

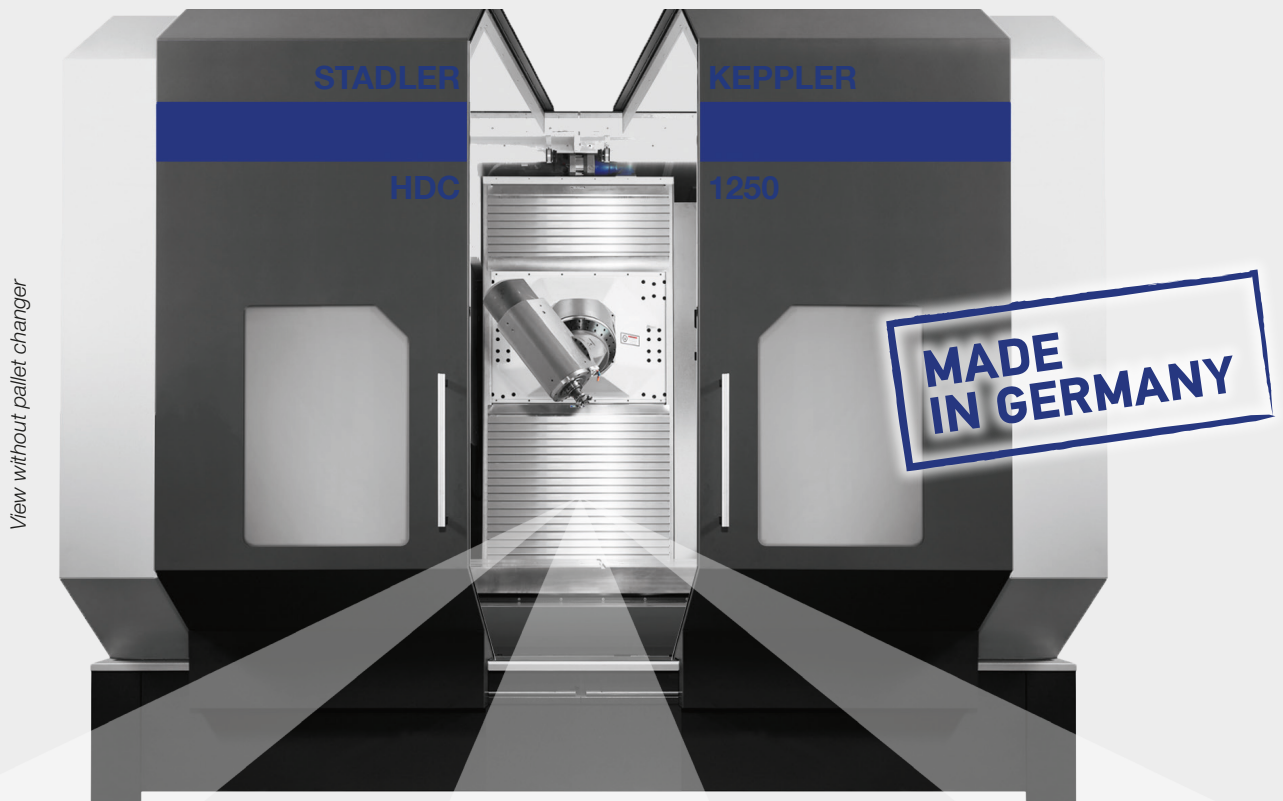
HDC 1250

HIGH DYNAMIC MILLING AND HEAVY MACHINING -

FOR EVERY SCOPE THE **BEST** SOLUTION

**STADLER
KEPPLER**

MASCHINENBAU



FLEXIBILITY

2-axis-NC-
Universal-
milling head

DYNAMIC

5m/s²
50m/min

POWER

F_{max} (X/Y/Z)
15.000 N

6-axis

Universal machining centre

HDC

Pallet-
changer

WELCOME TO **STADLER KEPPLER**

Precision and economy in metal

STADLER KEPPLER - 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 KEPPLER 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 Keppler Maschinenbau.

