

# HDC 3000

LEADING MOULD BUILDING  
AND MECHANICAL ENGINEERING

**STADLER  
KEPPLER**

MASCHINENBAU

**MADE  
IN GERMANY**

STADLER

HDC

KEPPLER

3000

HDC with full enclosure (Option)

## FLEXIBILITY

2-axis-NC-  
Universal-  
milling head

## DYNAMIC

4m/s<sup>2</sup>  
45m/min  
with dynamic package

## POWER

F<sub>max</sub> (X/Y/Z)  
15.000 N

# 5-/6-axis

Universal machining centre

# HDC

WELCOME TO **STADLER KESSLER**

# Precision and economy in metal

STADLER KESSLER - synonymous with innovative, efficient solutions and engineering excellence in the field of metalworking for more than five decades. A competent workforce of 100 employees in the Stadler-Group and over 40 dedicated specialist at the facility in Pfullingen, modern machinery, an innovative design department and exemplary quality assurance make us the preferred industry partner. STADLER KESSLER machines give you a decisive competitive edge.

Accompany us after the slogan „fascinating mechanical engineering“ on the following sites and dive into the world of Stadler Kessler Maschinenbau.

02-03



# working

*High dynamic 2-axis milling head with strong torque motor and absolute value measurement system for universal applications. Available in various spindle version (HSK63 / HSK100 / SK50)*



*Perfection in every detail: The best guarantee for lasting reliable function and high productivity*



## FORESIGHT THAT BRINGS YOU FORWARD

Visionary and always close to the customer. Creative and always one hundred percent practical. The forward-looking STADLER KEPPLER experts understand perfectly how to realise mechanical innovations to meet your specific needs. High-performance technology that allows you to master your challenges - precisely, quickly and reliably.

