KELLENBERGER TM300

Turn-Mill Center



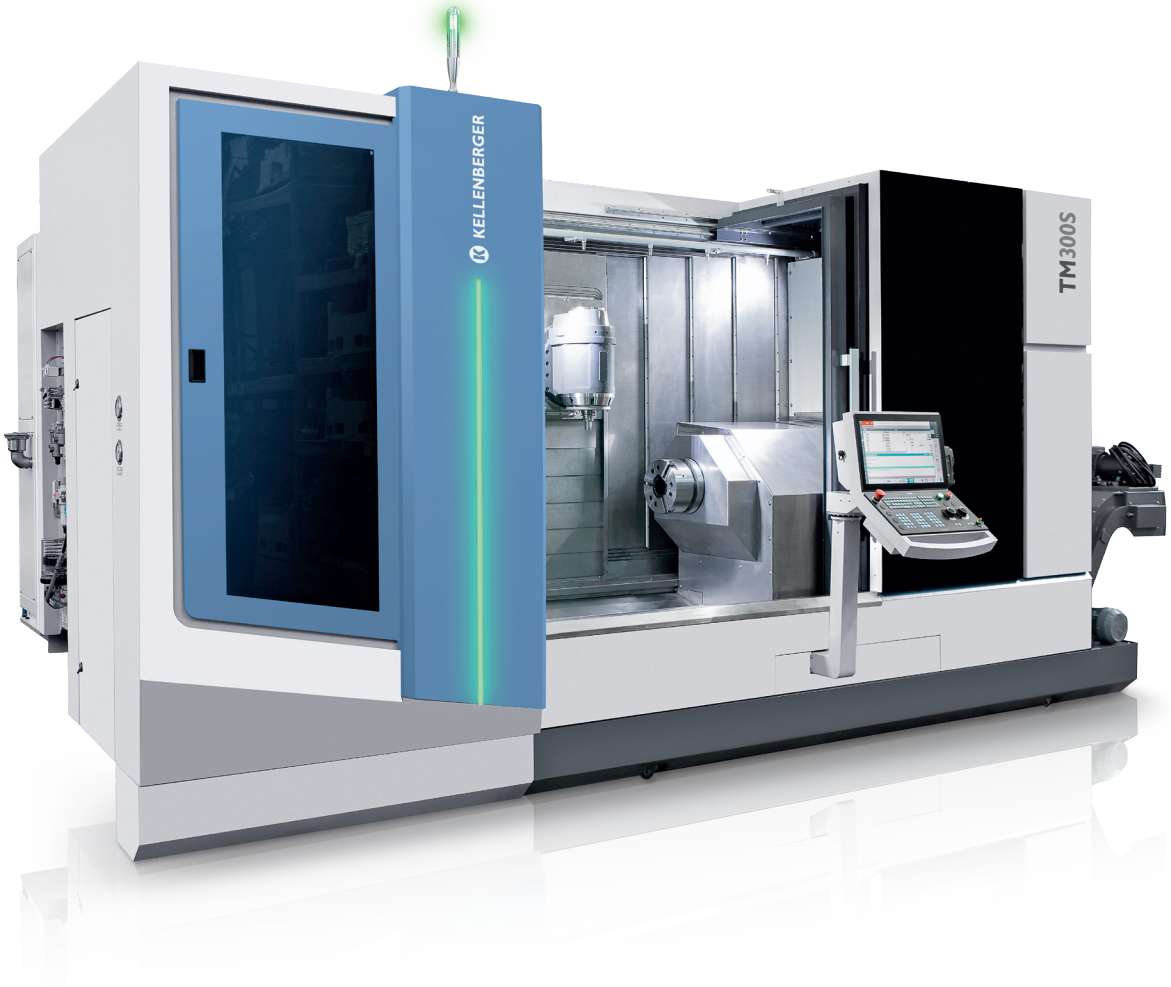
KELLENBERGER

KELLENBERGER TM300

Turn-Mill Center

Integrated Turn-Mill Technology

Powerful and versatile:
The machine is ideal for industries such as precision engineering, aerospace, mechanical engineering, medical technology, and many more.



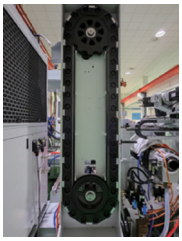
The TM300 is available in 3 configurations

- TM300 (base version): with turning spindle and servo tailstock MT5.
- TM300S: with main spindle and counter spindle for complete machining of workpieces.
- TM300ST: with turning spindle, sub-spindle, and lower turret for 6-sided machining of workpieces with complex geometries.

