



PRIMNER

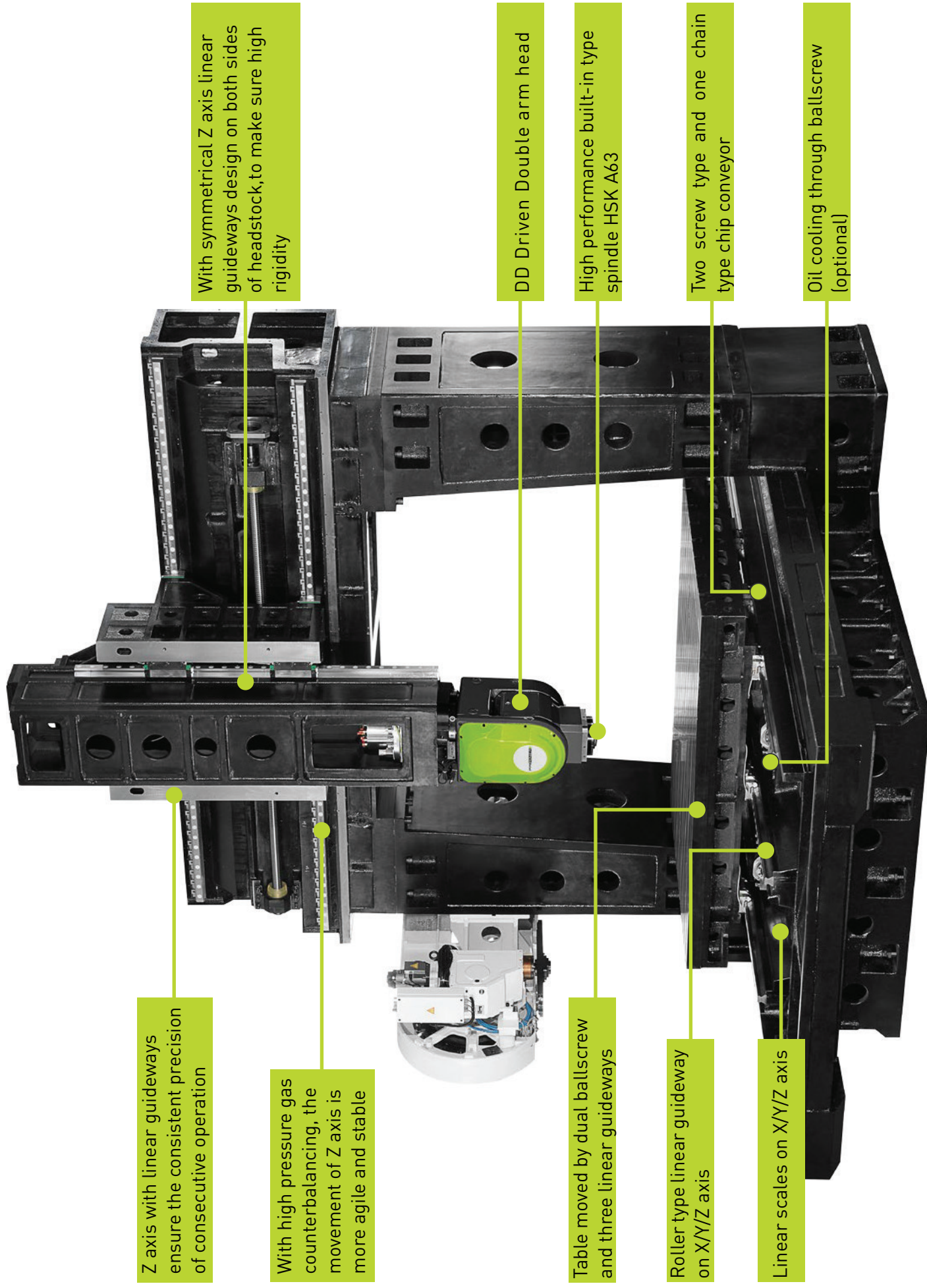
GT18-5X

5 Axis High Speed Double Column Center



Technical Specifications		GT18-5X
Table size		1800×1400 mm
X/Y/Z Travel		1900/1400/800 mm
X/Y/Z Rapid feed		24 m/min
B/C Max. speed		50 rpm
Spindle taper		HSK A63
Spindle speed		24000 rpm



