PRIMINER

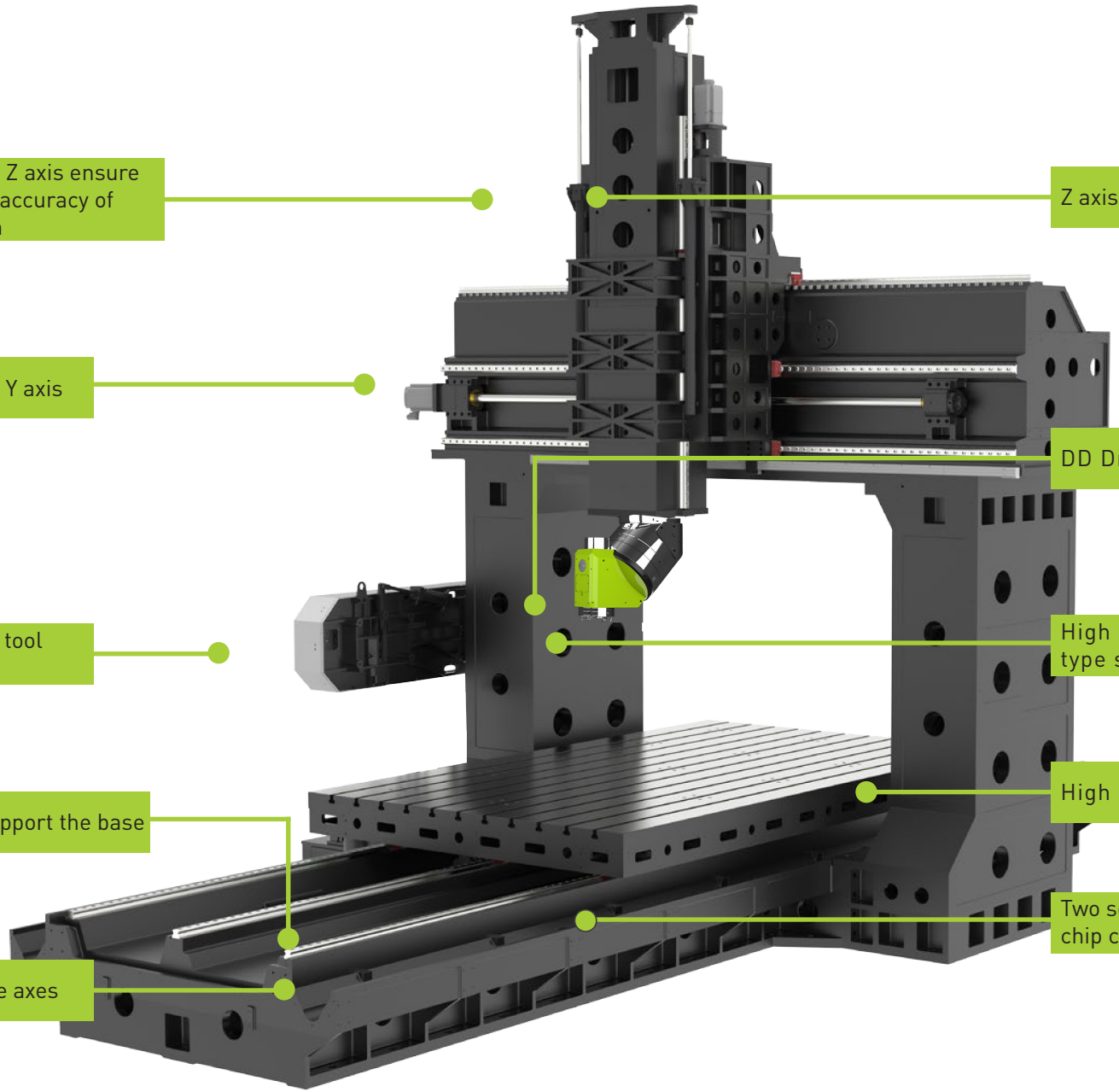
GT428-5XG

5 Axis Double Column Center



Technical Specifications	GT428-5XG
Table size	4000×2400 mm
X/Y/Z Travel	4200/3300/1200 mm
X/Y/Z Rapid feed	20 m/min
Spindle taper	BT50
Spindle speed	4000rpm





4 linear guideways on Z axis ensure high rigidity and high accuracy of consecutive operation