02-03

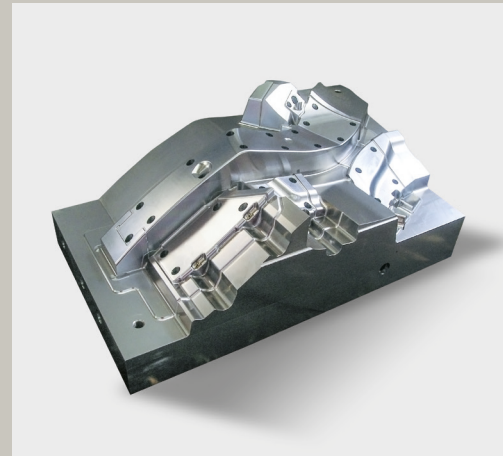


working

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.

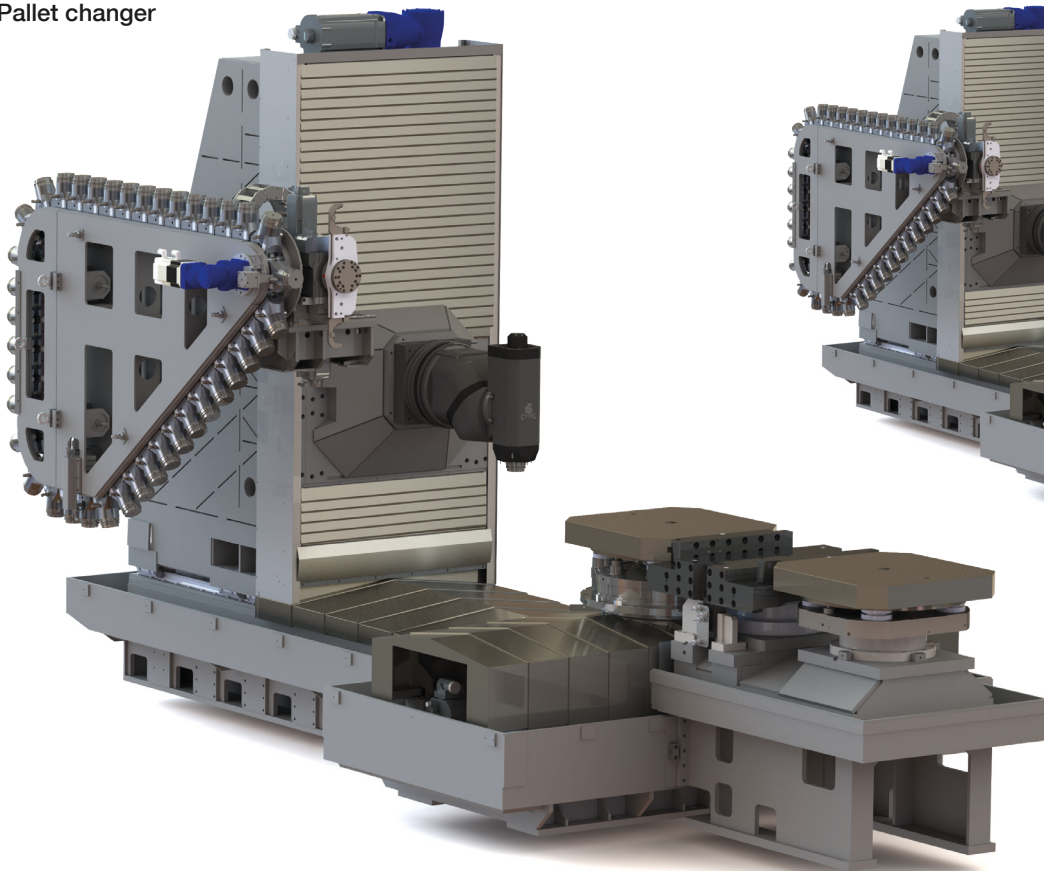
No compromises!

As swabian manufacturer of machine tools stands quality on the first position. Therefore STADLER KEPPLER machines will only be assembled in the production location in 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.

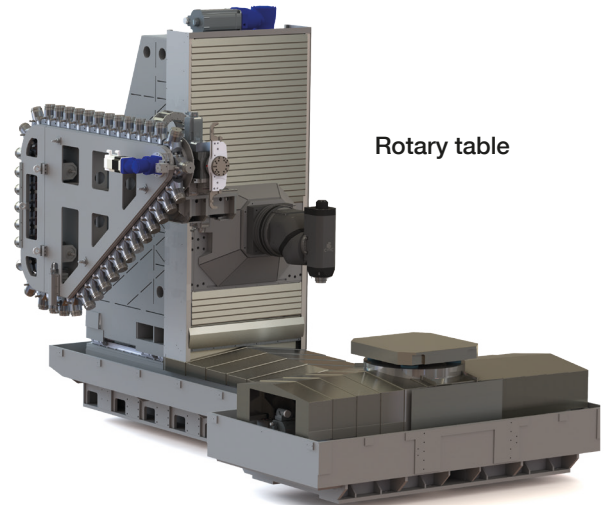
Which philosophy do you prefer?