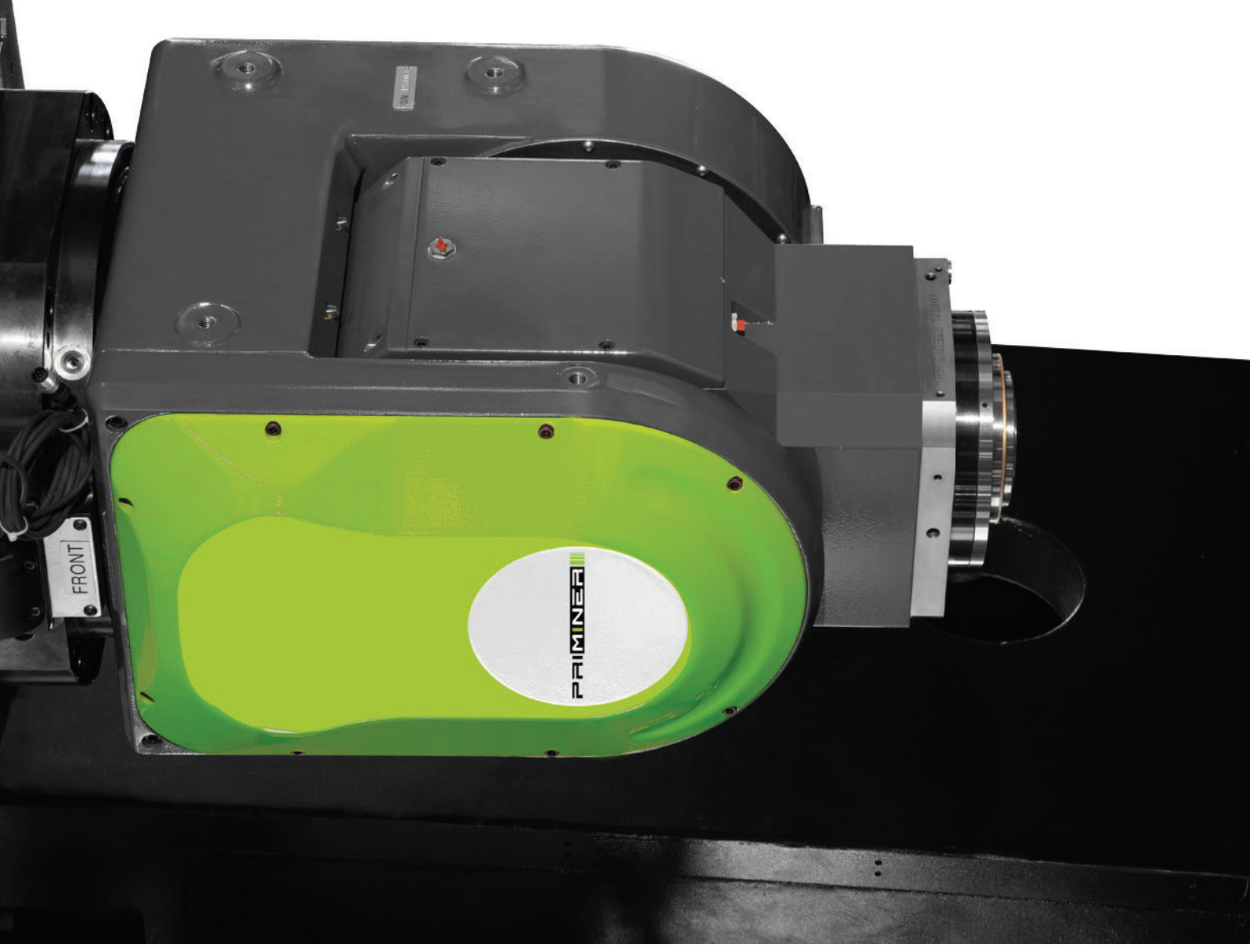


DD DRIVEN DOUBLE ARM HEAD

- Direct Drive motor on B/C axis
- B axis travel $\pm 108^\circ$
- C axis travel $\pm 270^\circ$
- B axis clamping torque 2000 Nm
- C axis clamping torque 3000 Nm

Standard spindle

- Built-in spindle HSK A63, 24000 rpm
- Spindle motor power 42/56.7 kW
- Spindle motor torque 68/90.2 Nm



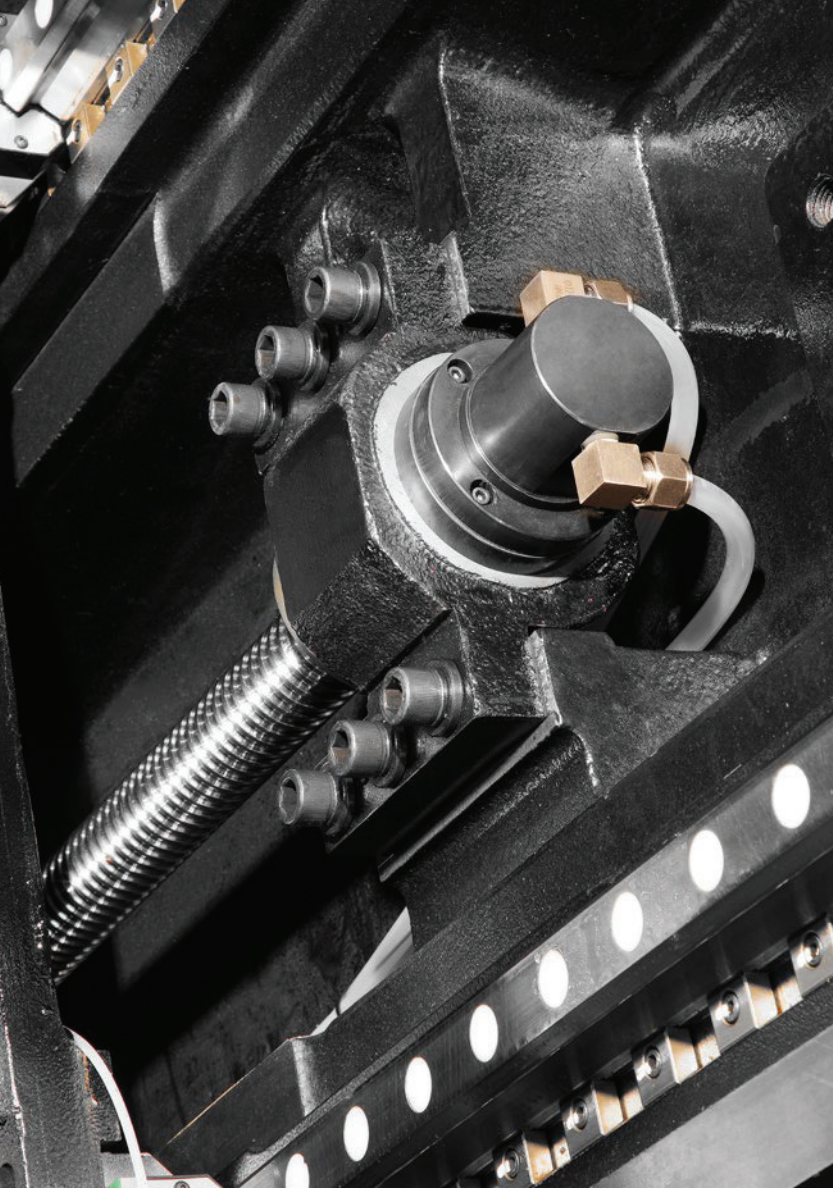
DUAL DRIVE TECHNOLOGY

Highlights

Dual drive system with two ballscrews and three linear guideways on Y axis to ensure the best dynamic performance

Ballscrew pairing ensure high accuracy

Dual linear scales



Oil cooling through ballscrew(optional)



Heidenhain linear scales on X/Y/Z axis

HIGH PRECISION

CHAIN TYPE TOOL CHANGER



- Tools can be loaded and unloaded during machining
- User-Friendly door and button make the loading and unloading of workpiece easier
- High production efficiency

Technical Specification

HSK A63

- Number of tools 60
- Max.tool length 300 mm
- Max.tool diameter $\Phi 78/\Phi 150\text{mm}$ (next release)
- Max.tool weight 8 kg



USER-FRIENDLY DESIGN



Rotatable operation panel

Allows users to operate at any angle and position.



