

PRIMINER

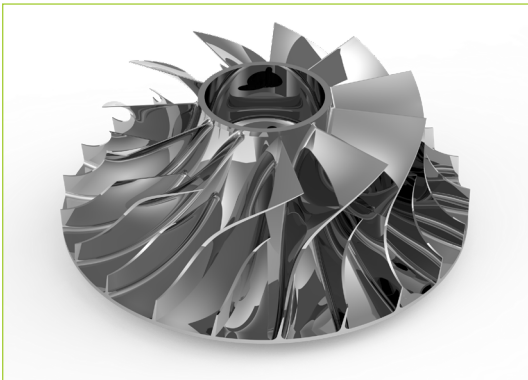
U800-5X

5 AXIS GANTRY TYPE MACHINING CENTER

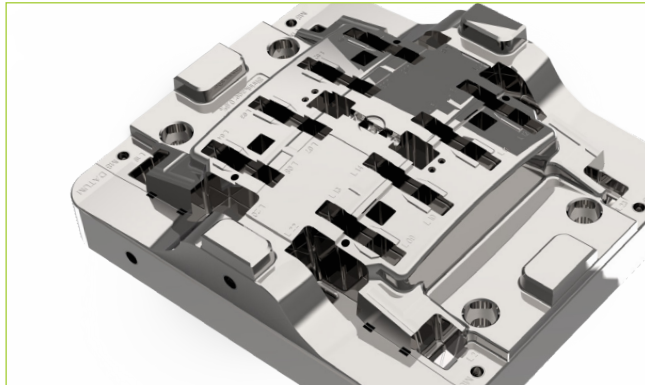
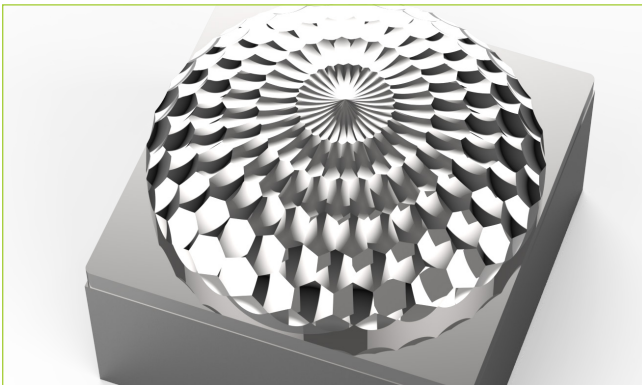
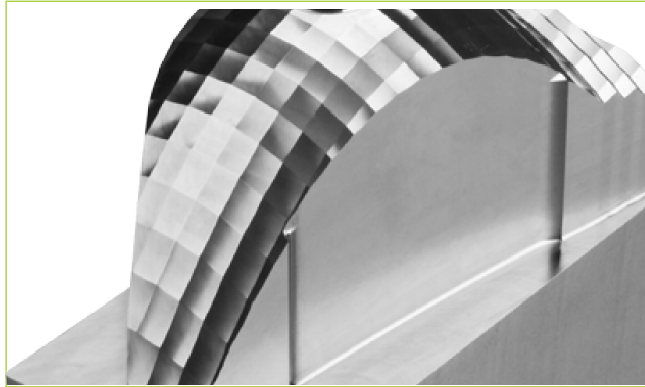
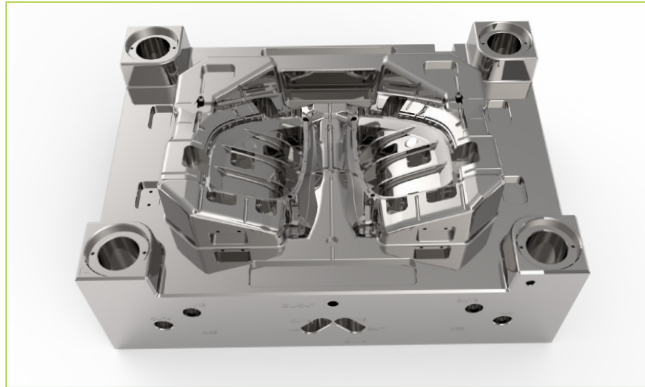
High speed, high efficiency, high precision