3 linear guideways on Y axis

60 pocekts chain type tool changer

3 linear guideways support the base

Linear scales on three axes

Z axis with dual drive system

DD Driven Universal head

High performance built-in type spindle, HSK A100

High rigidity column structure

Two screw type and one chain type chip conveyor

DD DRIVEN UNIVERSAL HEAD

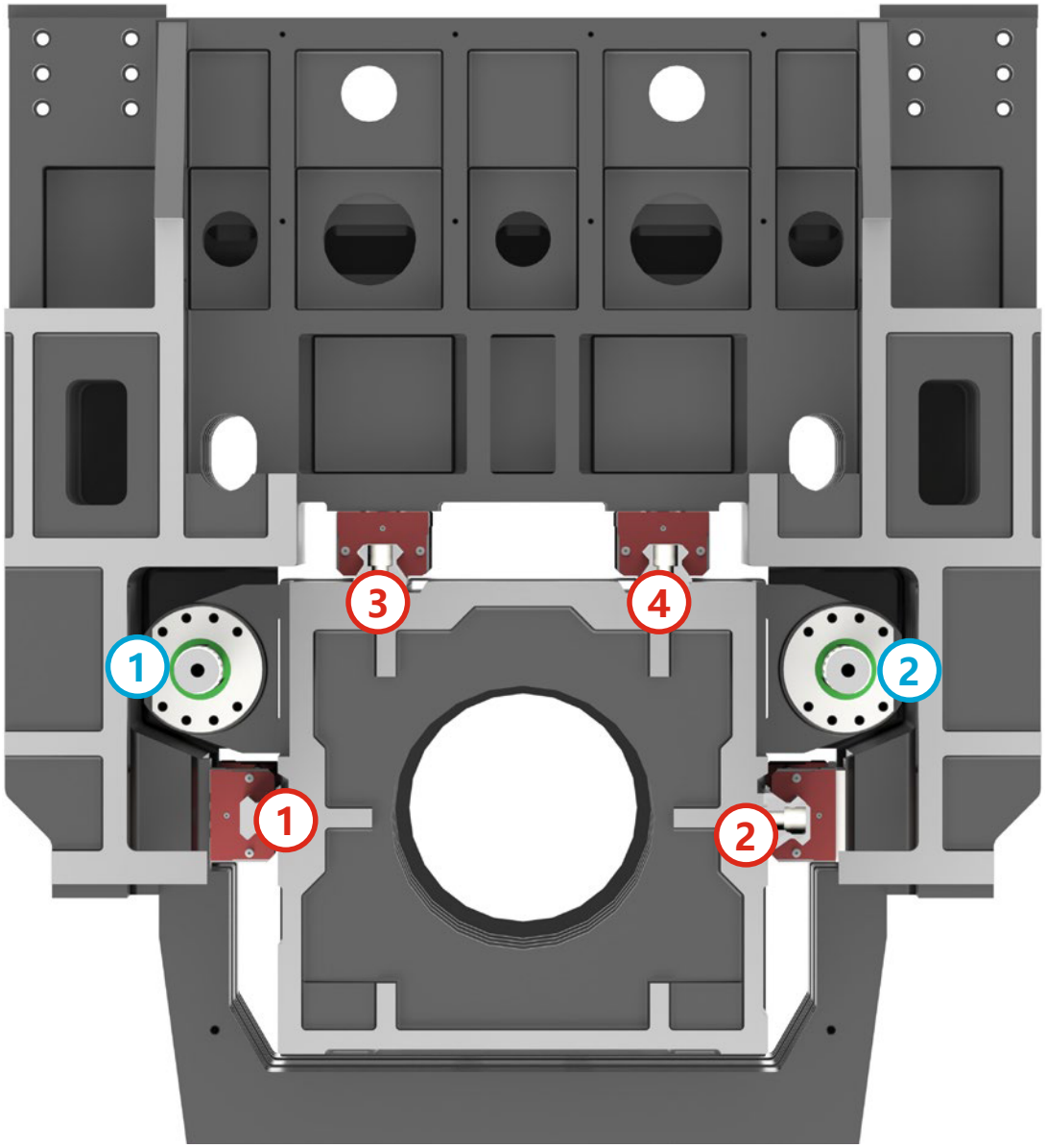
1. Higher positioning and accuracy
2. Faster A/C axis response with smoother motion
3. Reduced mechanical wear and maintenance
4. Improved long-term reliability
5. Enhanced machining quality for complex 5 face machining applications