Three doors design

Easy to clamp and measure workpiece, and confirm machining status.

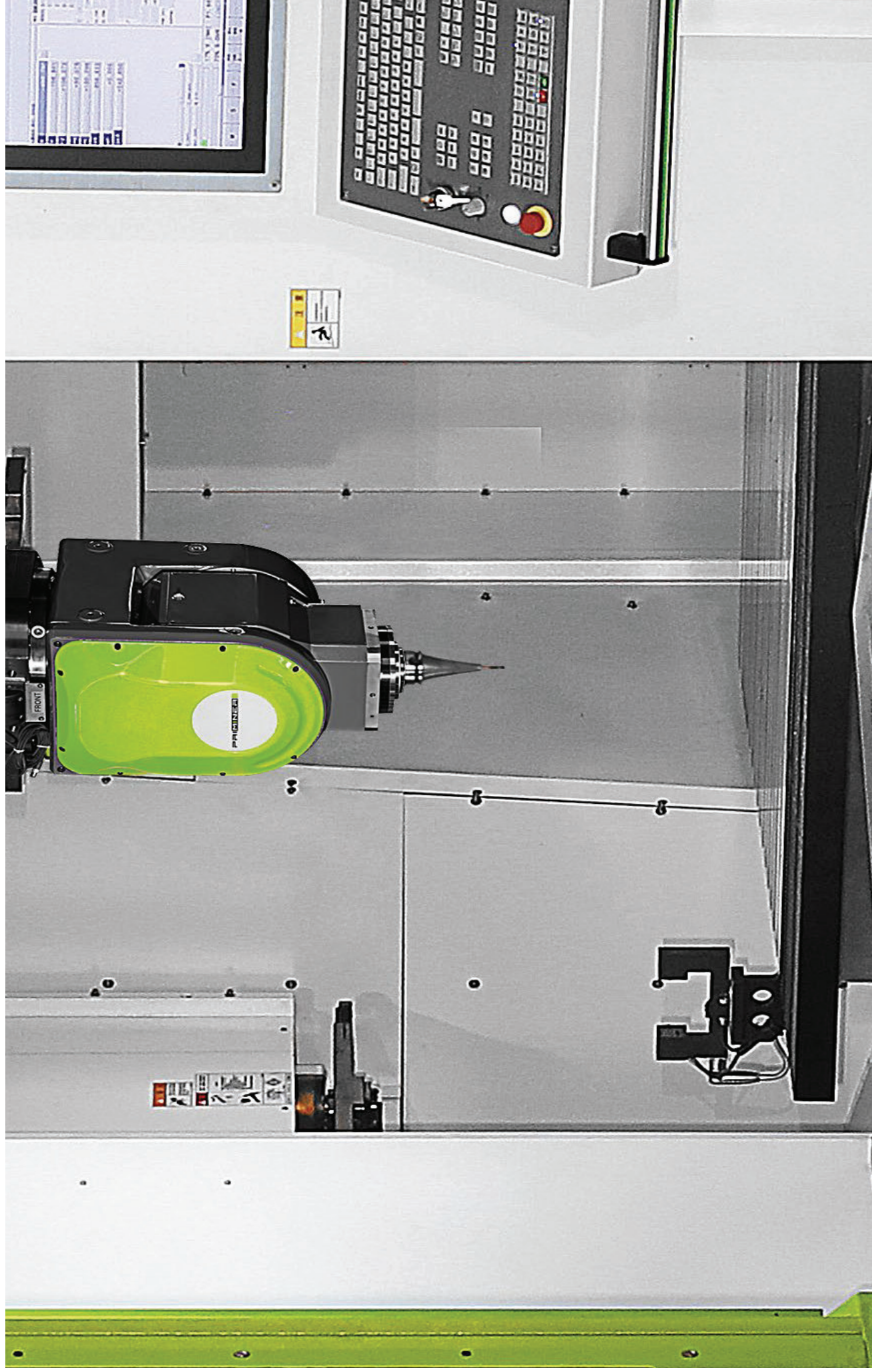


Front door with wider open

Make the loading/unloading of the workpiece more convenient.



