
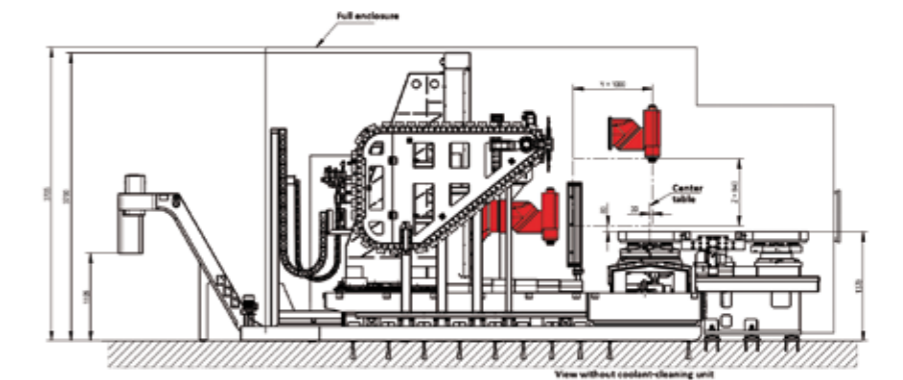
Horizontal spindle – Technical data

Main drive motor spindle	
Rated power S1 / S6 (kW)	50 / 65
Rated torque S1 / S6 (Nm)	405 / 526
Max. rotational speed (rpm)	8,000
Option:	
Rated power S1 / S6 (kW)	80 / 100
Rated torque S1 / S6 (Nm)	1,270 / 1,590
Max. rotational speed (rpm)	7,000

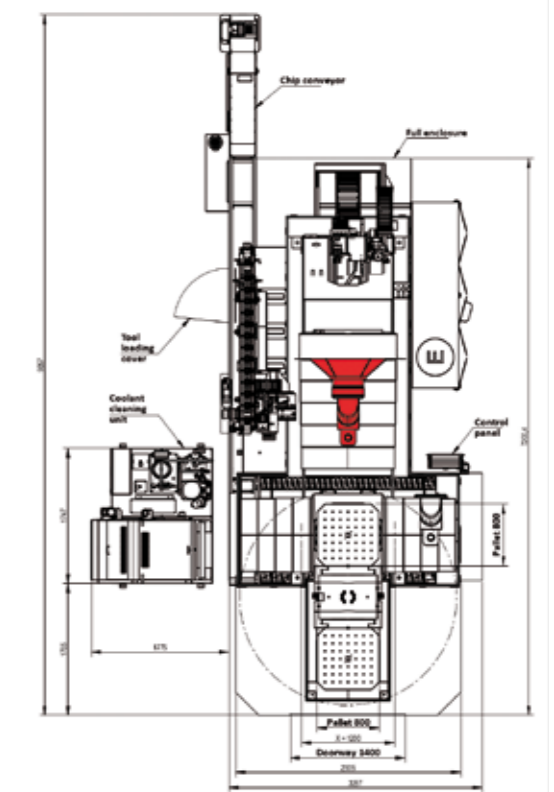
Horizontal spindle



2-axis-NC-milling head



Horizontal spindle



2-axis-NC-milling head

Additional individual machine designs are possible. Please contact us.
 Technical specifications are subject to change.

Options – for more individuality

- Oil emulsion separator for full enclosure
- Minimal quantity lubrication through spindle
- Tool coding
- Index table with customer specific dimensions
- Internal cooling feedthrough through spindle – increase to 60 bar
- Blower through spindle centre
- External blower
- Rotating viewing window
- Track flushing
- Work piece measurement system (sensing device)
- Horizontal gear spindle with up to 2,500 Nm
- Manual operating modul
- Spray gun
- Tool breakage monitoring
- Special designs according to customer specification
- Cooled bearing seat
- Blowing gun
- Collision monitoring
- Kinematic measuring of the rotary axis
- Extraction unit

Control, operation and maintenance

By selection of the control system, KEPPLER relies on high quality. So you can run your HDC either with Heidenhain or Siemens control.

Dynamic and efficiency

- Latest installation technique
- Best accessibility
- Minimal maintenance effort
- High lifetime
- Standardized user interface
- Solid machine technique



Siemens 840 D SL



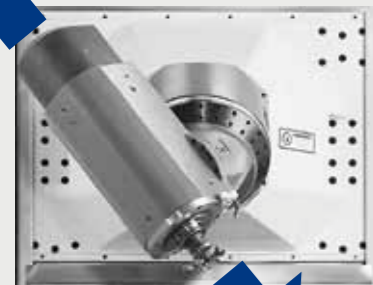
Heidenhain iTNC 530 HSCI

Additional range of functions

- Pallet- / work piece monitoring
- Master computer connection over Ethernet
- 24/7 remote access / machine monitoring
- Process monitoring
- Tool monitoring
- Updates / trainings

KEPPLER – Simply clever

In the developing stage of the HDC, huge attention was paid on accessibility, to keep the effort as low as possible, when it comes to service or repairs. The optional collision monitoring offers an increased crash safety. However, if a defect on the spindle occurs against all expectations, our competent electronic and mechanical engineers will give you advice and assistance.