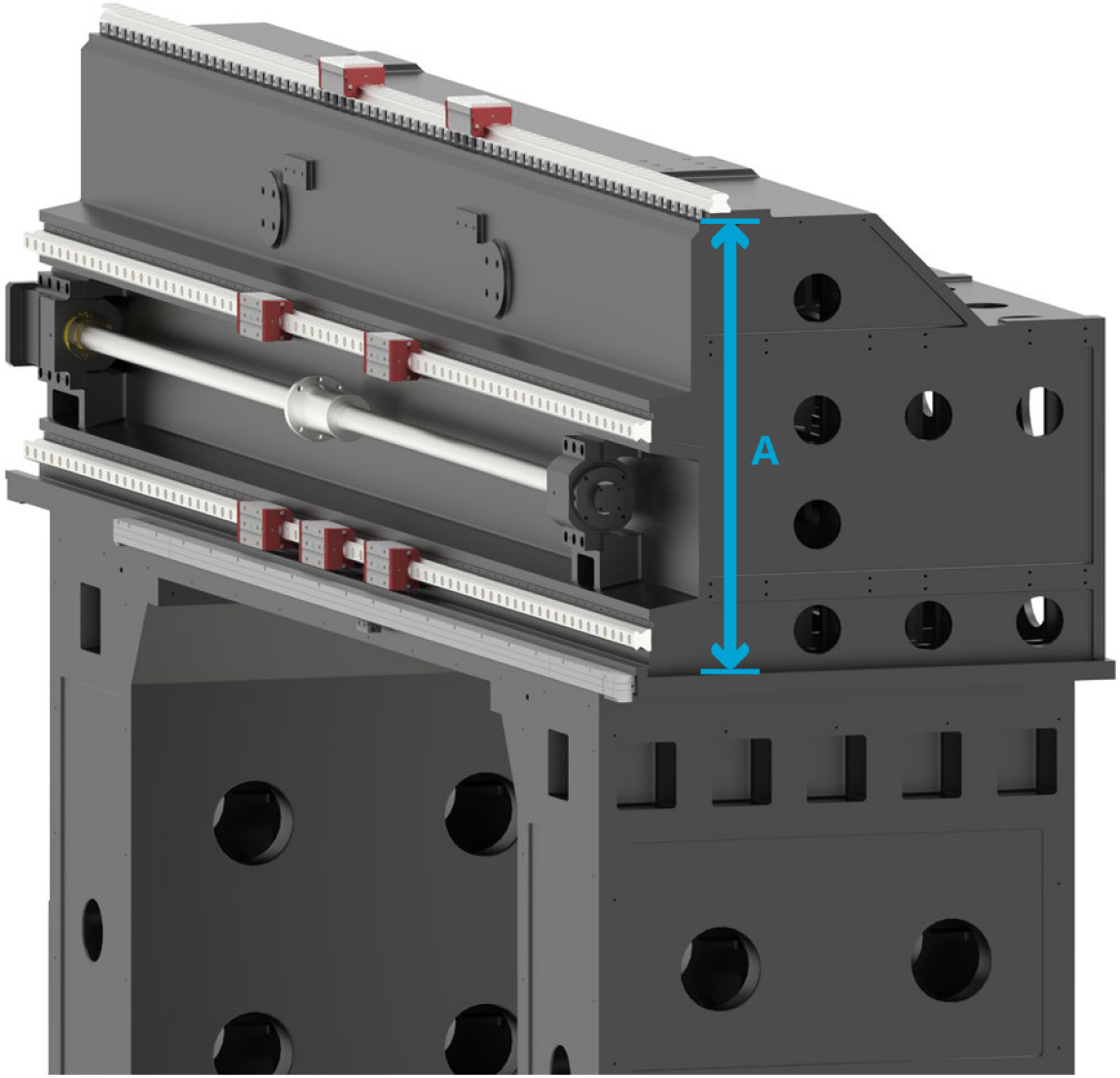
HIGH RIGIDITY BED STRUCTURE

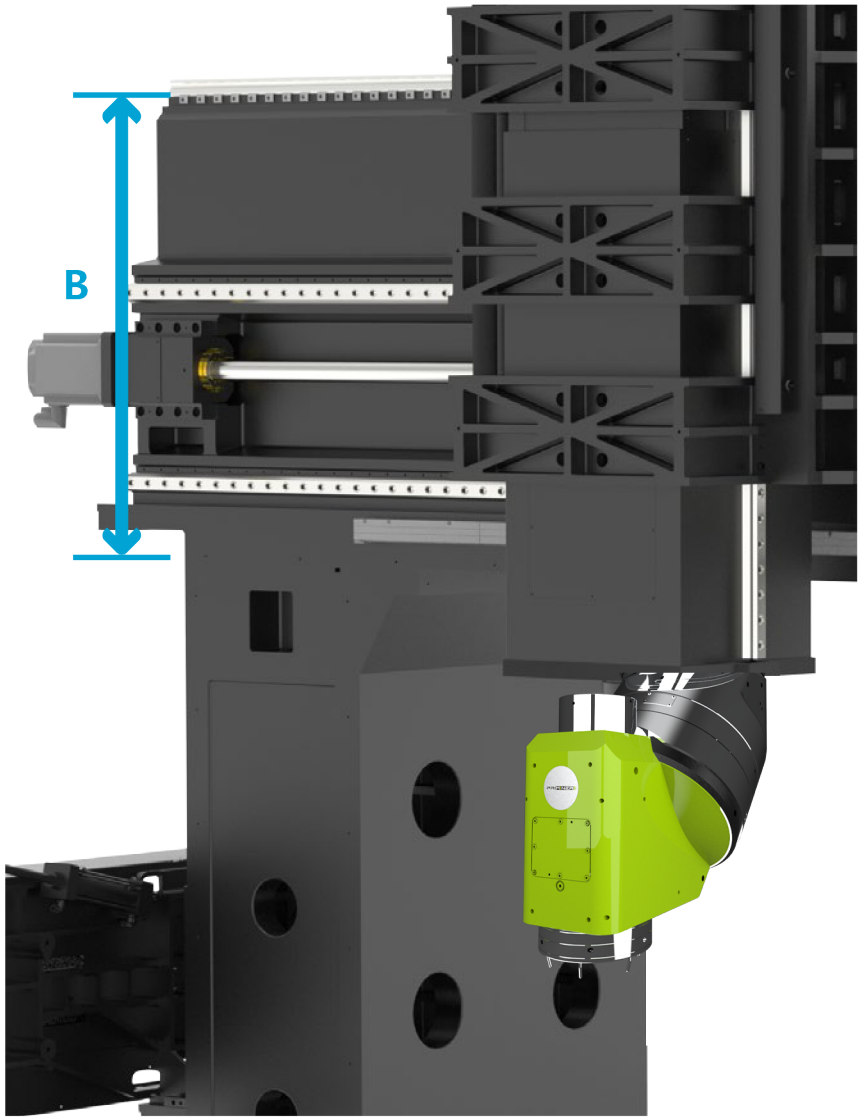
- 4 linear guideways on Z axis ensure high rigidity and high accuracy
- Z axis designed with dual drive technology two ballscrews for high dynamic machining





- 3 linear guideways on Y axis
- Height of A and B nearly same with Z axis travel