**THE FRONT DOOR WITH WIDER OPEN MAKES THE LOADING/
UNLOADING OF THE WORKPIECE MORE CONVENIENT.**



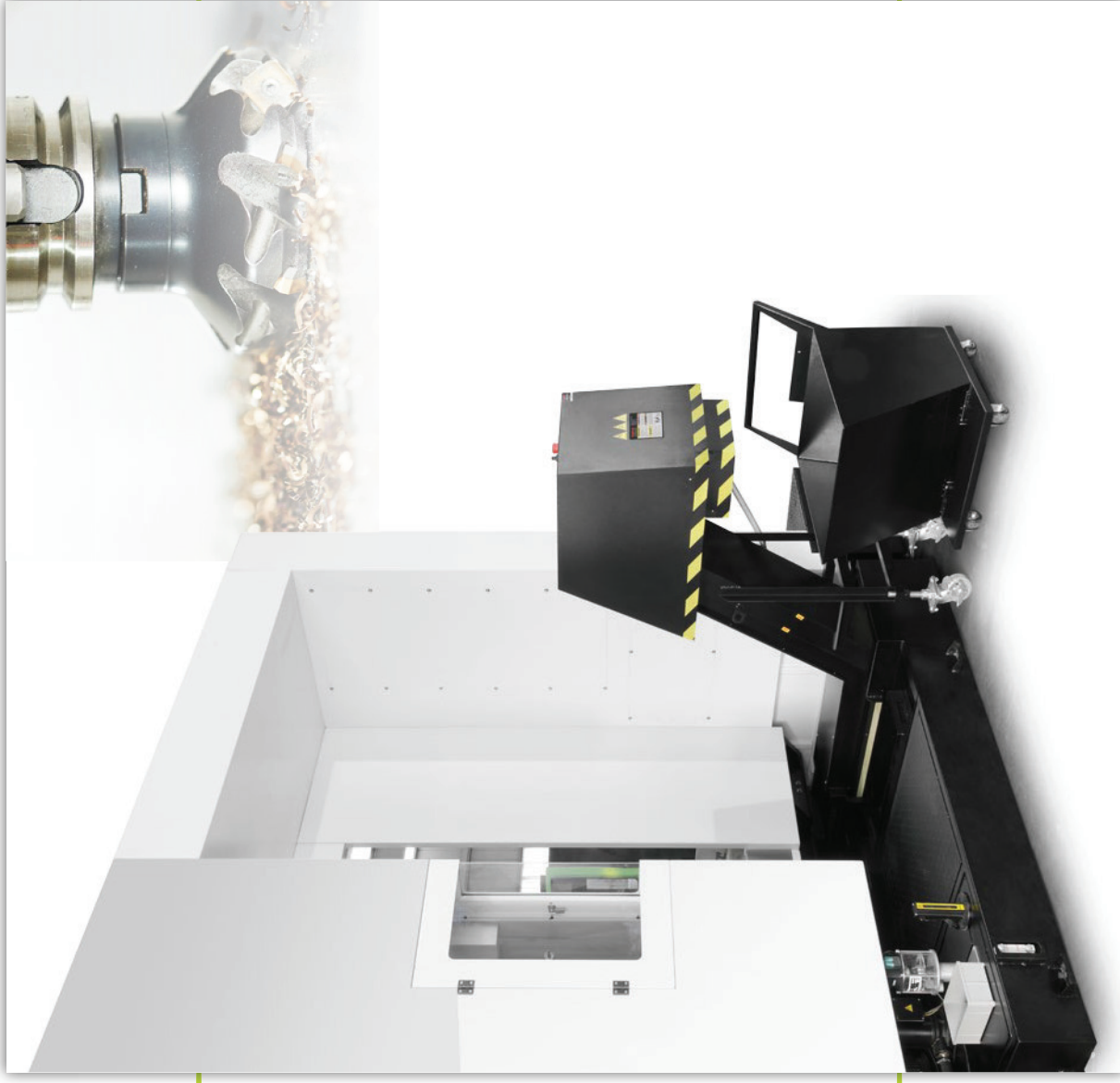
**ROTATABLE PANEL MAKES
OPERATION AT EVERY
CONVENIENT ANGLE.**



Efficient chip-removal

STANDARD WITH THREE CHIP CONVEYOR

Equipped with two screw type
chip conveyor and one chain
type chip conveyor



BLUM MEASURING SYSTEM

Universal High-Speed touch probe with multidirectional measuring mechanism

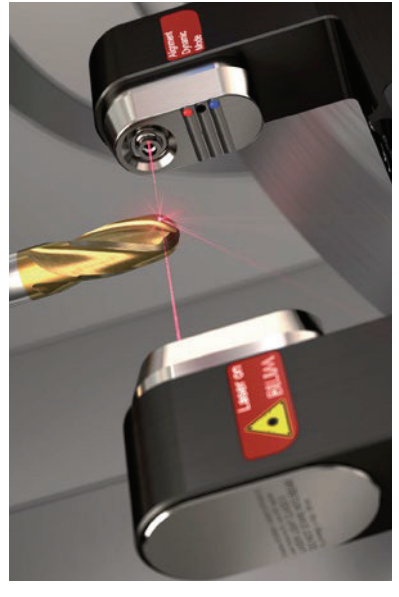
- ✓ Detection of workpiece position
- ✓ Correction of workpiece orientation
- ✓ Thermal compensation of the machine tool
- ✓ Contour measurement

Your benefit:

- ✓ Measuring speed up to 3 m/min
- ✓ Precise, non-lobing touch characteristics
- ✓ No-wear, optoelectronic measuring mechanism
- ✓ Use of two measuring systems with one IR receiver
- ✓ Extended battery life
- ✓ Precise measurement even with coolant
- ✓ Proven and robust design

Highlights

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



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
- ✓ Programming free contours and Data Matrix codes
- ✓ Easy calibration of rotary axes with KinematicsOpt

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 Machining
- ✓ Machining and measuring 3-D contours
- ✓ The TNC 640 makes setup easy