If high dynamic milling or heavy machining, through a selection of the milling units, the HDC 1250 is universally useable and perfectly fitted for all kind of machining operation.

Pallet changer



Rotary table

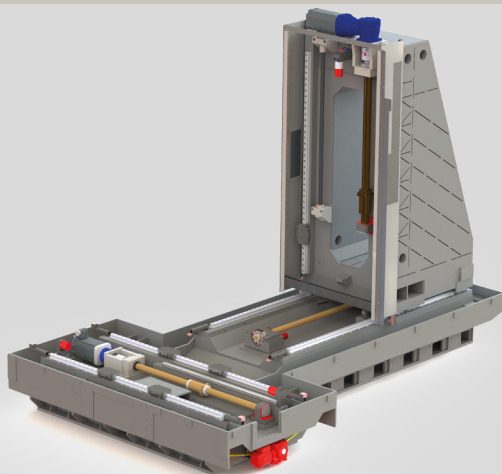


Modul construction kit HDC 1250

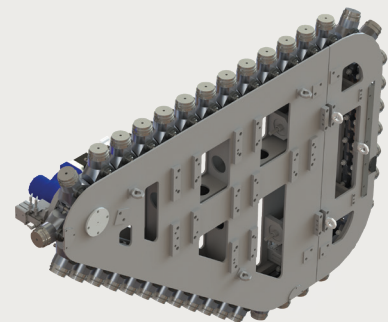
The termo-symmetric base construction as well as with mineral cast damped Y-stand and Z-slide offer excellent stability for high dynamic machining. Therefore the HDC 1250 is fitted best for heaviest machining and excellent processing quality.