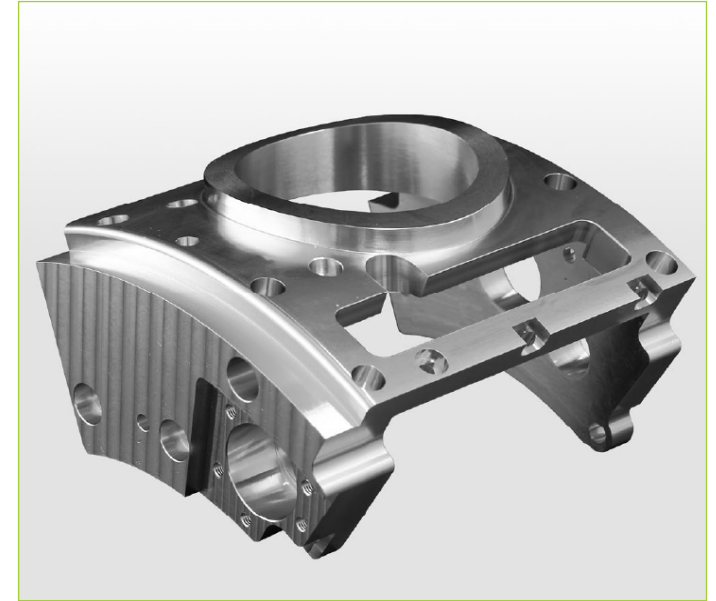
Aircraft Applications



Automotive Applications



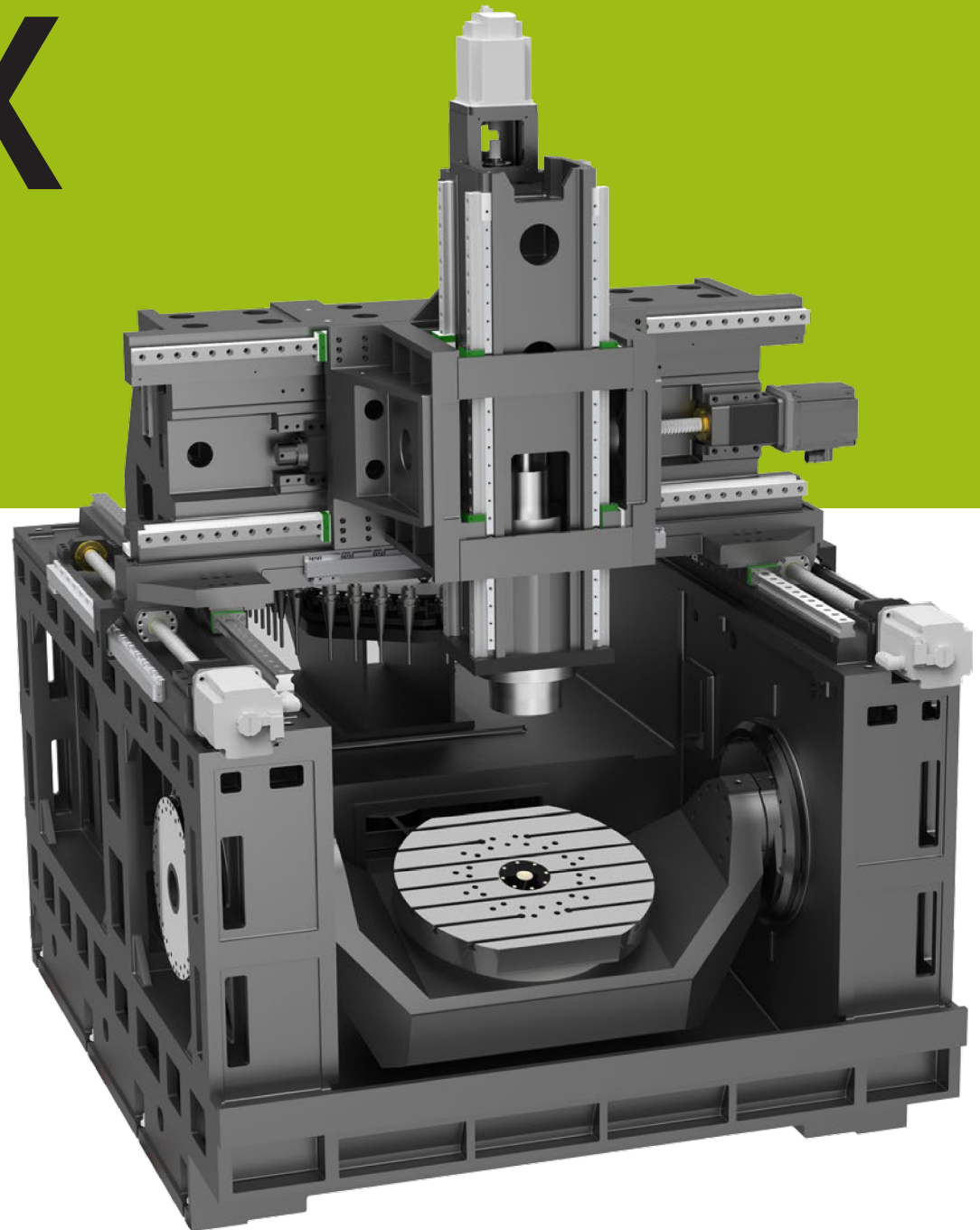
High-precision Applications



U800-5X

Gantry Type Double Column Structure Design

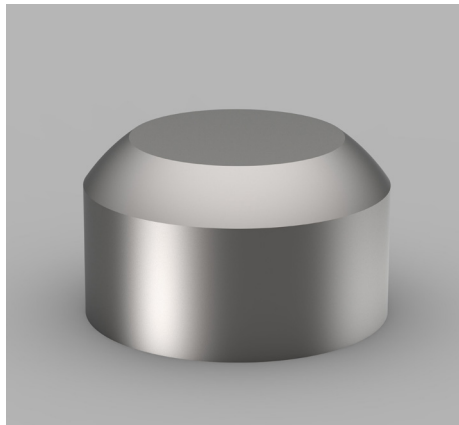
- The overhead integrated machine construction design allows operators to easily work in machining area.
- The X/Y/Z moving components are completely separated from the cutting area, no workpiece loading influence and ensuring best cutting performance.
- Dual ballscrew drive technology from Europe provides fast move feed and excellent dynamic performance.
- A/C axes are driven by dual direct drive (DD) motors, featuring zero backlash and no mechanical wear, ensuring long-term precision stability.
- The A/C rotary table is supported by the vertical walls of the machine base, offering high rigidity, high load capacity, and high accuracy for heavy-duty cutting.
- Three-axis direct measuring system with linear scales, rotary encoders as standard accessories of A/C axes.
- Max. cutting travel within same layout space.