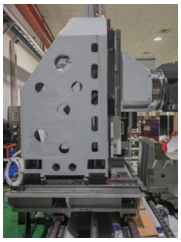
Features

- A28 Motor spindle
- High-speed milling spindle with taper HSK T63 and spindle speed 12,000 rpm
- Internal coolant supply to the main and counter spindle, B-axis, and milling spindle
- Siemens SINUMERIK ONE control

Servo tool changer with 40 tool positions



Orthogonal Y-axis structure, 300 mm travel



B axis 240° large angle Direct drive structure

High-precision milling spindle, HSK T63, 120,000 rpm, 100 Nm

A28 motor spindels, 3,500 rpm

High-performance cooling unit, control accuracy 0.1°C

High-resolution linear scales on the X,Y, Z, B and C axes



Typical parts

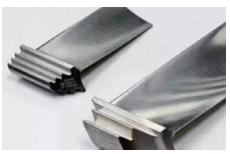
Spindle sub-spindle connection



Parts with complex contours



Free-form surface machining



Shafts

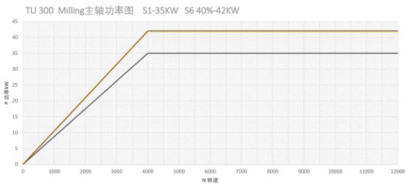


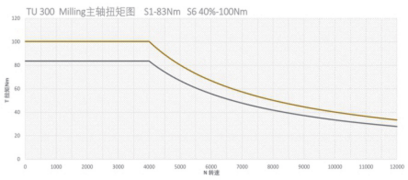
Siemens SINUMERIK ONE



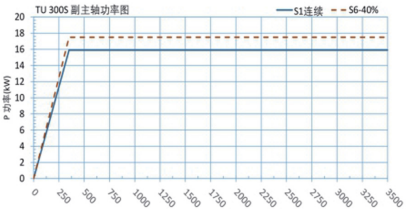
- User-friendly interface
- Digital Twin (Option)
- Color touch screen display 22″
- Storage expansion mode SD card /USB/ Ethernet
- Shop Turn/Shop mill
- Graphical 3D simulation
- Face/cylinder conversion
- Top Surface
- Top Speed Plus
- Pre-reading 3000
- Collision Detection ECO
- 2D/3D protected area
- Graphical conversational programming
- Graphical HMI
- Maximum number of parts programs on NCU is 1000
- Execute the program from the network drive
- Tool life and workpiece number monitoring

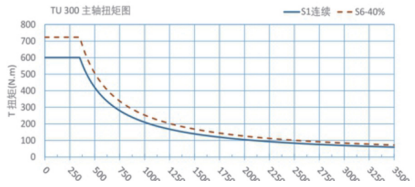
Milling Spindle – HSK T63, 12,000 rpm
Power (S1-35kW,S6-42kW); Torque (S1-83Nm,S6-100Nm)



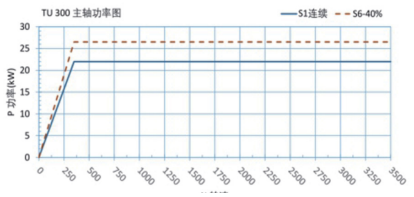


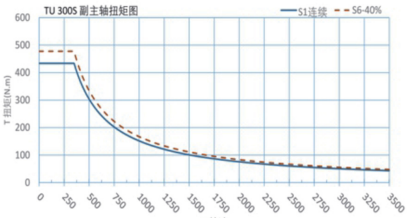
Main spindlel – 3,500 rpm
Power (S1-22kW,S6-26.5kW); Torque (S1-600Nm,S6-723Nm)





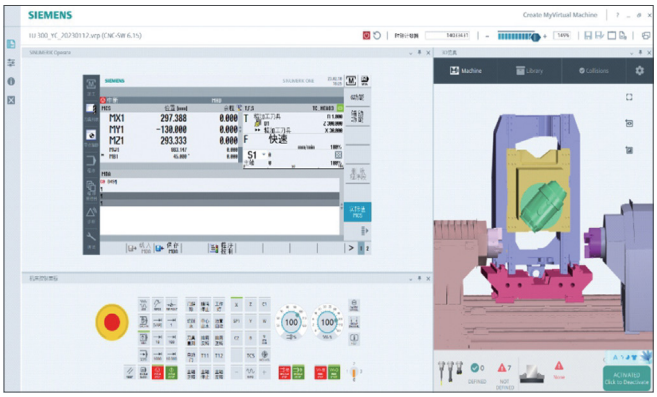
Sub-spindlel – 3,500 rpm
Power (S1-17.5kW,S6-15.9kW); Torque (S1-433Nm,S6-477Nm)