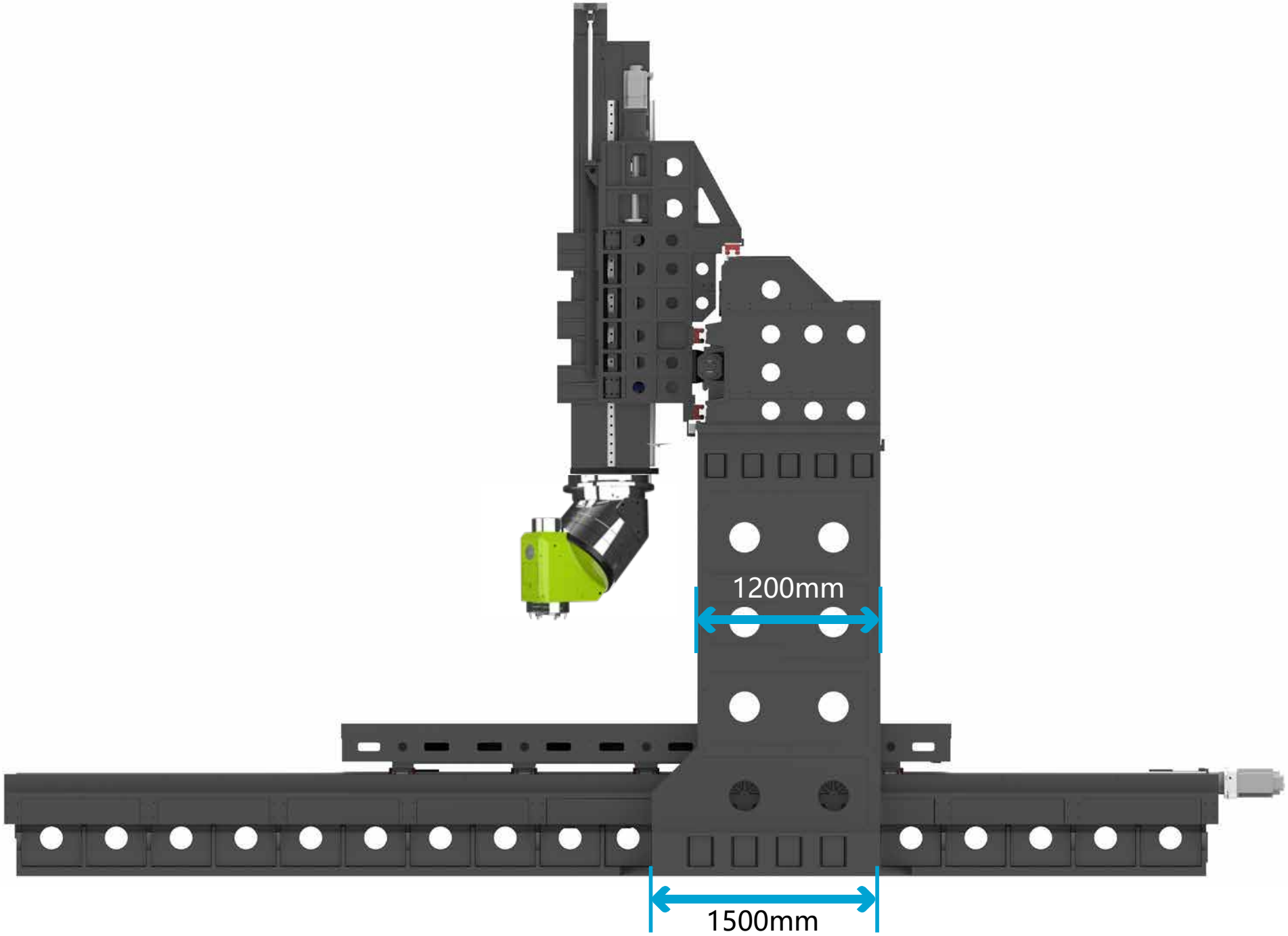


HIGH STABILITY BASE

X axis designed with 3 linear guideways and 15 blocks providing structural stability without deformation for working table



EXTRA WIDE COLUMN



CHAIN TYPE TOOL CHANGER

- User-Friendly interface make the loading and unloading of workpiece easier
- High production efficiency





Technical Specification

- 60 pockets BT50
- Max.tool lenth 400 mm
- Max.tool diameter Φ125/Φ250mm(next release)
- Max.tool weight 16 kg

BLUM MEASURING SYSTEM

Universal High-Speed touch probe with multidirectional measuring mechanism

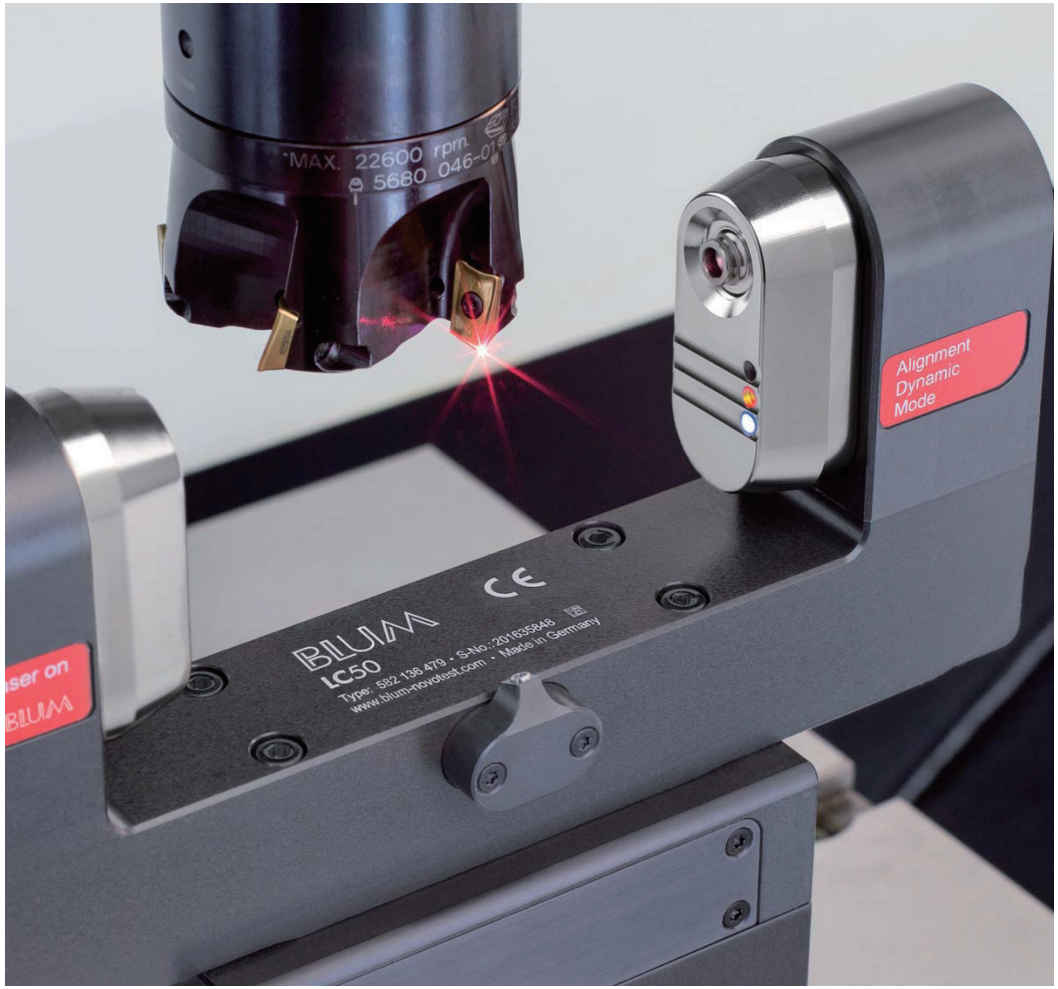
- Detection of workpiece position
- Correction of workpiece orientation
- Thermal compensation of the machine tool
- Contour measurement