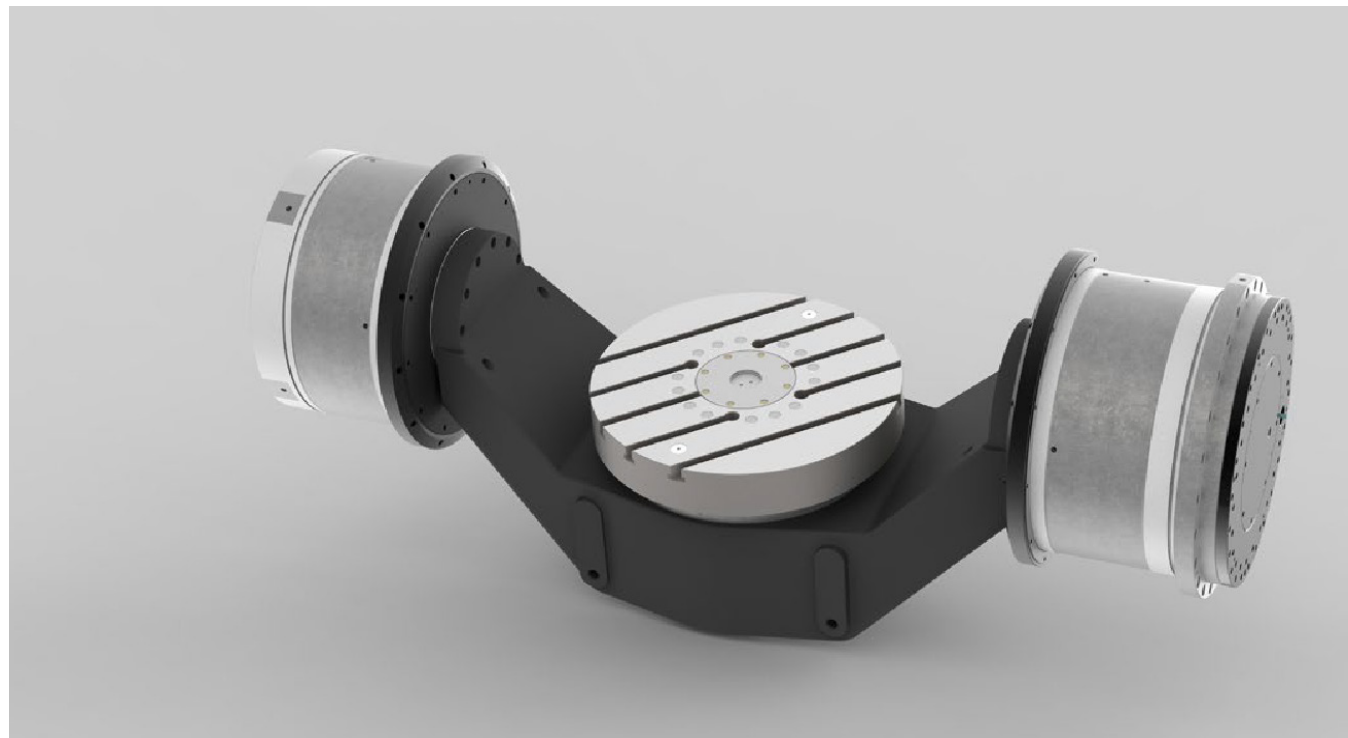
High-precision 5 Axis Rotary Table

- A/C axis with dual DD motor drive device
- A/C axis with Max. speed :100/100 rpm (U800-5X)
100/1000rpm (U800T-5X)
- A axis travel +30°~ -110°
- C axis travel ±360°

Machining capability



- Machining capability
- Max. workpiece diameter 1000mm
- Max. workpiece height 700mm
- Max. workpiece weight: 1200kg (U800-5X)
800kg (U800T-5X)



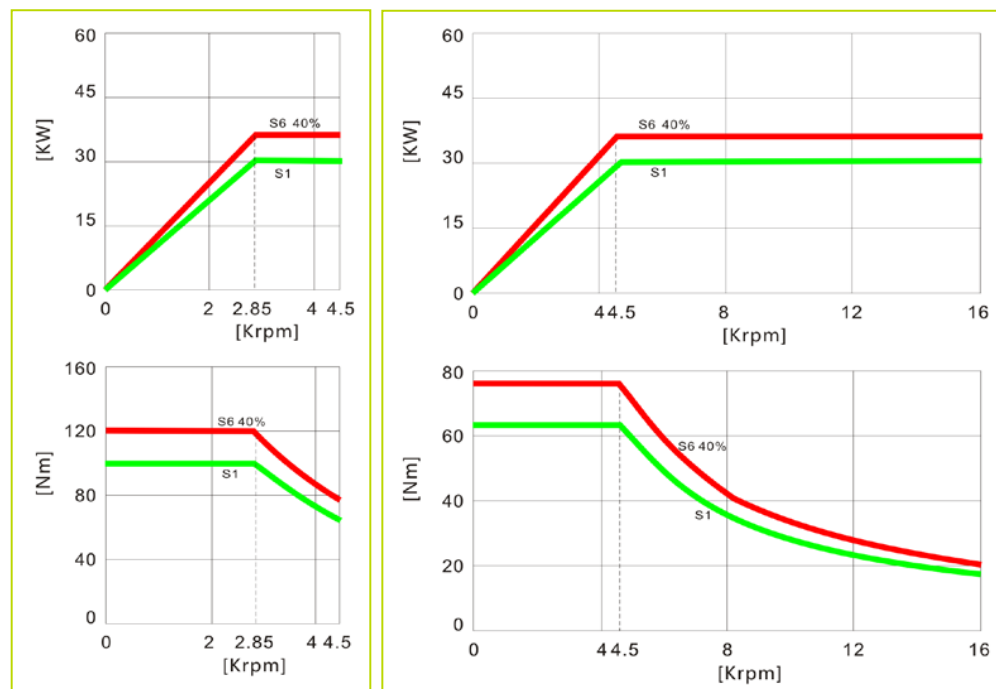
Standard with 60 pockets tool changer

- Max. tool length 300mm
- Max. tool diameter 70/120 mm (next release)
- Max. tool weight 8kg