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

Base unit

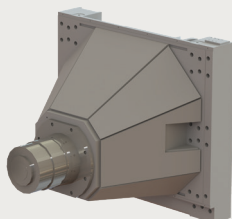


Tool magazine

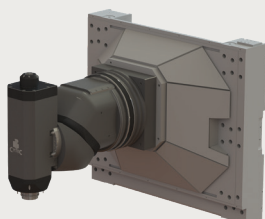


Chain magazine
40 / 60 / 80 / 100 tools
HSK100 / SK50

Milling unit

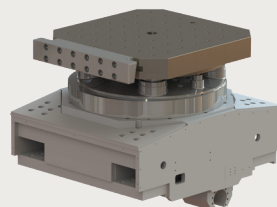


Horizontal spindle

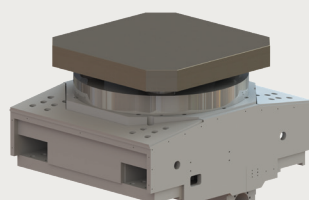


2-axis-milling head

Work piece carrier

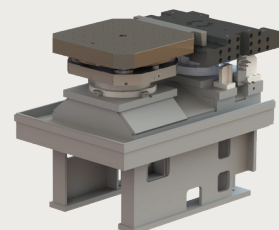


Rotary table with pallet

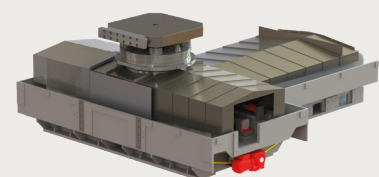


Rotary table with plate field

Loading unit



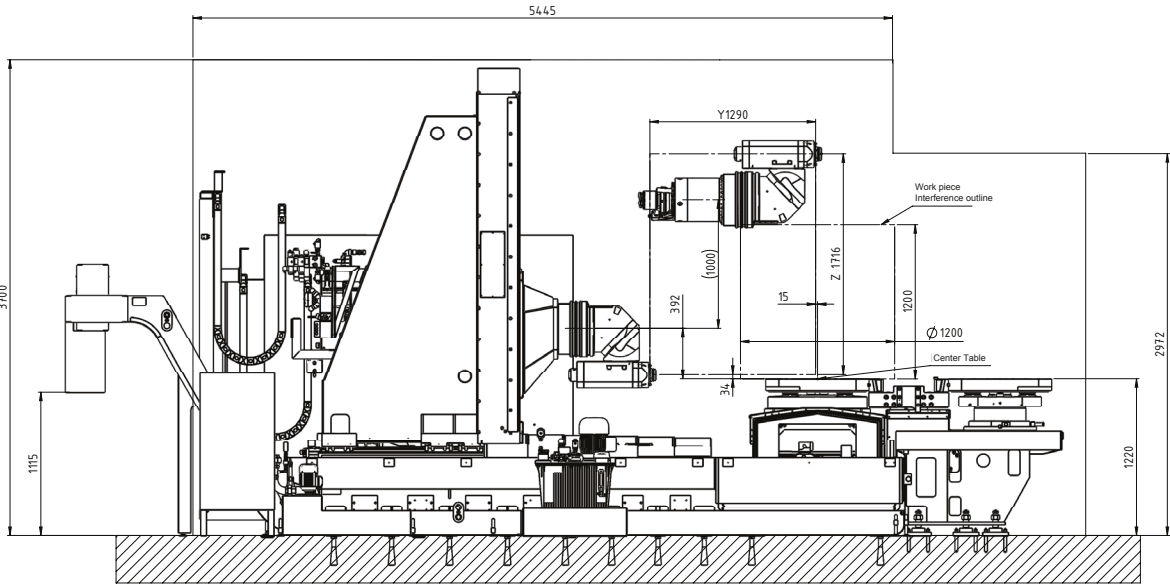
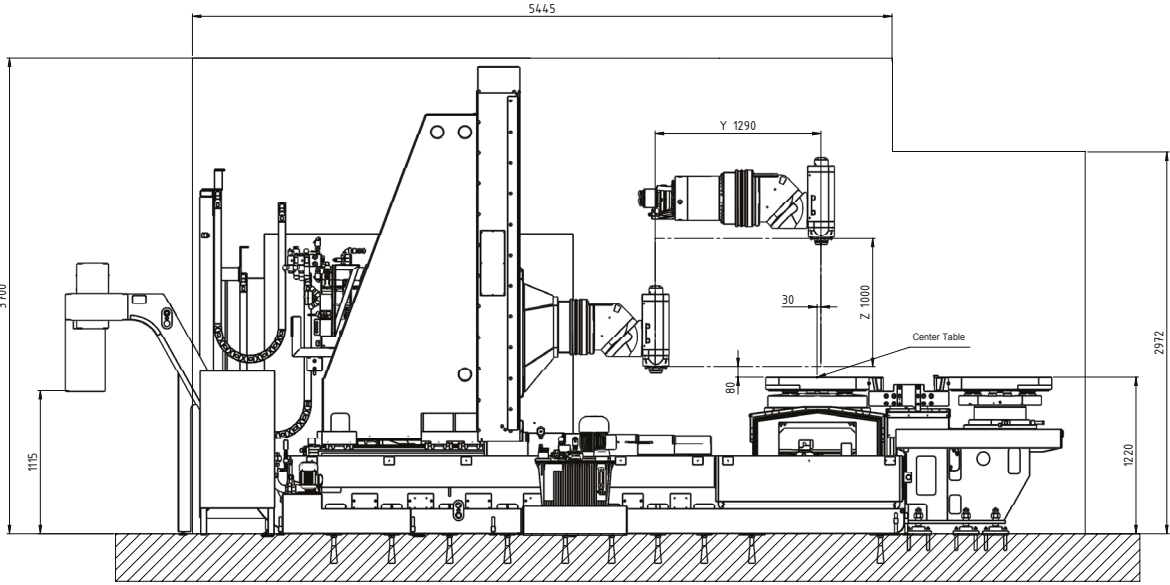
Loading site with pallet
changer

