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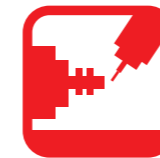
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Please visit the website for more information.

Dealer:



# T M series



2000 | 2000S | 2000STM  
2500 | 2500S | 2500STM  
3000 | 3000S | 3000STM  
4000 | 4000S | 4000STM



Multioperational turning milling centers

**High Accuracy and High Efficiency**



Evolution  
Upgrade Evolution

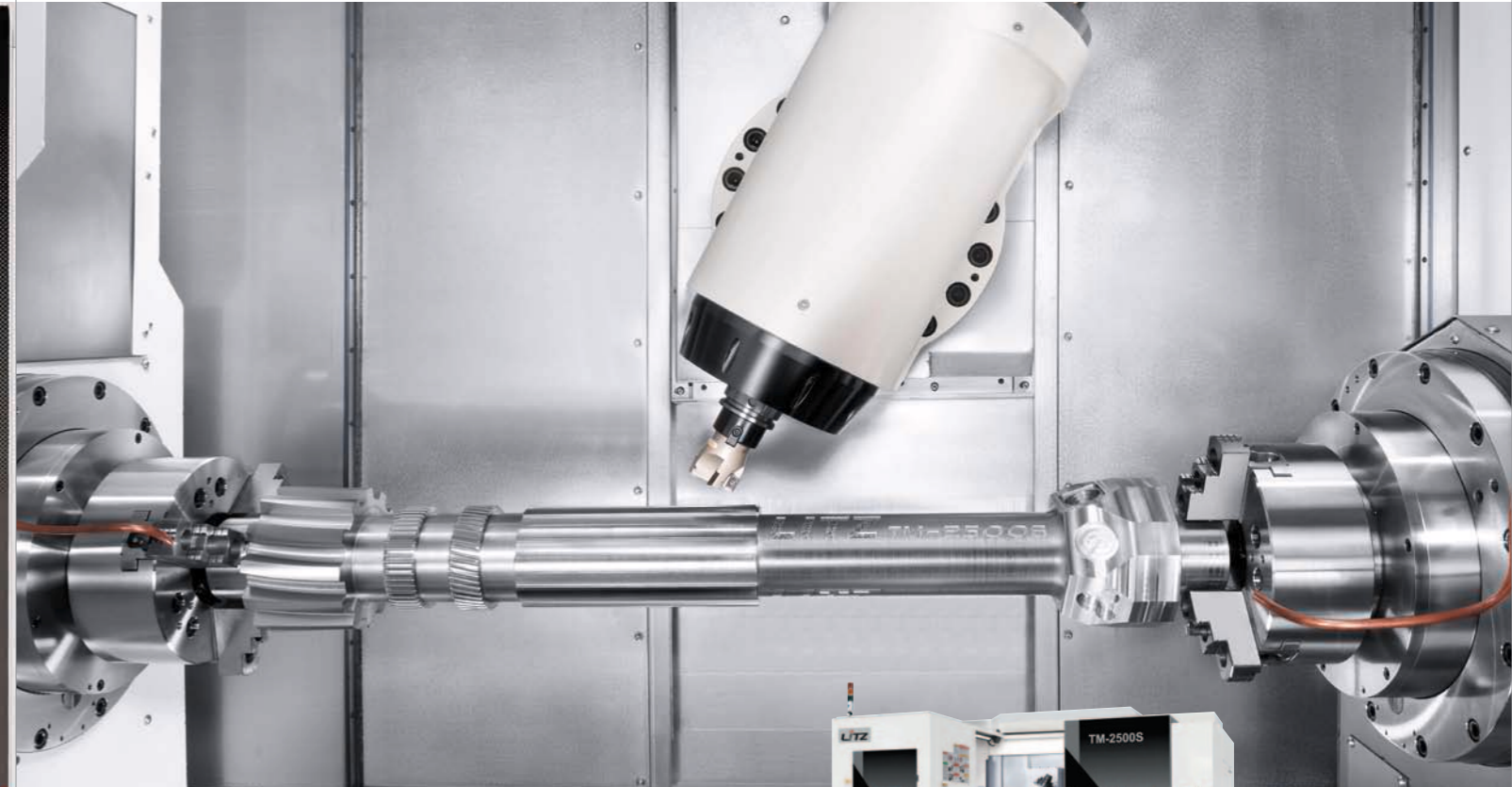
Litz Hitech Corp.  
Litz Machine Tools (JiaXing) Corp.



TM series provide solutions for higher machining accuracy  
higher production efficiency.