SIEMENS SINUMERIK ONE

Platforms and digitalization drive innovations

- ✓ 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



TECHNICAL SPECIFICATIONS

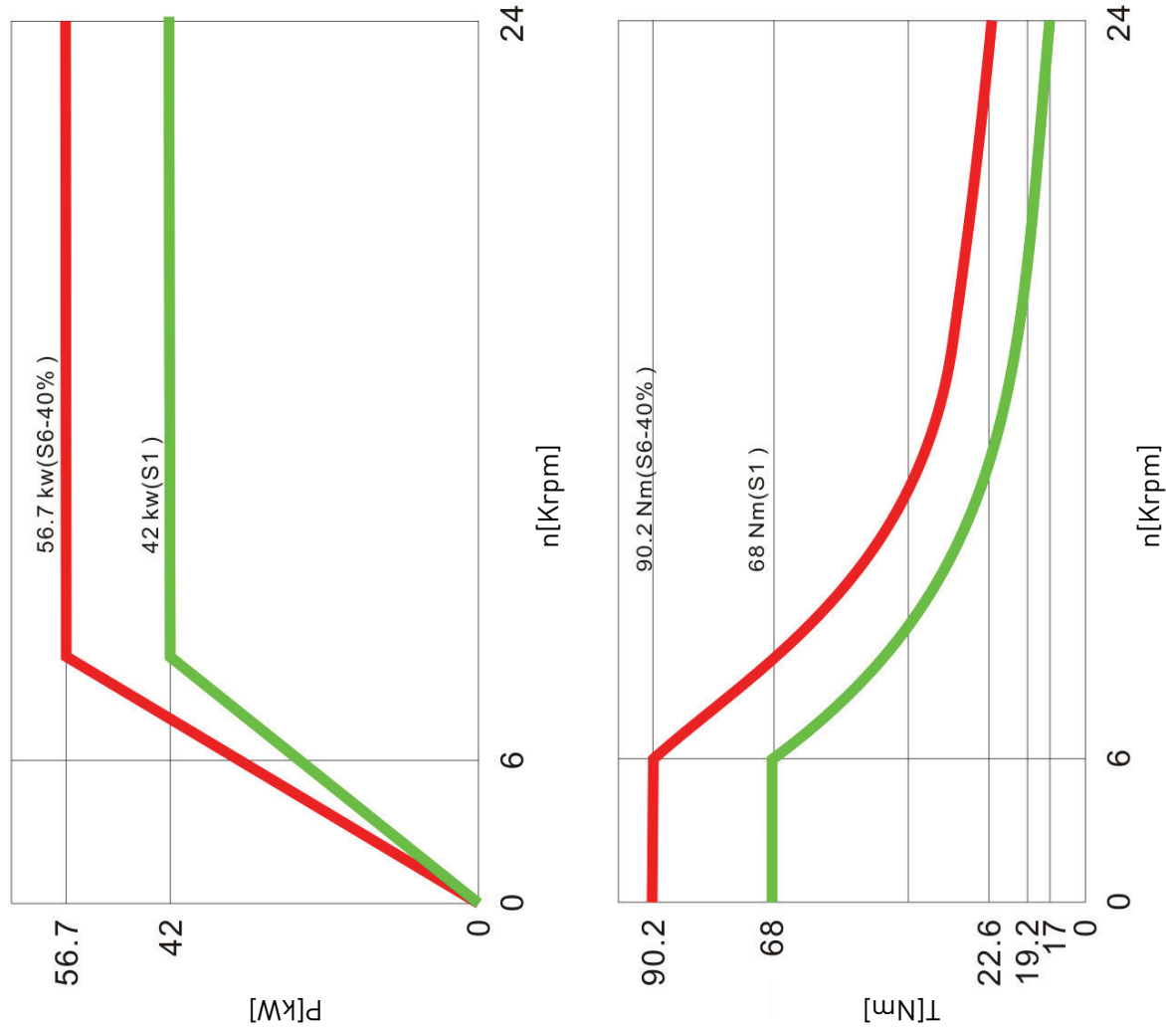
GT18-5X	
Table	
Table size	1800 x 1400 mm
T-slot(width x number x distance)	22 x 7 x 170 mm
Max.load	6000 kg
Travel	
X/Y/Z Travel	1900 / 1400 / 800 mm
B/C Axis	±108° / ±270°
Spindle nose to table	50 - 850 mm HSK A63
90° spindle center line to table	410 - 1210 mm
Distance between column	1960 mm
Spindle	
Spindle taper	HSK A63
Spindle motor power	42 / 56.7 kW
Spindle motor torque	68 / 90.2 Nm
Spindle speed	24000 rpm
Feed	
Rapid feed XY/Z	24 m/min
Cutting speed X/Y/Z	1-12000 mm/min
Max. speed B/C	50 rpm
Tool changer	
Number of tools	60
Max. tool length	300 mm
Max. tool diameter	Φ78 / Φ150 mm
Max. tool weight	8 kg
Accuracy(VDI 3441 Full travel)	
Positioning accuracy	0.010/0.010/0.008 mm(X/Y/Z); 6/8 arc-sec(B/C)
Repeatability accuracy	0.006 mm(X/Y/Z); 3/4 arc-sec(B/C)
Dimensions & Weight	
Dimensions	6160×4970×4840 mm
Weight	24000 kg

STANDARD /OPTIONAL CONFIGURATION

● Standard ○ Optional

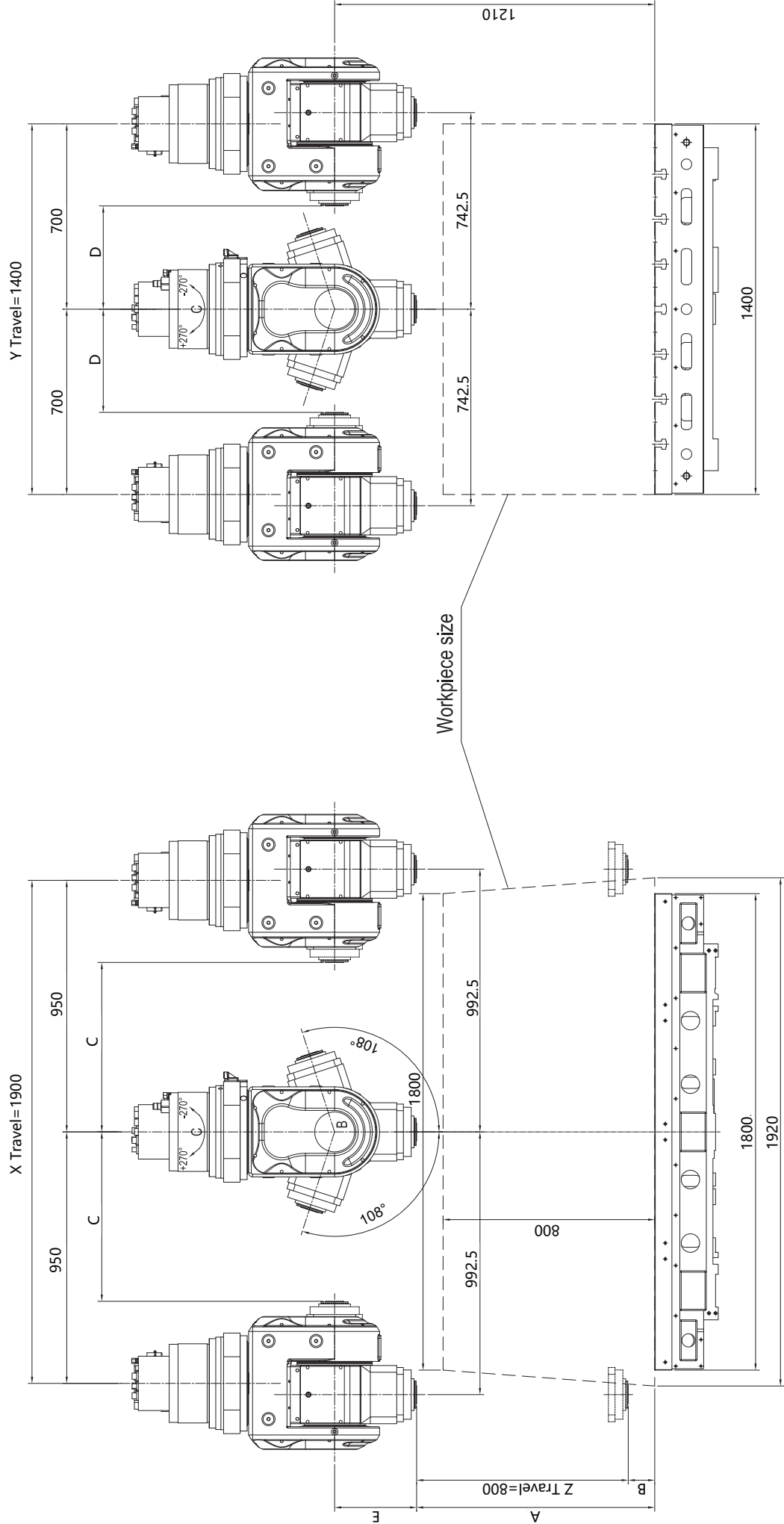
Configurations	Standard	Optional
Full enclosed splash guard	●	
Chip conveyor (two screw type and one chain type)	●	
Linear scales on X/Y/Z axes	●	
Oil-air lubrication system for spindle	●	
High precision spindle water cooler	●	
Built-in spindle HSK A63 24000rpm_42/56.7KW_68/90.2Nm,60 pockets tool changer	●	
Oil cooling through ballscrew		○
CTS Coolant through spindle+ATS		○
Oil mist collector		○
Tool probe		○
Workpiece probe		○
Coolant Cooling system		○
Oil skimmer		○
Kinematics		○
Dynamic Collision Monitoring		○
Extra 200GB SSD program memory		○
Rigid tapping	●	
Air-conditioned electrical cabinet	●	
Ethernet,CFcard and USB interface	●	
Automatic lubrication system	●	
Coolant system	●	
LED workinglamp	●	
End of program light	●	
Electronic handwheel	●	
Tool box	●	
Leveling bolts and blocks	●	
Coolant gun	●	
Air gun	●	
User Manual	●	