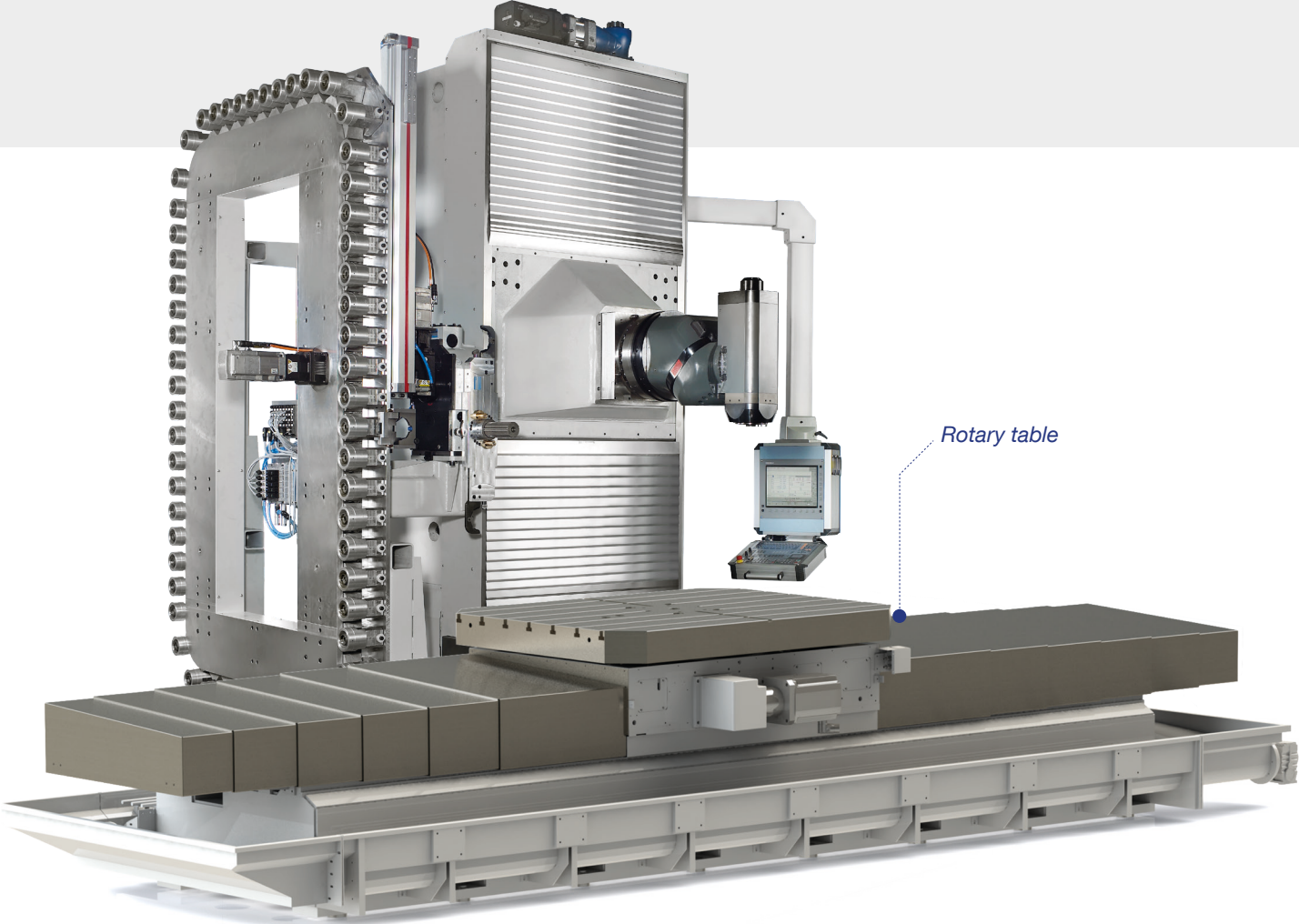
## QUALITY TO BENEFIT YOU

Our products and services are tested according to the most stringent quality standards. In every field, our actions are governed by the zero-defects principle. The result: products which excel in terms of their outstanding availability coupled with a long service life. Absolute customer focus, reliability and fairness are all at the top of the STADLER KEPPLER list of priorities - and the benefit is all yours.