Torque Diagram

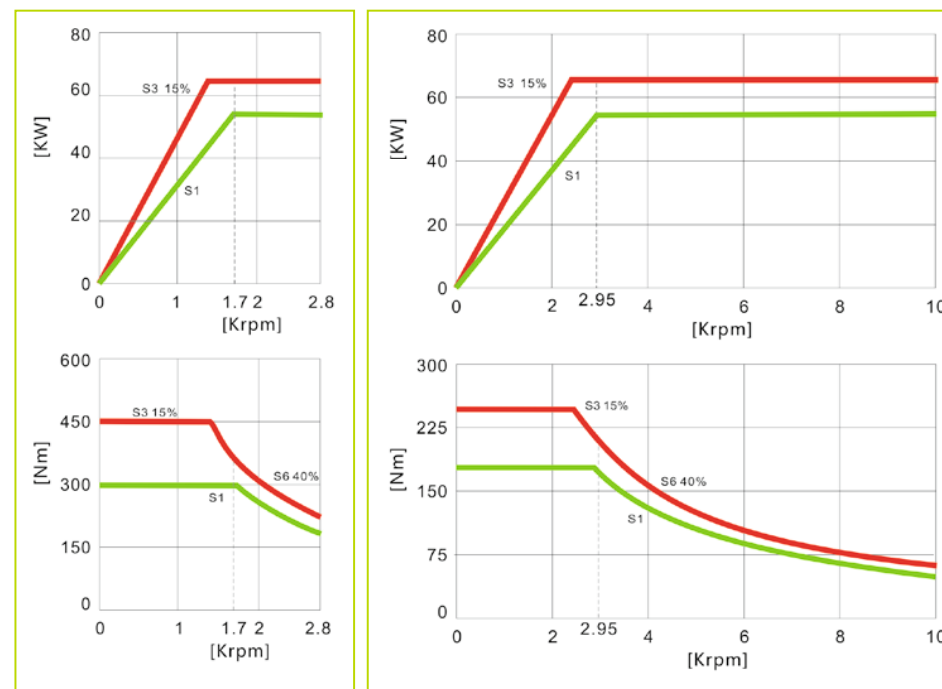
HSK-A63 · 16000 rpm



Y connection 4500 rpm
30/36 kW 100/120 Nm

△ connection 16000 rpm
30/36 kW 63.6/76.3 Nm

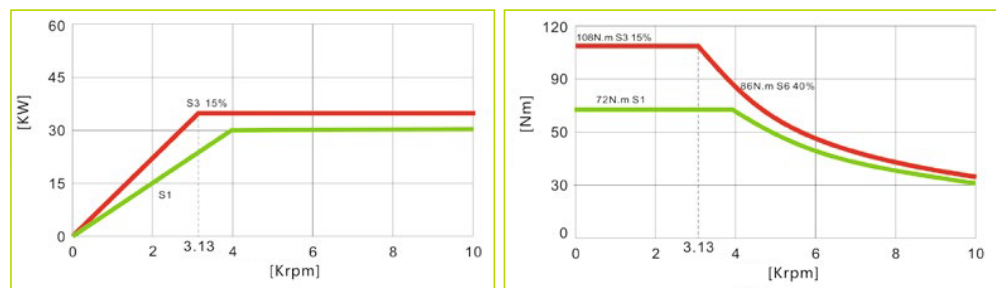
HSK-A100 · 10000 rpm



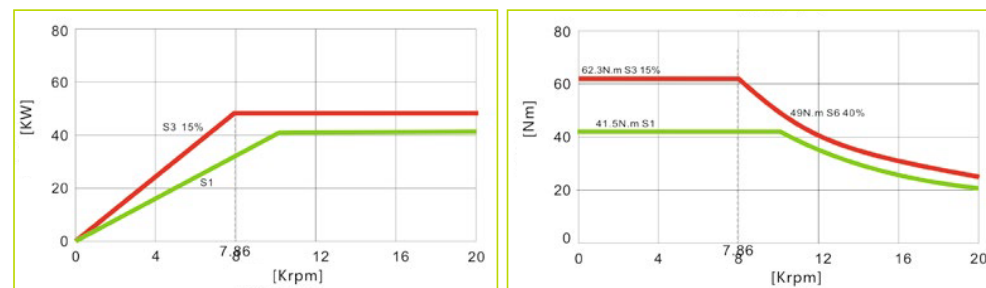
Y connection 2800 rpm
54/65 kW 300/360 Nm

△ connection 10000 rpm
54/65 kW 174.8/210 Nm

HSK-A63 · 20000 rpm



Y connection 10000 rpm
30/36 kW 72/86 Nm



△ connection 20000 rpm
42/51.4 kW 41.5/49 Nm



HEIDENHAIN TNC 640

The TNC contouring control
for milling and milling-turning machines

Key features:

Intelligent-Dynamic Precision Machining

- Dynamic Collision Monitoring (DCM)
- Dynamic Efficiency
- Active Chatter Control (ACC)
- Adaptive feed control (AFC)
- Machine any contour slot with trochoidal milling