TORQUE DIAGRAM



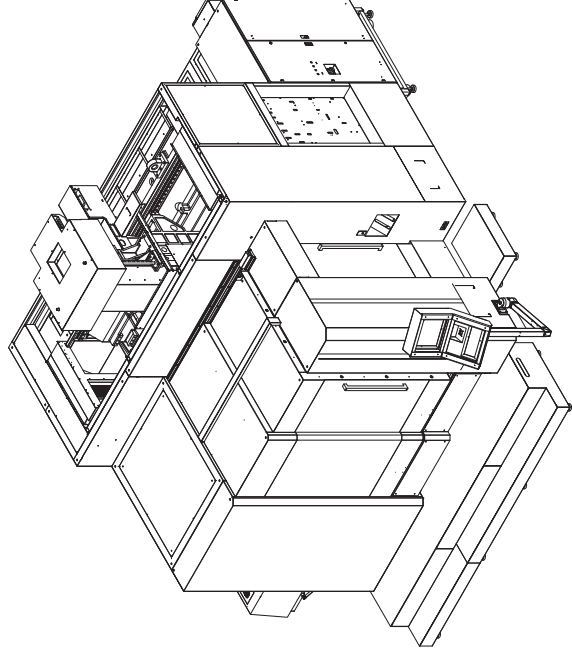
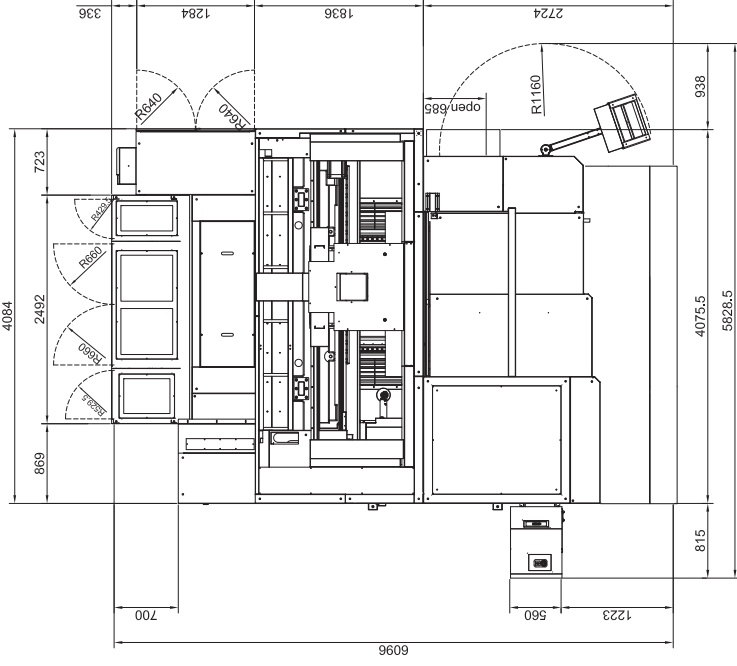
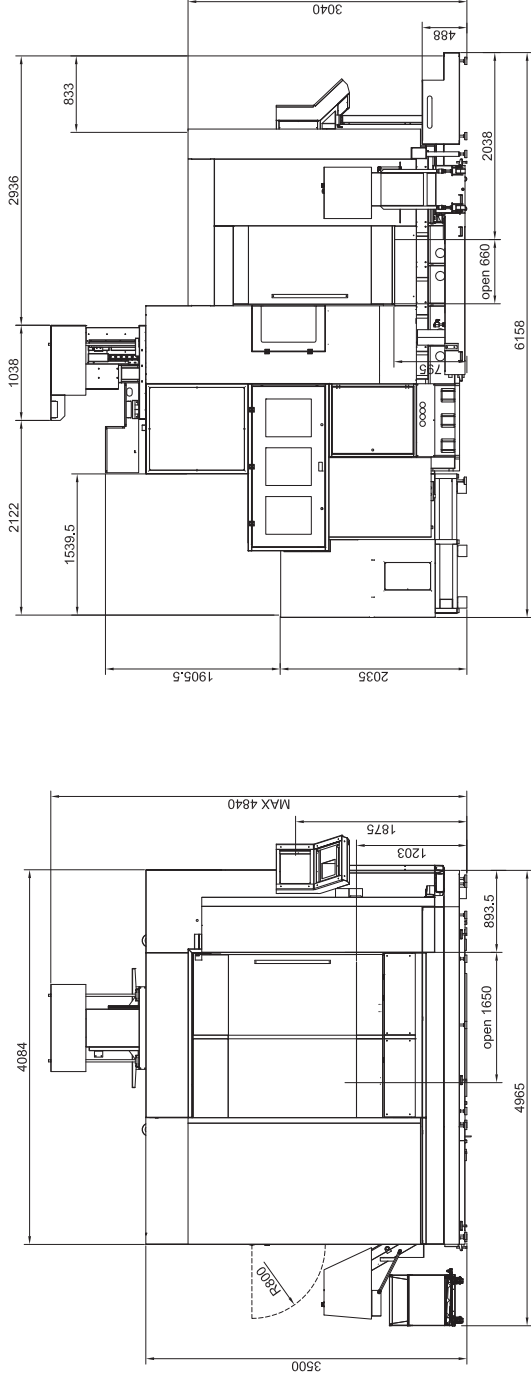
HSK A63-24000 rpm