# Created for demanding mould

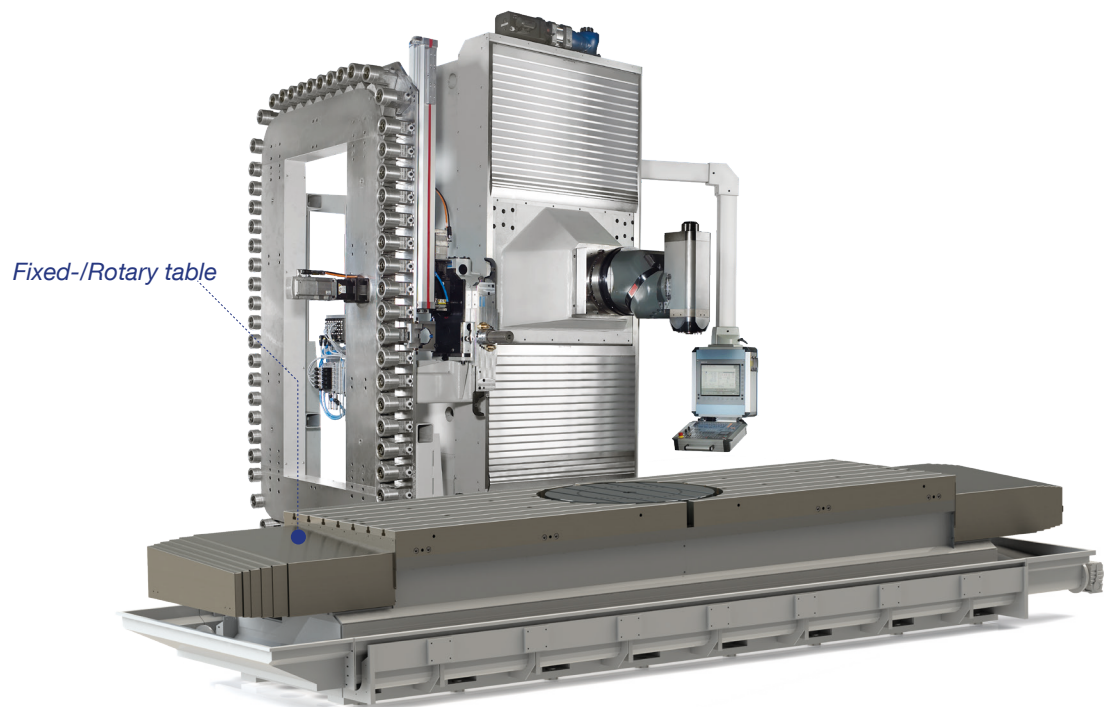
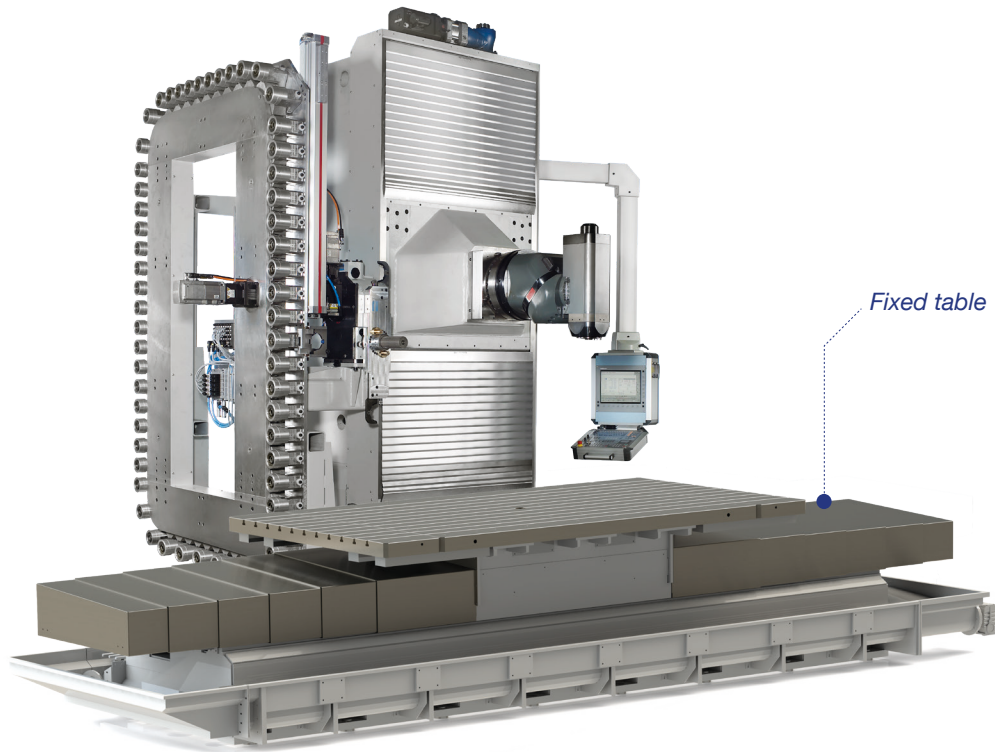
Flexibility meets efficiency - a fitting description for this technical masterpiece from STADLER KEPLER. Modern design, impressive performance data and an excellent cost-to-performance ratio makes this 6-axis universal machining centre the perfect solution when it comes to precisely machining parts for the mechanical engineering industry.