Your benefit:

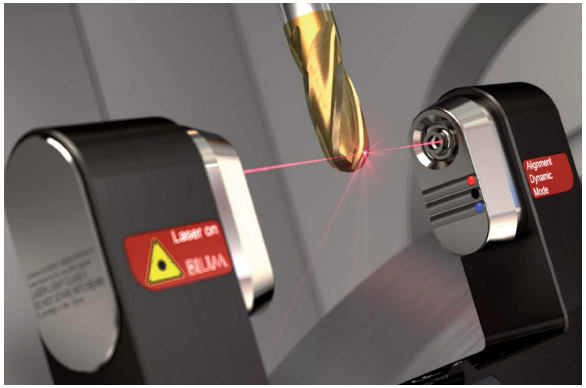
- Measuring speed up to 3 m/min
- Precise, non-lobing touch characteristics
- No-wear, optoelectronic measuring mechanism
- Use of two measuring systems with one IR receiver
- Extended battery life
- Precise measurement even with coolant
- Proven and robust design

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
- Programing 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

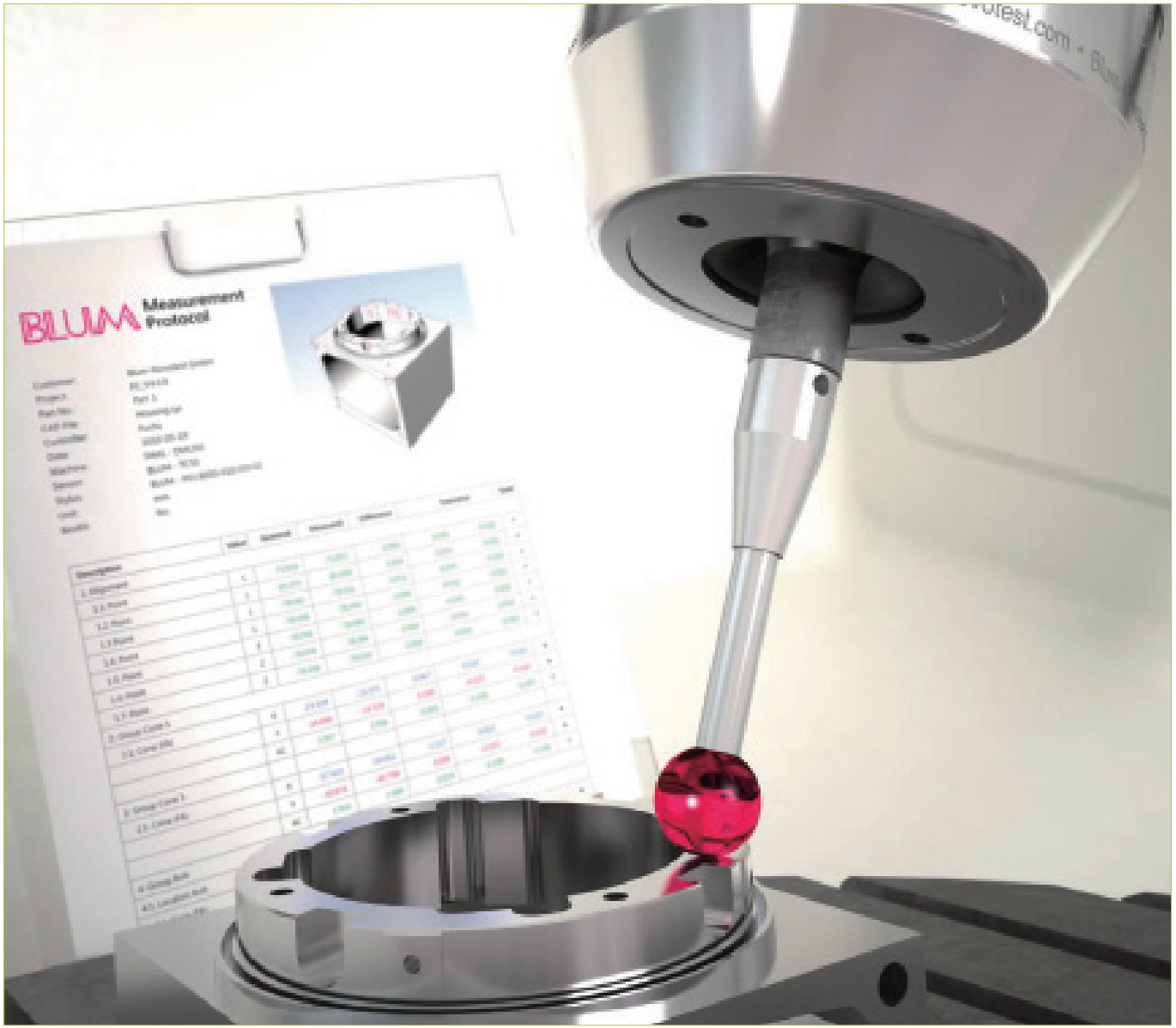
Technical Specifications	GT428-5XG
Table	
Table size	4000×2400 mm
T-slot (width x number x distance)	28×11×200 mm
Max. load	15000 kg
Travel	
X/Y/Z Travel	4200/3300/1200 mm
Distance between columns	2800 mm
A/C Head	Universal Milling Head
A/C Travel	±180° / ±180°
A/C brake torque	4,000 /4,000 Nm
Spindle taper	BT50
Spindle motor power	30/63 kW
Spindle motor torque	840/1,760 Nm
Spindle speed	4,000 rpm
Feed	
Rapid feed X/Y/Z	20 m/min
Cutting feed X/Y/Z	1-12000 mm/min
Max. speed A/C Axis	50 rpm
Tool changer	
Number of tools	60 pcs
Max. tool length	400 mm
Max. tool diameter	Φ125 / Φ250 mm
Max. tool weight	16 kg
Accuracy(VDI 3441 Full travel)	
Positioning accuracy	0.020/0.015/0.010 mm(X/Y/Z); 6/8 arc-sec(A/C)
Repeatability accuracy	0.015/0.010/0.006 mm(X/Y/Z); 3/4 arc-sec(A/C)
Dimensions & Weight	
Dimensions	10250×6320×6250 mm
Weight	52000 kg