CUTTING AREA



Spindle	A	B	C	D	E
HSK A63	850 mm	50 mm	587.8 mm	337.8 mm	362.2 mm

DIMENSIONS





PR



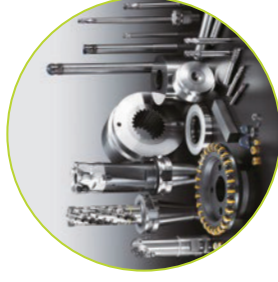


IMINER GLOBAL TEAM

PRIMINER Solutions



hyperMILL®
SolidCAM
The Leaders in Integrated CAM



DIJET NS TOOL
GUHRING



LEHMANN®



HAIMER®



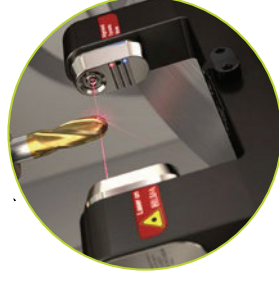
SCHUNK



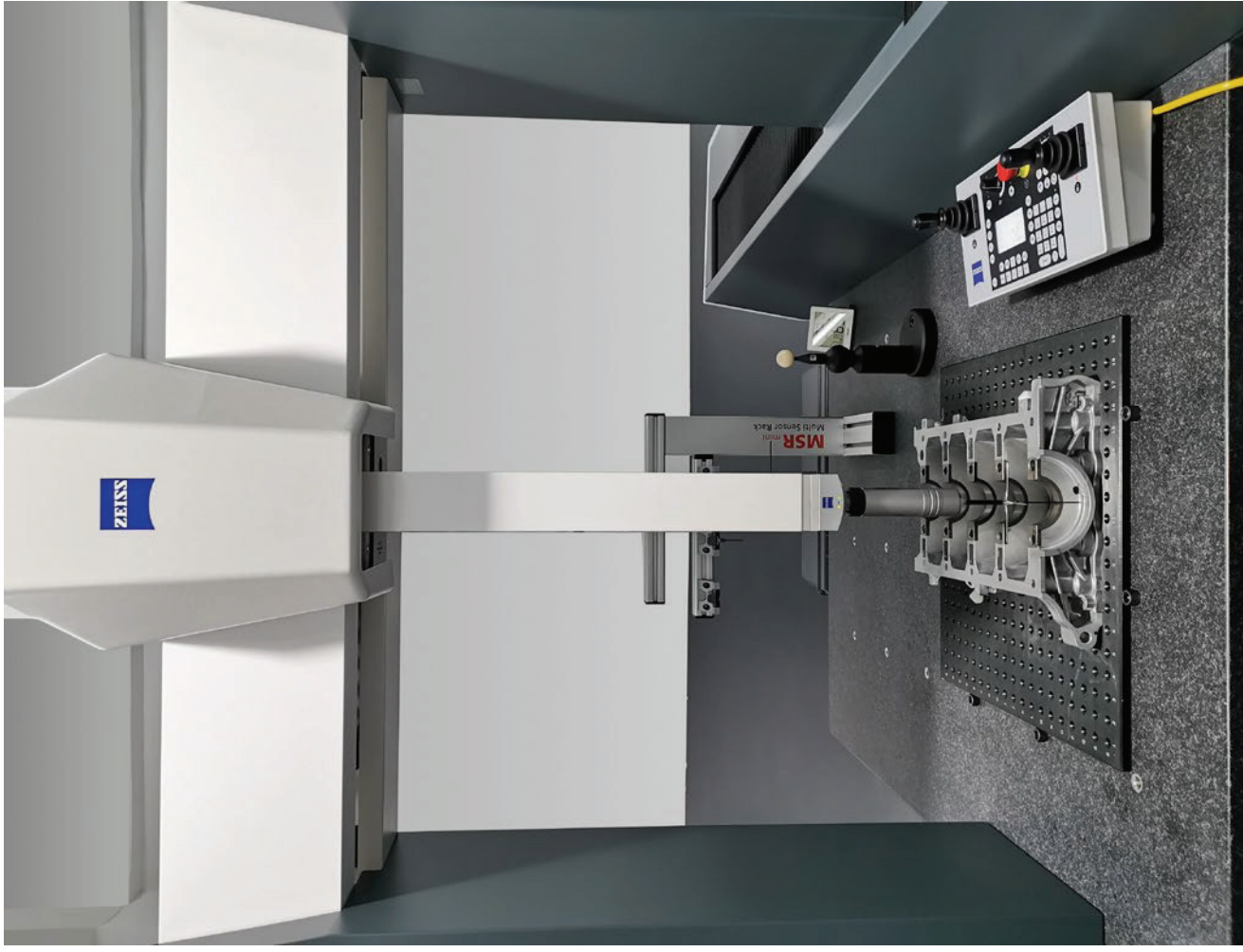
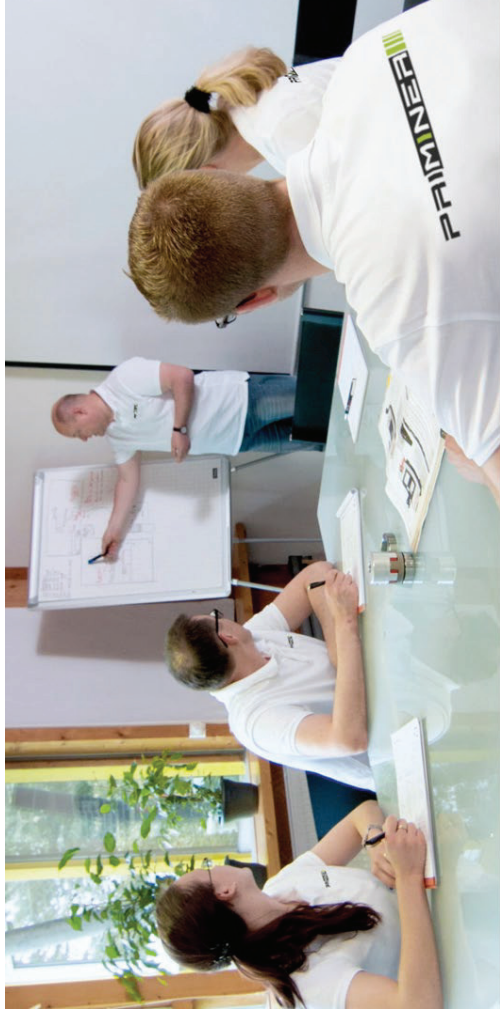
Blaser.
SWISSLUBE