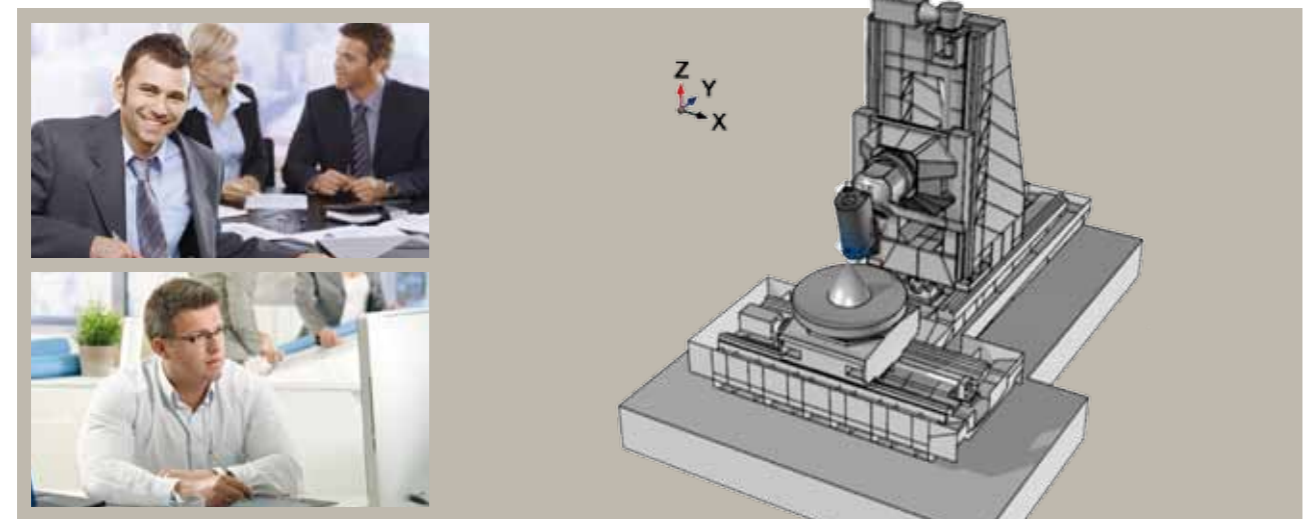


MTTR: Mean Time To Repair

Change time (Spindle unit) 6 hours

Through consequent **research** and **advancement** we are able to fulfill your wishes and demands even better.

For your success more than 100 committed specialists in design, software development, production and assembly will support you, offering you the appreciated Keppler service.



FAST, FLEXIBLE, INDIVIDUAL

Tailor-made for you

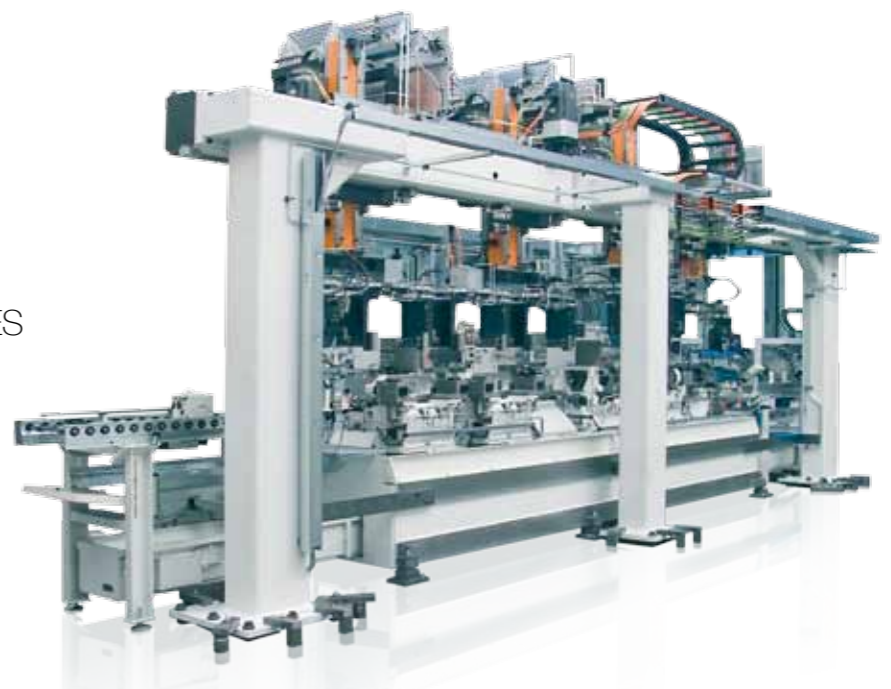
Talk to us about your requirements:

- K**ey requirements of the machine
- E**xclusive machine properties / options
- P**roduction environment
- P**roduction means
- L**evel of performance
- E**conomic on-site customizations of the machine
- R**emaining machine pool

Benefit from our success story

In addition to excellent 5/6-axis-Universal-machining-centres and travelling-column-machines, we offer you tailor-made components, hydraulic and fully automatic fixtures, application-specific conversions and a service package that leaves nothing to be desired.

- MECHANICAL ENGINEERING
- TOOL MAGAZINES
- PALLET CHANGERS
- FIXTURES
- RETROFITTING
- SPECIAL-PURPOSE-MACHINES



KEPPLER

A synonym for service and customer competence



From **A** like automobile manufacturer to **Z** like zero error tolerance: Our know-how and our comprehensive mindset reflect the impressive range of our customers. Whether individual production or global corporation – we determine the matters of all our customers. We make his matters to our own and provide an investment secure, efficient, individual and absolute reliable solution – worldwide!

Branches



Automotive



Mechanical engineering



Renewable energy



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Paper machines / Printing industry



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