STANDARD /OPTIONAL CONFIGURATION

● Standard ○ Optional

Configurations	Standard	Optional
Direct drive AC head	●	
Full enclosed splash guard	●	
Chip conveyor (two screw type and one chain type)	●	
Linear scales on X/Y/Z axis, rotary encoder on A/C axis	●	
60 pockets chain type tool changer	●	
High precision spindle water cooler	●	
CTS Coolant through spindle + ATS		○
Tool probe		○
Workpiece probe		○
Oil skimmer		○
Kinmatics		○
Dynamic Collision Monitoring (DCM)		○
Extra 200GB SSD program memory		○
Rigid tapping	●	
Air-conditioned electrical cabinet	●	
Ethernet, CF card and USB interface	●	
Automatic lubrication system	●	
Coolant system	●	
LED working lamp	●	
End of program light	●	
Electronic handwheel (MPG)	●	
Tool box	●	
Leveling bolts and blocks	●	
Coolant gun	●	
Air gun	●	
User Manual	●	

OPTIONS



Tool and workpiece probe



CTS coolant through spindle

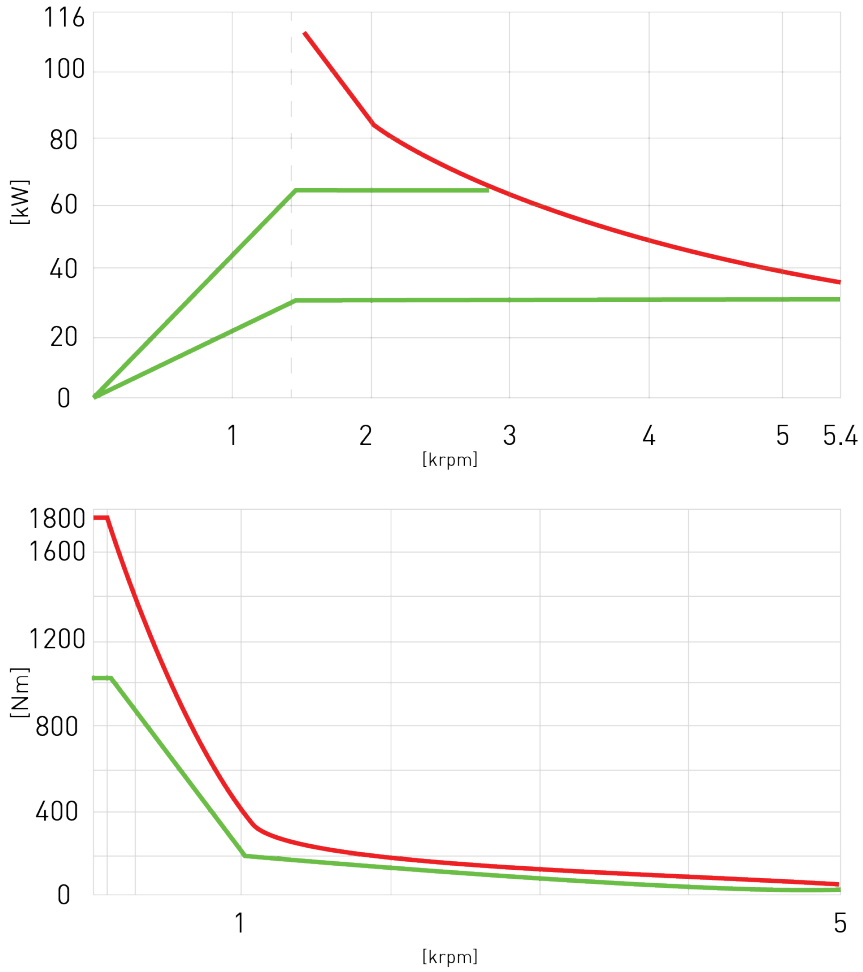


Oil skimmer



Visiport

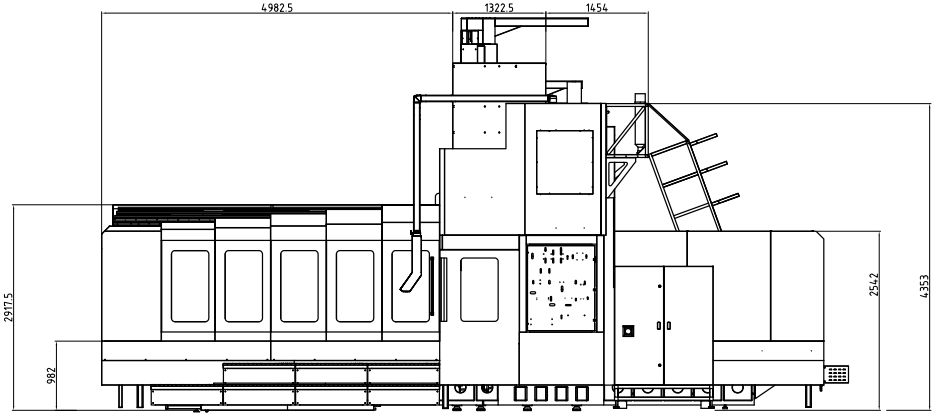
TORQUE DIAGRAM

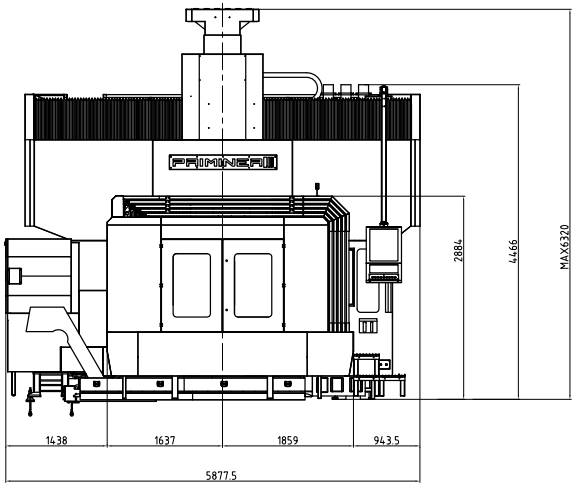


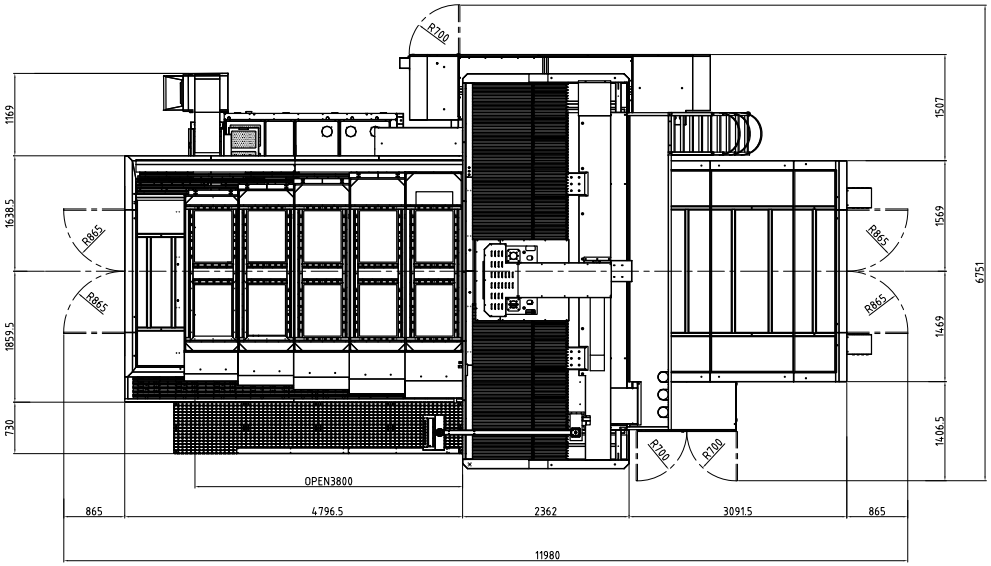
BT50 4,000rpm

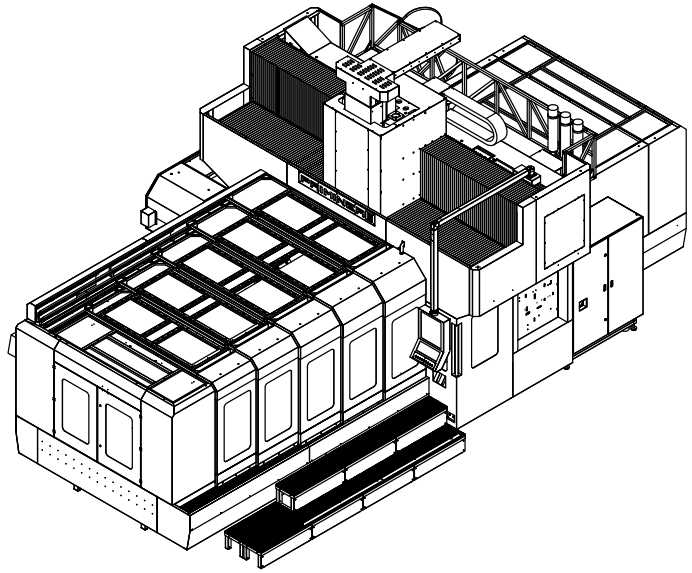
30/63 kW 840/1760 Nm

DIMENSIONS

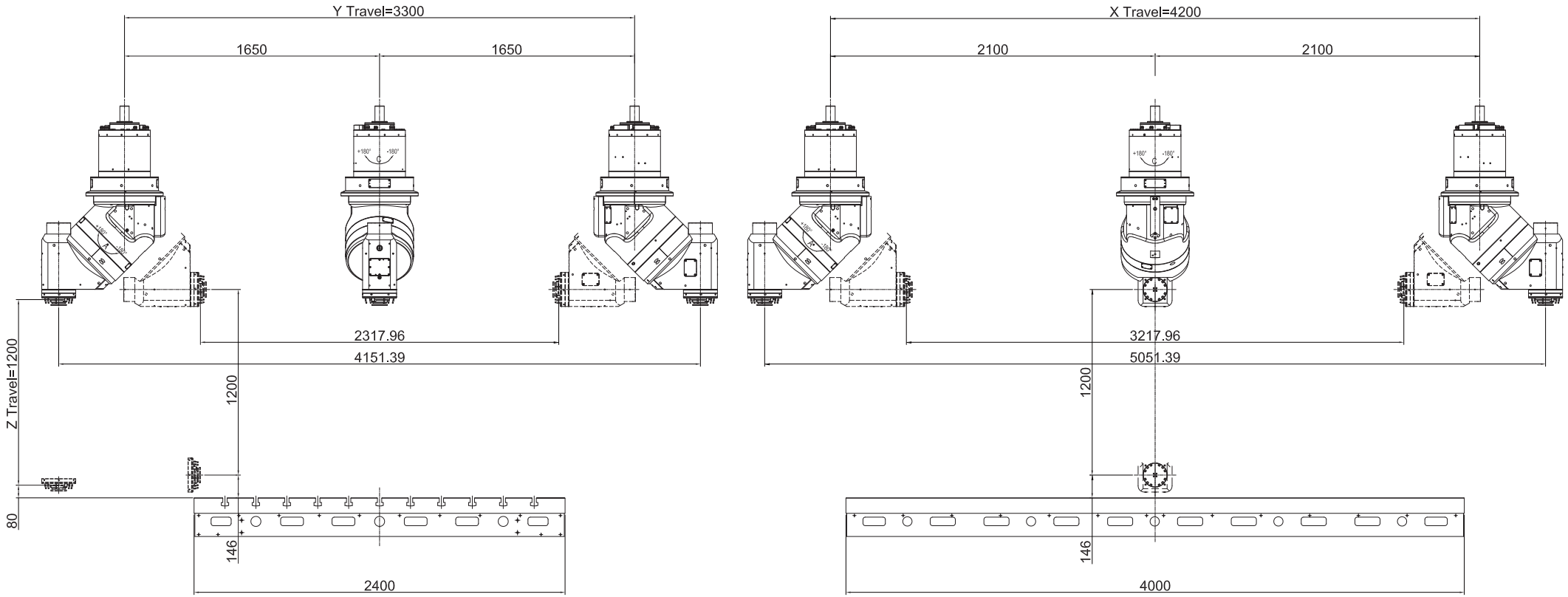

4982.5
1322.5
1454
2917.5
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4353


FAMINCAM
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4466
MAX6320
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943.5