04-05



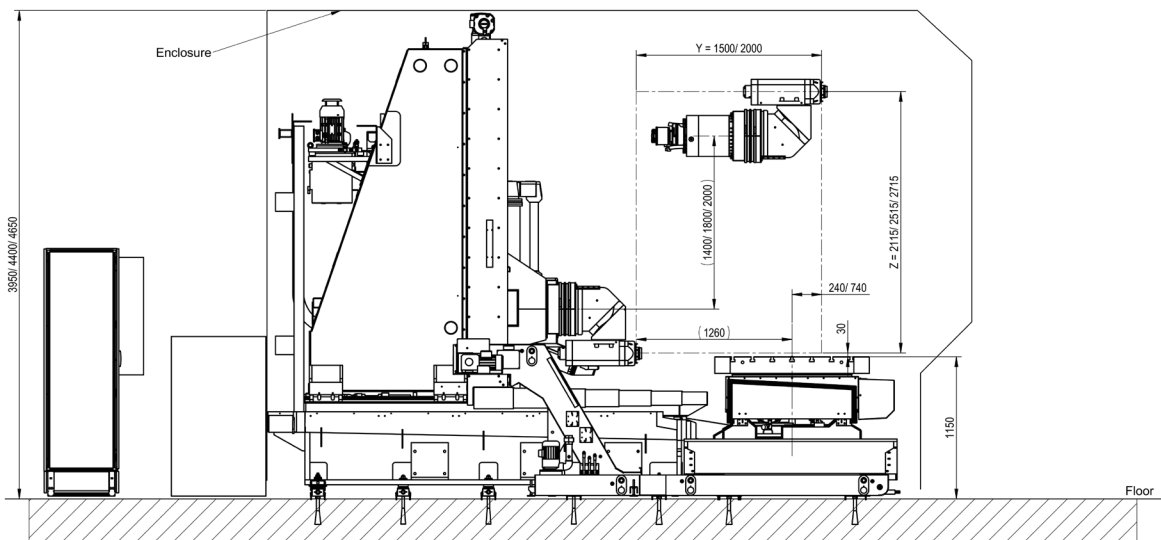
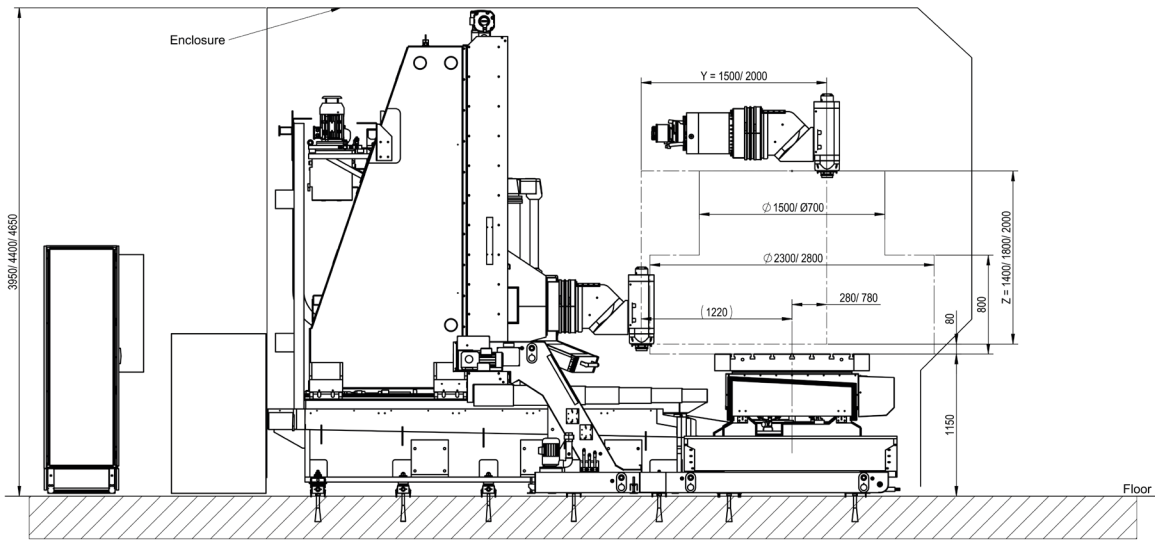