Fast and reliable machining at high contour fidelity

- Optimal tool guidance by the TNC 640

Programming, Editing, Testing and Automated machining

- A full range of possibilities with the TNC 640
- Graphical support in any scenario
- Straightforward function keys for complex contours
- Programing free contours and Data Matrix codes
- Easy calibration of rotary axes with Kinematics Opt

Tool measurement and Workpiece measurement

- Measuring length, radius, and wear inside the machine
- Setup, preset setting, and measuring with touch trigger probes
- Machining and measuring 3-D contours
- The TNC 640 makes setup easy

Open to outside information

- Processing CAD files with the TNC 640
- The TNC 640 programming station
- Uniformly digital job management with Connected
- MachiningMachining and measuring 3-D contours
- The TNC 640 makes setup easy

SIEMENS SINUMERIK ONE

Platforms and digitalization drive innovations

Key features:

- Reduction of time to market
- Further individualization in mechanical engineering
- High quality and best possible availability
- Defined precision and increased productivity
- Safety of man and machine and security of individual property in the digital age
- High-performance processor and communication technologies
- Scalable intelligent control and drive technology
- Best safety and security standards
- Innovative digital engineering

An integrated solution along the entire value chain raises new potentials for machine builders and users

- The digital native CNC
- Development from VIRTUAL to REAL
- Scalable in VIRTUAL and REAL
- Intelligent and highly productive
- Digital Transformation of machine tools
- Maximize productivity
- Innovate faster
- Excite digitalization
- Discover a new way of thinking

Platforms and digitalization drive innovations

- Top Speed plus
- Intelligent Load Control
- Intelligent Dynamic Control
- Interpolation turning
- Configured stop
- Angle head adapter
- Identify tool demand



<Option>

BLUM MEASURING SYSTEM

Universal High-Speed touch probe with multidirectional measuring mechanism

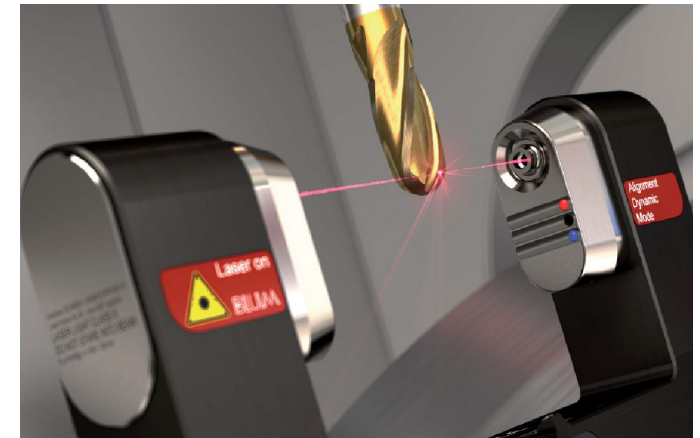
- Detection of workpiece position
- Correction of workpiece orientation
- Thermal compensation of the machine tool
- Contour measurement

Your benefit:

- Measuring speed up to 3 m/min
- Precise, non-lobing touch characteristics
- Use of two measuring systems with one IR receiver
- Extended battery life
- Precise measurement even with coolant
- Proven and robust design

Highlight:

- Proven high-precision laser measuring system
- Non-contact, optical tool measurement;
- 100 % reliable due to BLUM protection system



Standard Configuration

- Fully enclosed splash guard
- Built-in Spindle 16000rpm, HSK A63 (U800-5X)
- Built-in Spindle 15000rpm, HSK T63 (U800T-5X)
- 60 pockets tool changer
- Linear scales on X/Y/Z axis
- Rotary encoder on A/C axis
- Direct Drive torque motor on A/C axis
- Dual drive system in Y axis
- Coolant system
- Cutting air blast device
- Air-conditioned electrical cabinet
- Rigid tapping
- Ethernet, CF card and USB interface
- Chain type chip conveyor
- Automatic lubrication system
- High precision spindle
- water cooler
- LED Working lamp
- End of program light
- Electronic Handwheel(MPG)
- Tool box and User Manuals
- Chip flushing system
- Coolant gun and air gun