5877.5


R700
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R865
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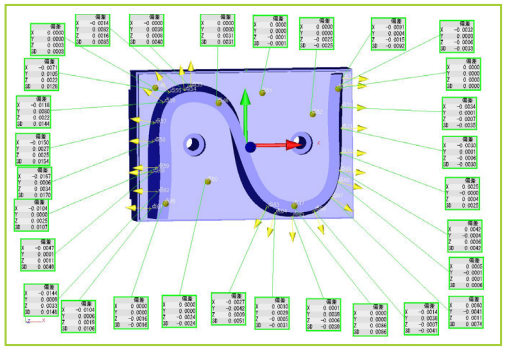


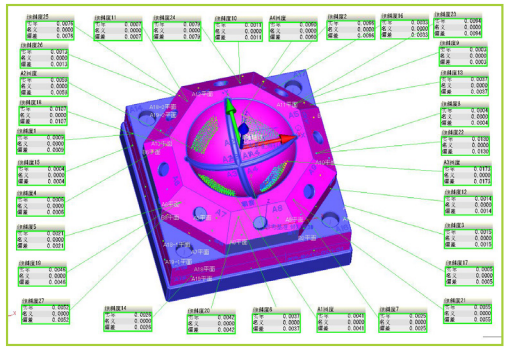
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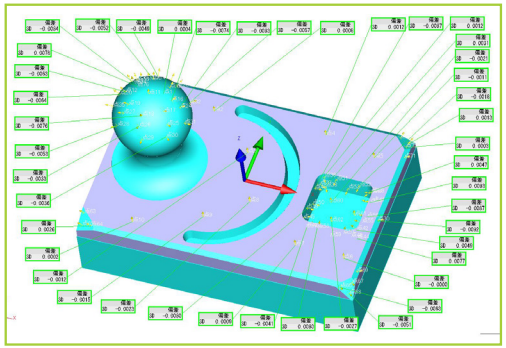

Y Travel=3300
1650
1650
2317.96
4151.39
Z Travel=1200
1200
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2400
X Travel=4200
2100
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5051.39
1200
146
4000

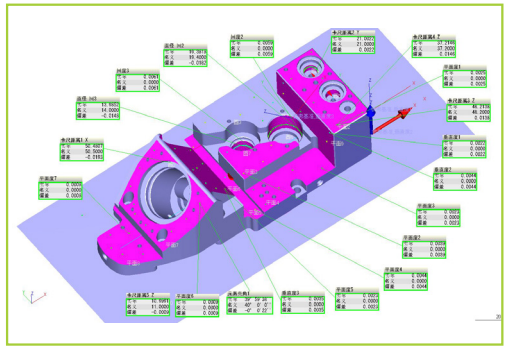


Workpiece measuring by CMM











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The above specifications are subject to change without prior notice.