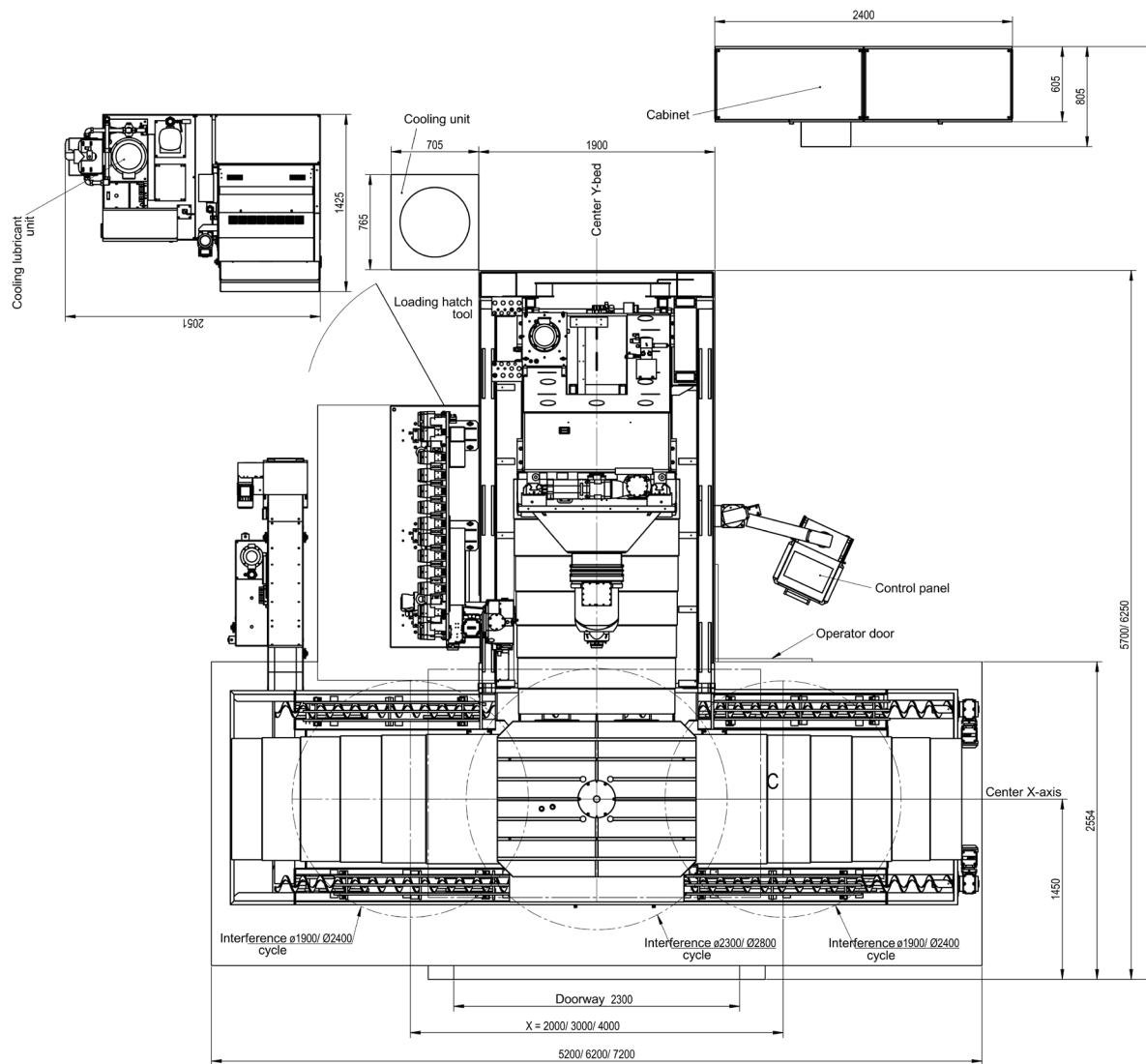
# building and mechanical engineering



# Well equipped for large tasks

06-07





# Your most successful part prod

When it comes to mould building, precision, versatility and 5-sided machining are paramount. STADLER KEPPLER machines provide truly impressive results in every one of these areas, coupled with outstanding capabilities. Because this 5-axis universal machining centre was designed to address the specific demands of this sector - which naturally also include high machining speeds and an attractive price tag.

## Options:

- Full enclosure
- Table load up to 10 t
- Increase of interference cycle up to  $\varnothing$  3.600 mm
- Chip conveyor in Y-bed (upgradeable)
- Dynamic package 45m/min, 4 m/s<sup>2</sup>, rack and pinion drive X-axis, reinforced drive Y, Z-axis
- Temperature compensation of the motor spindle
- Internal cooling feedthrough through spindle - increase to 60 bar
- Maintenance free oil emulsion separator for full enclosure
- Blower through spindle centre
- External blower
- Spray- / Blowing gun
- Minimal quantity lubrication through spindle
- Work piece measurement system (sensing device)
- Tool breakage monitoring
- Tool coding
- Rotating viewing window
- Track flushing
- Manual operating modul
- Multi - pallet changing system
- Media interface table center
- Zero-point clamping system
- Special designs according to customer specification