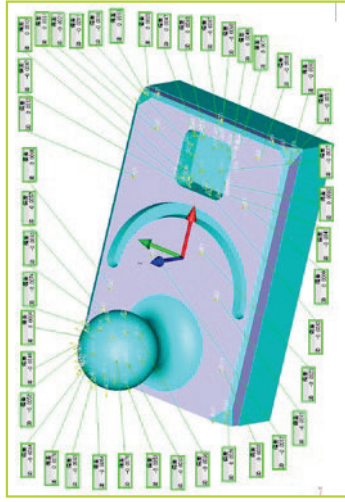
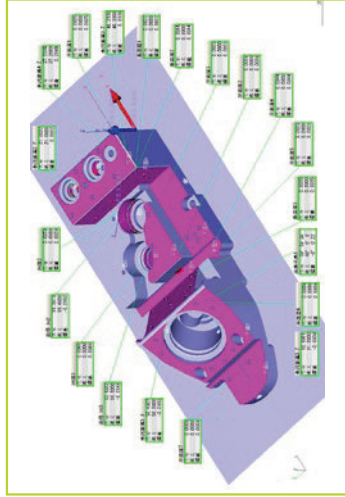
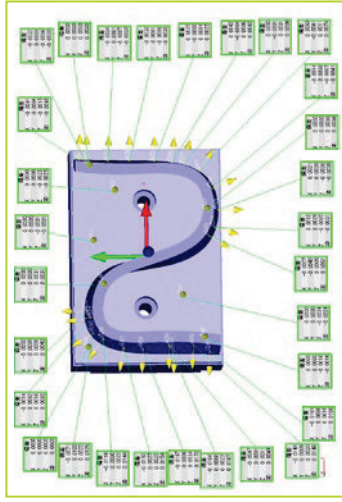
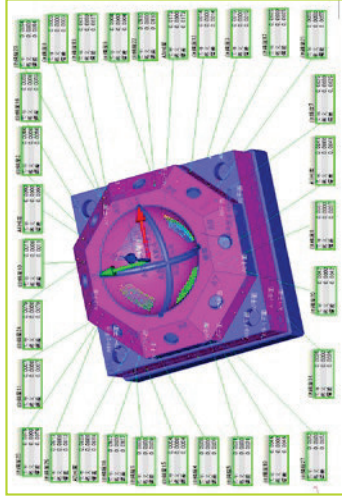
REGO-FIX

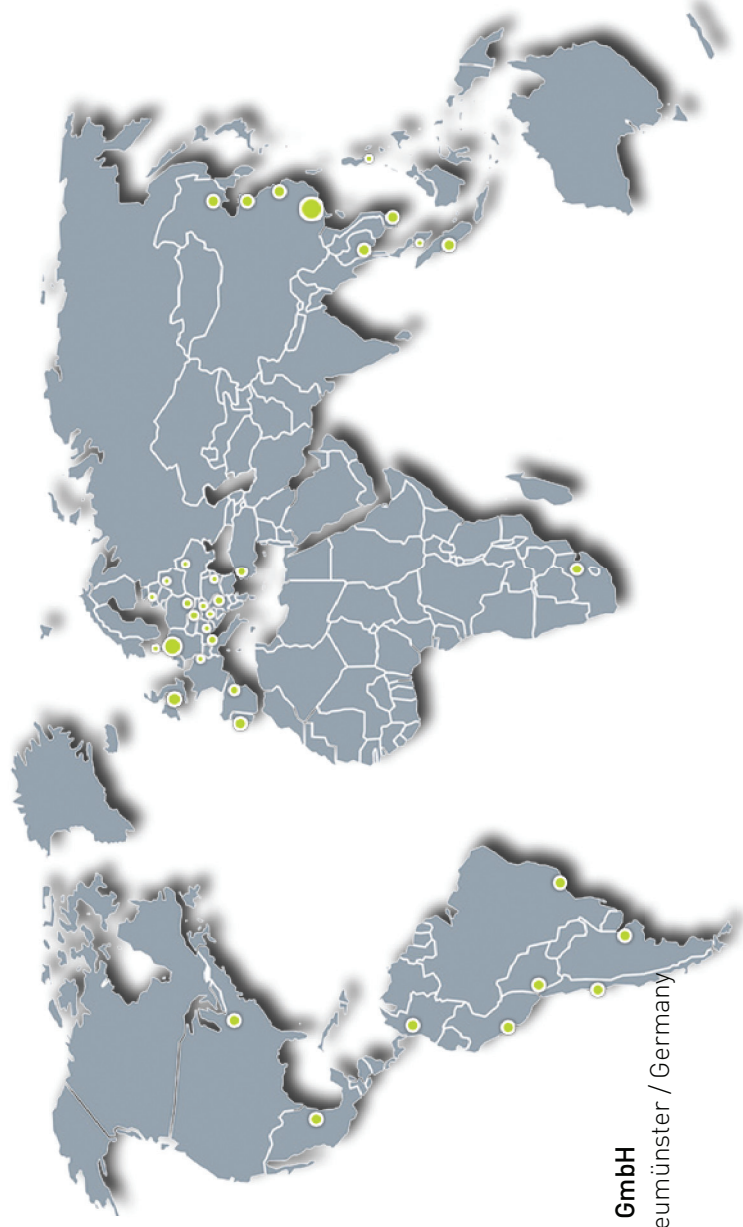


BLUM
focus on productivity



Workpiece measuring by CMM





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