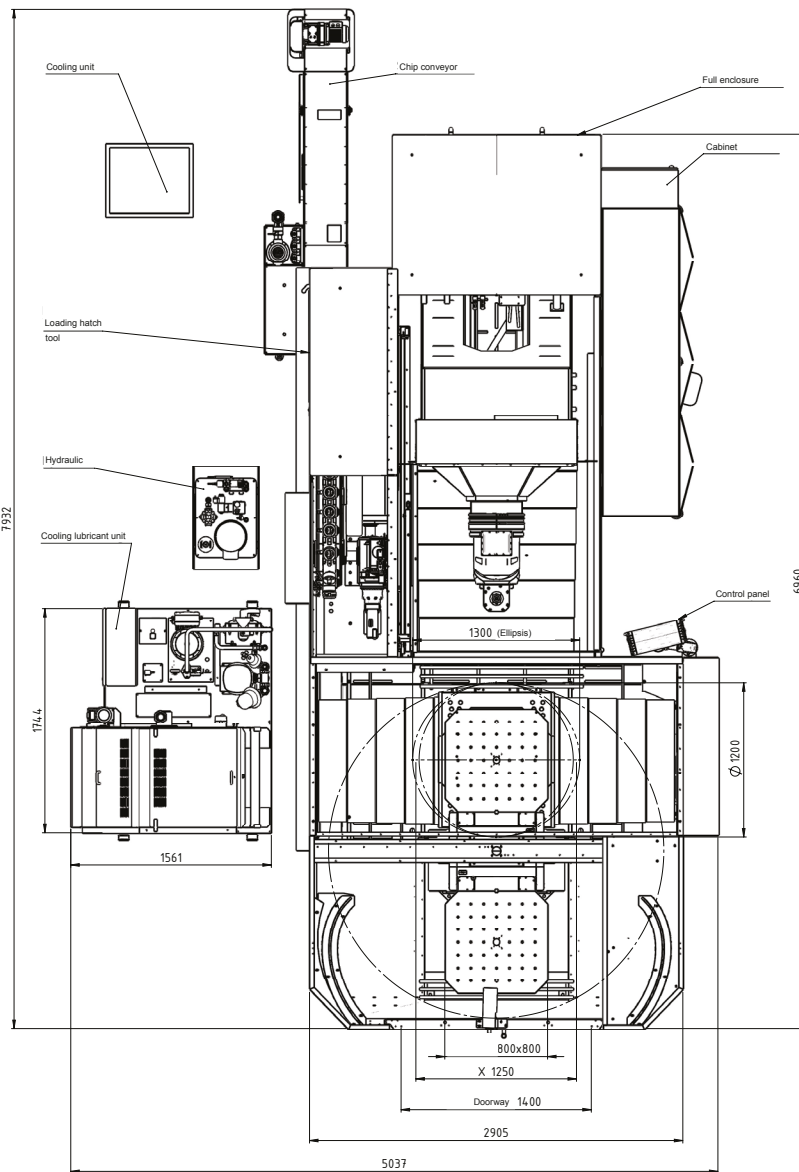


Direct loading

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 3 t
- Chip conveyor in Y-bed (upgradeable)
- 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
- Horizontal gear spindle with up to 2.500 Nm
- Rotary table with customer specific dimensions
- Cooled bearing seat
- Kinematic measuring of the rotary axis
- Special designs according to customer specification

uction ever

Machine table

- Rotary table with maintenance free torque drive
- high load up to 3 t
- Multi-side machining in only one clamping
- beneficial chip drop at horizontal roughing

simultaneous 5-axis machining

High rapid traverse speeds up to 50 m/min

Milling head

- 1-axis milling head (S6) 525 Nm HSK 100
- 2-axis milling head (S6) 220 Nm HSK 100
- 2-axis milling head (S6) 140 Nm HSK 100 / HSK 63
- Horizontal spindle (S6) 526 Nm HSK 100
- additional spindle-, head-types according to customer specifications

Direct measurement system

Tool magazine

- full automatic machining with 40/60/80/100 tools
- Optional up to 800 mm long tools

Mineral cast damped Y-stand and Z-slide

- Excellent stability for high dynamic machining

Guiding system (X-, Y-, Z-axis)