# uction ever

## Machine table

- Rotary table with worm gear drive, high dynamic twin drive or maintenance free torque drive
- high load up to 10 t
- Multi-side machining in only one clamping
- beneficial chip drop at horizontal roughing

## simultaneous 5-axis machining

## High rapid traverse speeds up to 50m/min

## Milling head

- 1-axis-NC milling head 525 Nm (S6), 7.000 rpm
- 2-axis-NC milling head 220 Nm (S6), 10.000 rpm
- HSK100 / SK50
- 2-axis-NC milling head 140 Nm (S1), 15.000 rpm
- HSK 63 / HSK 100
- additional spindle-, head-types according to customer specification

## Direct measurement system

- Heidenhain, pressurized air

## 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            | 55     |
| Size Y, Z         | 65     |
| Carriage (X-axis) | 6 pcs. |
| Carriage (Y-axis) | 4 pcs. |
| Carriage (Z-axis) | 4 pcs. |

## Tool magazine

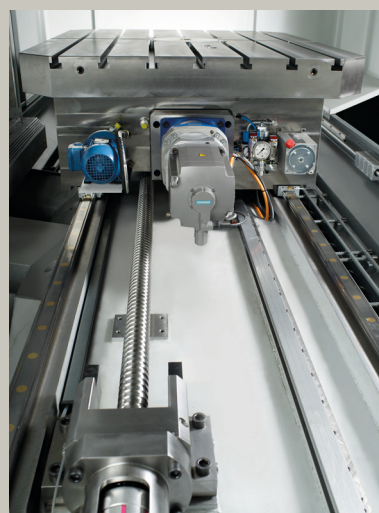
- Chain magazine with 40 / 60 / 80 / 100 tools
- Rack magazine bigger 100 tools according to customer specification

## Machine bed in welded design

- Rigid basic body with high mechanical and thermal stability for highest precision
- Constant load spreading for steady foundation load
- Inherently stable at high static and dynamic stress
- Weight reduced ribbing for an optimized stiff to mass ratio

## Standard

- Water cooled direct drive motor
- Water cooled X-axis bearing
- Water cooled cabinet with central cooling unit (maintenance free)
- Y-axis prepared for retro fitting chip screw
- Tool length ~ 800 mm