Optional Configuration

- Built-in Spindle 20000rpm, HSK-A63 30/36 kW 72/86 Nm(U800-5X)
- Built-in Spindle 12000rpm, HSK-A63 37/44 kW 130/156 Nm(U800-5X)
- Built-in Spindle 10000rpm, HSK-A100 54/65 kW 300/360 Nm(U800-5X)
- 90 pockets tool changer(HSK-A63)
- 48 pockets tool changer(HSK-A100)
- Workpiece measuring system
- Tool measuring system
- Oil mist collector
- Minimum quantity lubrication system
- Coolant temperature control system
- CTS Coolant through spindle + ATS
- 200GB SSD expansion storage
- Load adaptive control(LAC)
- Kinematics with reference ball diameter 25mm
- Dynamic Collision Monitoring(DCM)
- Graphite machining

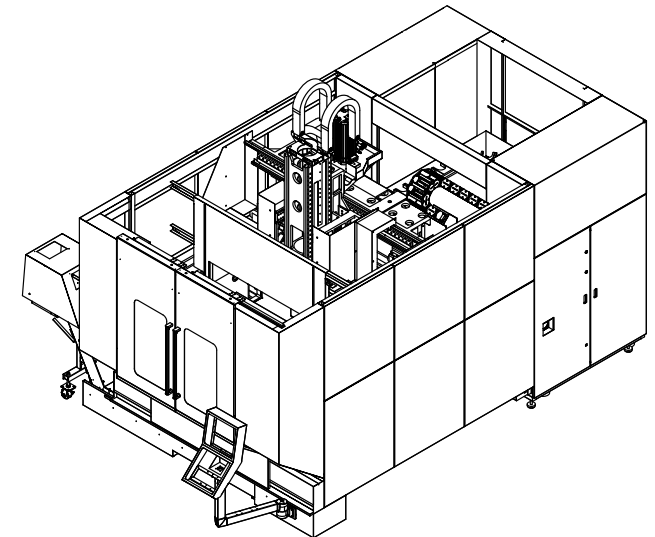
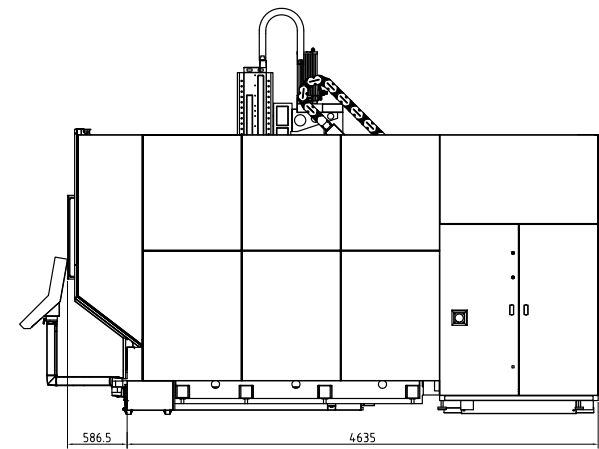
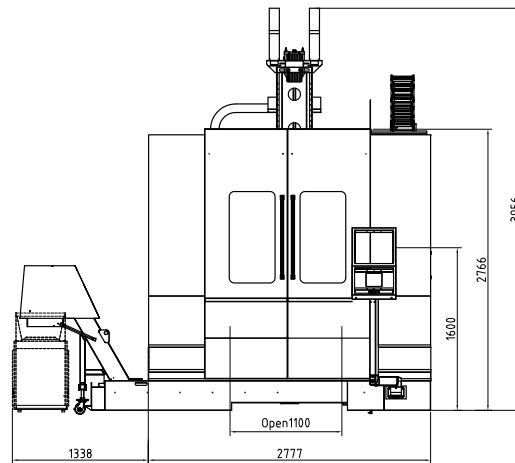
Specification

Table	U800 - 5X		U800T - 5X
Max. workpiece diameter	Φ 1000 mm		
Table Size	Φ 800 x 700 mm		Φ 800 mm
T slot (width* distance*number)	14 mm × 100 mm × 7		14 mm × 8
Max. load	1200 kg		800 kg
Travel			
X/Y/Z travel	1000 / 1100 / 600 mm		
A/C Travel	+30° ~ -110° / ±360°		
Spindle			
Spindle taper	HSK A63	HSK A100	HSK T63
Spindle motor power	30 / 36 kW	54 / 65 kW	30 / 36 kW
Spindle motor torque	100 / 120 Nm	300 / 360 Nm	100 / 120 Nm
Spindle speed	16000 rpm	10000 rpm	15000 rpm
Spindle nose to table	180-780 mm	190-790 mm	233-833 mm