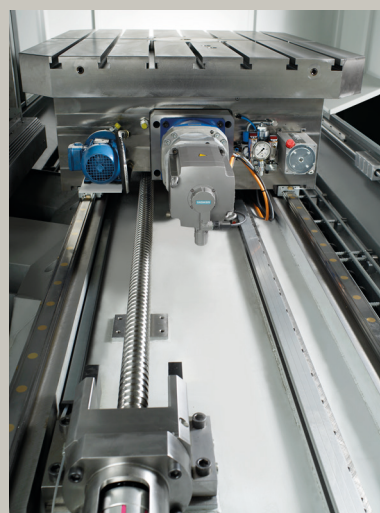
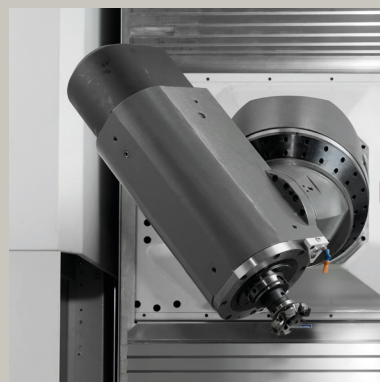
- Roller-linear guidance system preclamped, central lubricated
- | | |
|-------------------|--------|
| Size X, Y, Z | 55 |
| Carriage (X-axis) | 6 pcs. |
| Carriage (Y-axis) | 4 pcs. |
| Carriage (Z-axis) | 4 pcs. |

Axle drive (X-, Y-, Z-axis)

- Precision ball screw, preclamped, central lubricated
- | | |
|----------------------------------|---------|
| Diameter x gradient (X-, Y-axis) | 60 x 40 |
| Diameter x gradient (Z-axis) | 80 x 40 |

Standard

- Water cooled direct drive motor
- Water cooled cabinet with central cooling unit (maintenance free)
- Y-axis prepared for retro fitting chip screw



Control, operation and maintenance

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

Dynamic und efficiency

- Latest installation technique
- Best accessibility
- Minimal maintenance effort
- Long life cycle
- Standardized user interface
- Solid machine technique



Siemens 840 D SL



Heidenhain TNC 640

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

Impressive data

TECHNICAL DATA

PALLET CHANGER

ROTARY TABLE

Working range		
X-axis (mm)	1.250	1.250
Y-axis (mm)	1.290	1.290
Z-axis (mm)	1.000	1.000
Machine table		
Table size (mm)	800 x 800	800 x 800
Interference cycle	Ø 1.200	Ø 1.400
Load capacity (kg)	1.250 (opt. 2.000)	1.500 (opt. 3.000)
Pallet change time (s)	13	-
Feed rate		
max. rapid traverse speed X/Y/Z (m/min)	50	50
max. axis acceleration X/Y/Z (m/s ²)	5	5
max. feed force X/Y/Z (N)	15.000	15.000
2-axis-NC-milling head - technical data		
Slewing range A-axis	+ - 185°	+ - 185°
Slewing range B-axis	+ - 200°	+ - 200°
Main drive motor spindle HSK100 / SK50		
Rated power S1 / S6 (kW)	34 / 43	34 / 43
Rated torque S1 / S6 (Nm)	160 / 220	160 / 220
max. rotational speed (rpm)	10.000 (16.000)	10.000 (16.000)
Horizontal spindle - technical data		
Main drive motor spindle HSK100 / SK50		
Rated power S1 / S6 (kW)	50 / 65	50 / 65
Rated torque S1 / S6 (Nm)	405 / 526	405 / 526
max. rotational speed (rpm)	8.000	8.000
Option:		
Rated power S1 / S6 (kW)	80 / 100	80 / 100
Rated torque S1 / S6 (Nm)	1.270 / 1.590	1.270 / 1.590
max. rotational speed (rpm)	7.000	7.000
2-axis-NC-milling head - technical data		
Slewing range A-axis	+ - 185°	+ - 185°
Slewing range B-axis	+ - 200°	+ - 200°
Main drive motor spindle HSK100 / HSK63		
Rated power S1 / S6 (kW)	42 / 55	42 / 55
Rated torque S1 / S6 (Nm)	127 / 140	127 / 140
max. rotational speed (rpm)	16.000	16.000
Tool magazine - Chain		
Tools	40 / 60 / 80 / 100	40 / 60 / 80 / 100
Tool change time (s)	16	16
Max. tool length HSK100 / SK50 (mm)	450 / 800	450 / 800
Rack magazine < 100 tools according to customer specification		
Tool change time (s)	16	16
Control		
Path control	Heidenhain TNC 640	Heidenhain TNC 640
Optional	Siemens 840D SL	Siemens 840D SL



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



STADLER KEPPLER MASCHINENBAU GMBH

Max-Eyth-Straße 9
72793 Pfullingen (Germany)
Tel: +49 7121 9776 0
Fax: +49 7121 9776 45
info@stadler-kepler.de
www.stadler-kepler.de