# Impressive data

## TECHNICAL DATA

## ROTARY TABLE

<b>Working range</b>	
X-axis (mm)	2000 / 3000 / 4000
Y-axis (mm)	1500 / 2000 / 2500
Z-axis (mm)	1400 / 1800 / 2000
<b>Machine table</b>	
Table size (mm)	1250 x 1600
Interference cycle	Ø 2.300 / Ø 2.800 / Ø 3.600
Load (kg)	4000 / 6000 / 10000
Rotational speed (rpm)	10
Integrated rotary table (mm)	-
Load (kg)	-
<b>Feed rate</b>	
max. rapid traverse speed X/Y/Z (m/min)	27 / 30 / 30 / 45 (Dynamic-Package)
max. programmable feed X/Y/Z (mm/min)	27000 / 30000 / 30000 / 40.000 (Dynamic-Package)
<b>2-axis-NC-milling head - technical data</b>	
Slewing range A-axis	+ - 185°
Slewing range B-axis	+ - 200°
Main drive motor spindle HSK 100 / SK 50	
Rated power S1 (kW)	34
Rated torque S1 (Nm)	160
Power S6 (kW)	43
Torque S6 (Nm)	220
Nominal speed (rpm)	2000
max. speed (rpm)	10000
<b>1-axis-NC-milling head - technical data</b>	
Slewing range A-axis	+ - 185°
Main drive motor spindle HSK 100 / SK 50	
Rated power S1 (kW)	42
Rated torque S1 (Nm)	400
Power S6 (kW)	55
Torque S6 (Nm)	525
Nominal speed (rpm)	1000
max. speed (rpm)	7000
<b>2-axis-NC-milling head - technical data</b>	
Slewing range A-axis	+ - 185°
Slewing range B-axis	+ - 200°
Main drive motor spindle HSK 100 / HSK 63	
Rated power S1 (kW)	40
Rated torque S1 (Nm)	130
Power S6 (kW)	43
max. speed (rpm)	16000
<b>Tool magazin - Chain</b>	
Tools	40 / 60 / 80 / 100
Tool change time (s)	16
Max. tool length (mm)	800 / 1000
<b>Rack magazine &lt; 100 tools according to customer specification</b>	
Tool change time (s)	16
<b>Control</b>	
Path control	Heidenhain TNC 640
Optional	Siemens 840D SL

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

## FIXED TABLE

## FIXED TABLE WITH INTEGRATED ROTARY TABLE

2000 / 3000 / 4000  
1500 / 2000 / 2500  
1400 / 1800 / 2000

2000 / 3000 / 4000  
1500 / 2000 / 2500  
1400 / 1800 / 2000

2100 x 1200 / 3100 x 1200 / 4000 x 1200  
Ø 2.300 / Ø 2.800  
6000 / 10000  
-  
-  
-

2100 x 1200 / 3100 x 1200 / 4000 x 1200  
Ø 2.300 / Ø 2.800  
6000 / 10000  
40  
Ø 1000  
4000

27 / 30 / 30 / 45 (Dynamic-Package)  
27000 / 30000 / 30000 / 40.000 (Dynamic-Package)

27 / 30 / 30 / 45 (Dynamic-Package)  
27000 / 30000 / 30000 / 40.000 (Dynamic-Package)

+ - 185°  
+ - 200°

34  
160  
46  
220  
2000  
10000

+ - 185°  
+ - 200°

34  
160  
43  
220  
2000  
10000

+ - 185°

42  
400  
55  
525  
1000  
7000

+ - 185°

42  
400  
55  
525  
1000  
7000

+ - 185°  
+ - 200°

40  
130  
43  
16000

+ - 185°  
+ - 200°

40  
130  
43  
16000

40 / 60 / 80 / 100  
16  
800

40 / 60 / 80 / 100  
16  
800

16

16

Heidenhain TNC 640  
Siemens 840D SL

Heidenhain TNC 640  
Siemens 840D SL



We provide an investment secure efficient, individual and absolute reliable solution - worldwide!



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