Feed		
Rapid feed X/Y/Z	48/48/24 m/min [opt 24/24/24 m/min]	
Rotation speed A/C	100 / 100 rpm	100 / 1000 rpm
Cutting speed	1-12000 mm/min	
Tool changer		
No. of tools	60 pcs	
Max. tool length	300 mm	
Max. diameter	78 mm/150 mm(next release)	
Max. tool weight	8 kg	
Accuracy(VDI 3441)		
Positioning accuracy	0.008 mm (X/Y/Z); 6/4 arc-sec (A/C)	
Positioning repeatability	0.004 mm (X/Y/Z); 5/3 arc-sec (A/C)	
Machine weight and dimension		
Dimension(L×W×H)	4115 × 5870 × 3960 mm	
Weight	18000 kg	

Technical drawing of a platform scale with the following specifications:

- Capacity:** W=1200KG
- Platform Dimensions:** 1200mm (width) x 2000mm (length)
- Height Dimensions:**
 - Platform base height: 180mm
 - Vertical support height: 780mm
 - Maximum vertical support height: 1000mm
 - Leg height: 557mm
- Structural Details:**
 - Platform base width: 435mm
 - Platform base length: 500mm
 - Support leg diameter: $\phi 226$
 - Maximum support diameter: MAX $\phi 1000$
 - Platform base diameter: $\phi 800$
- Travel Dimensions:**
 - X Travel: 1000mm
 - Z Travel: 600mm





PRIMINER Solution



LEHMANN®



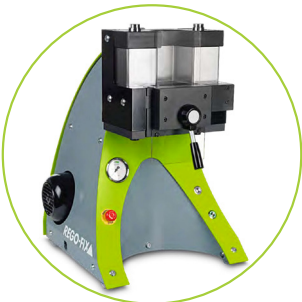
HAIMER®



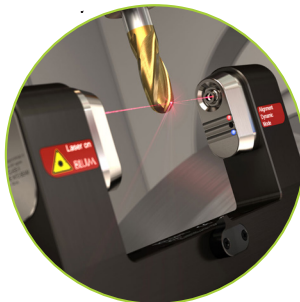
SCHUNK



JiZhuoBiao



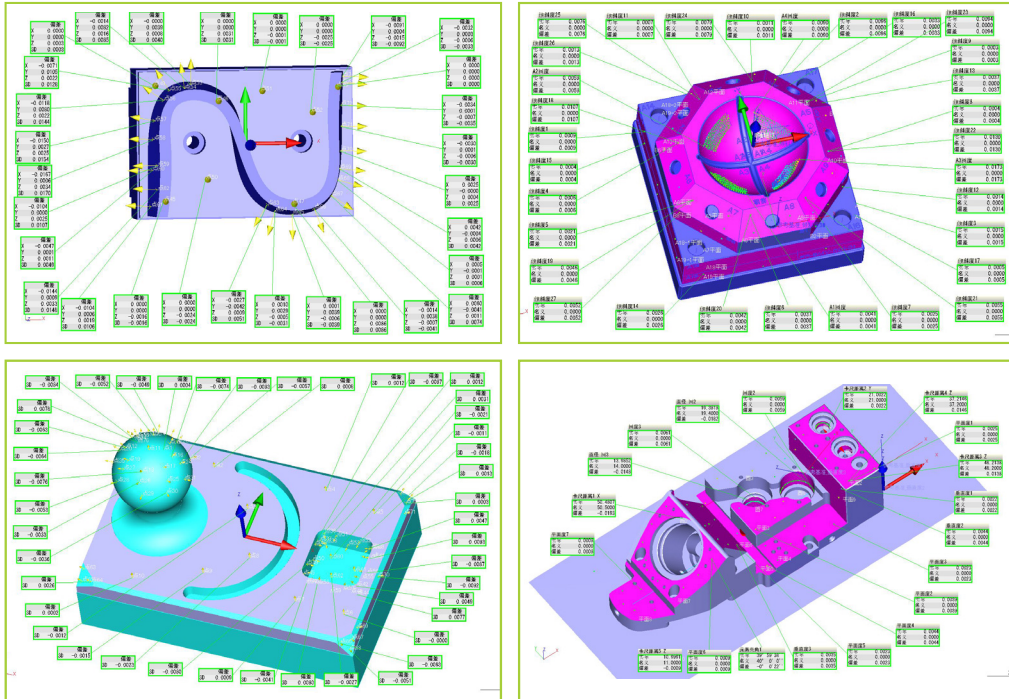
REGO-FIX▲



BLUM
focus on productivity



三坐标测量工件





202504