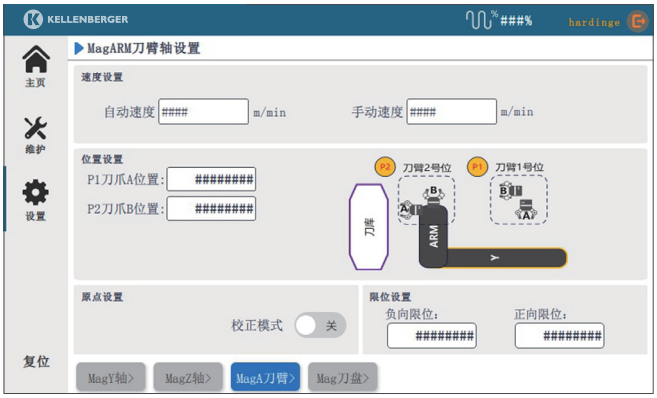
Digital Twin (option)

- The machine's digital twin allows programs to be created, simulated, and tested offline before being executed on the real machine.
- Optimization of machining processes
- Increased process reliablility
- Reduction of machining time



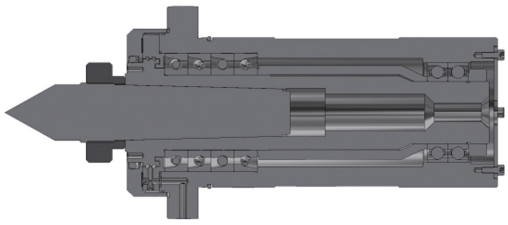
User-friendly interface

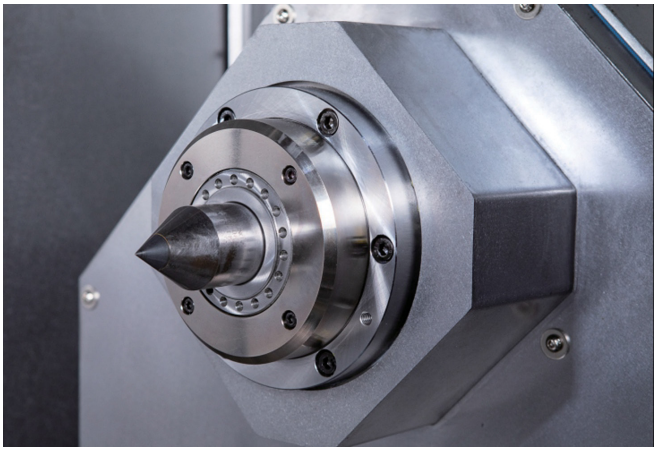
- Intuitive HMI
- Simple intuitive operation
- Easy monitoring of tool life and tool number
- Integrated maintenance interface



Servo tailstock

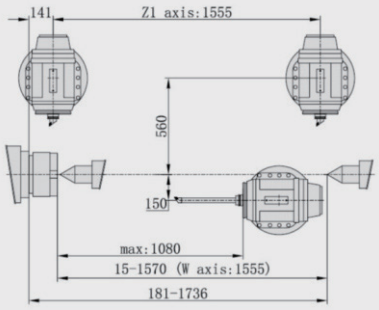
- MT5 tailstock (in standard version TM300)
- The tailstock is equipped with a bearing rotation device, allowing the use of a center for improved rotational accuracy and enhanced rigidity.



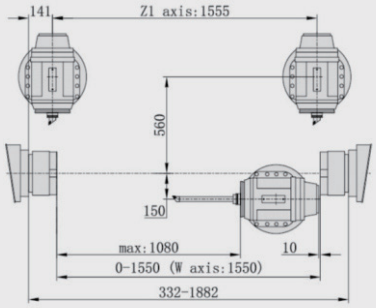


Travel

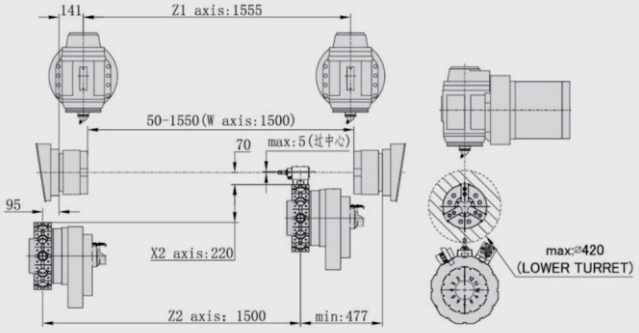
TM300



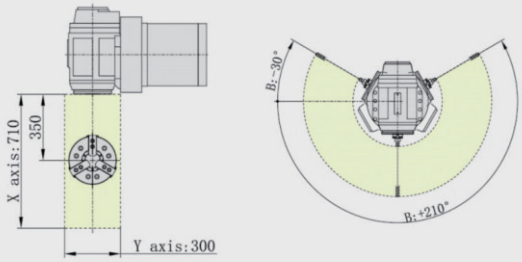
TM300S



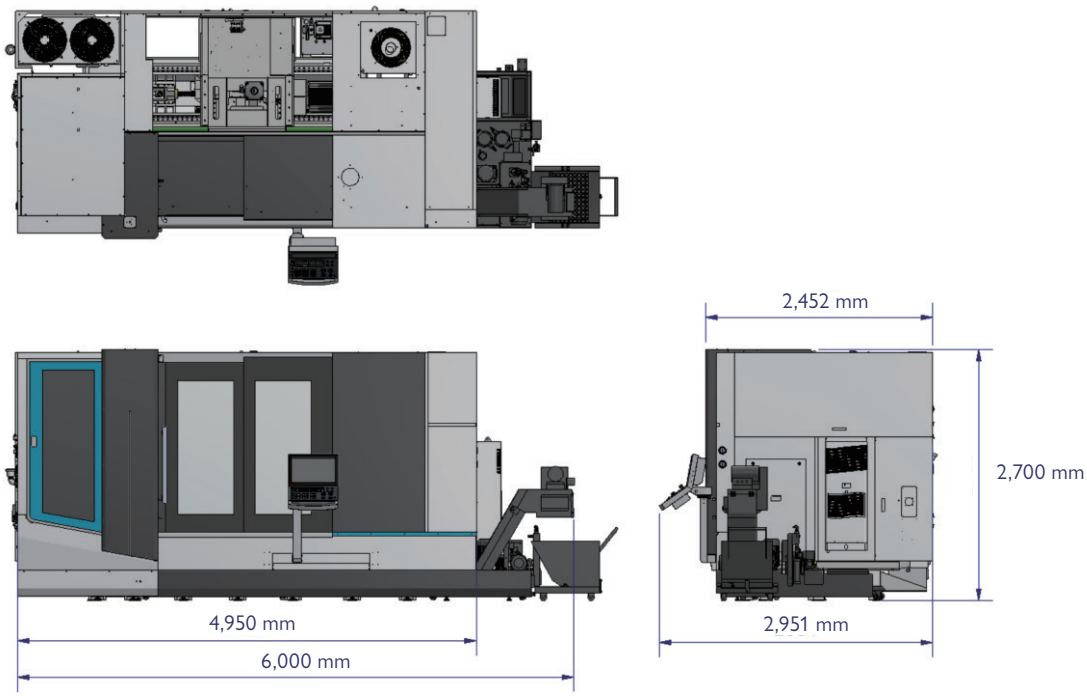
TM300ST



Milling spindle



Machine Dimensions



Technical Data

		TM300	TM300S	TM300ST
Workrange				
Max. rotation diameter	mm		700	
Max. turning diameter	mm		700	
Max. turning length	mm		1,500	
Max. bar through hole diameter	mm		78	
Travel				
X/Z/Y-Axis travel	mm		710/1,555/300	
B-Axis rotation angle	°		240	
Spindle				
Chuck size	“		10	
Spindle speed	rpm		3500	
Spindle nose			A28	
Spindle power (S6/S1)	kW		26.5/22	
Output torque (S6/S1)	Nm		723/600	
Spindle through hole diameter	mm		88	
Milling spindle				
Taper type			HSK T63	
Milling spindle speed	rpm		12,000	
Spindle power (S6/S1)	kW		42/35	
Output torque	Nm		100	
Sub-spindle				
Spindle nose		-	A28	
Spindle speed	rpm	-	3,500	
Spindle power (S6/S1)	kW	-	17.5/15.9	
Output torque (S6/S1)	Nm	-	477/433	
Lower turret				
Turret type			-	BMT55
Tool capacity			-	12
Max. turning diameter	mm		-	420
X2/Z2-Axis travel	mm		-	220/1,500
X2/Z2-Axis rapid speed	m/min		-	30/36
Rapid speed				
X/Y/Z-Axis	m/min		48/40/48	
Tool magazine				
Tool capacity			40T	
Max. tool diameter	mm		90 (Adjacent without tools 125)	
Max. tool length	mm		400	
Max. tool weight	Kg		12	
Tailstock-Servo				
Taper type		MT5	-	
Coolant				
Coolant tank capacity	L		400	
High pressure thru mill spindle	bar		20	
Other				
Dimensions	mm		6,000 x 2,452 x 2,700 (with chip conveyor)	
Weight	Kg		15,000	
Power requirement	KVA		70	
Compressed air requirement			6~8bar, 600L/min	

All prices and details are subject to change without notice. 1/2026

kellenberger.com

KELLENBERGER