Rich lines of products along with years of trust  
and performance won by TM series of turning-milling  
combined machine tools

- Further enhanced processing speed and precision by loading just one card for the full machining steps
- High production efficiency by high-rigidity structure and high-power turning and milling spindles
- Larger Y-axis travel for wider range of target workpiece



Advanced multi-function machine tool running entire  
processing cycle by loading the magazine just once



(TM-2500S)



(TM-2500)



(TM-2500STM)

High-precision, High-efficiency Integrated Mill Turn Centers

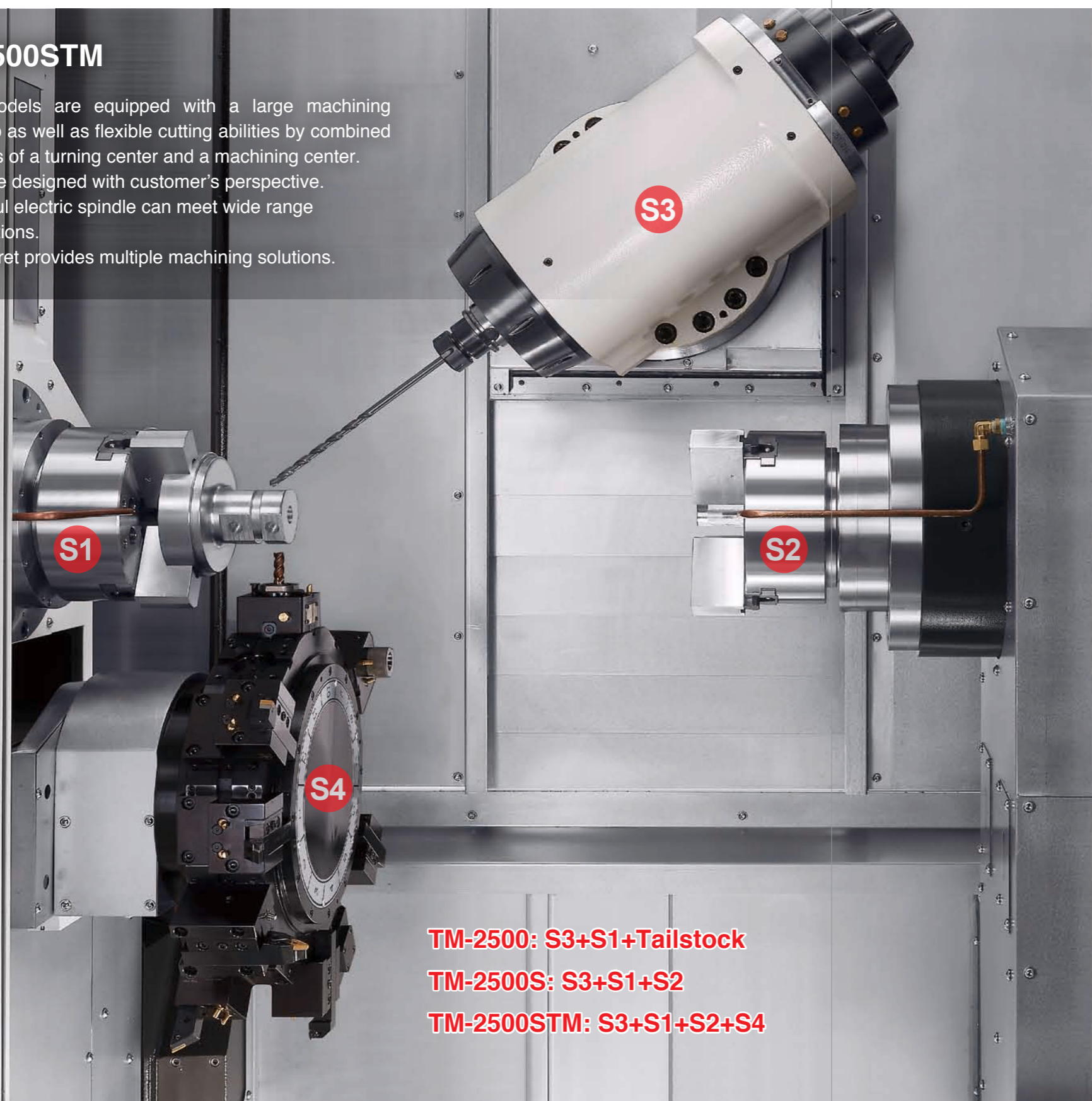


# Integrated Mill Turn Center at Highest Level of Performance

New technologies are capable of cutting complex-shaped workpieces with high accuracy and efficiency

## TM-2500STM

- The models are equipped with a large machining envelop as well as flexible cutting abilities by combined features of a turning center and a machining center.
- Machine designed with customer's perspective.
- Powerful electric spindle can meet wide range applications.
- Sub-turret provides multiple machining solutions.



**TM-2500: S3+S1+Tailstock**  
**TM-2500S: S3+S1+S2**  
**TM-2500STM: S3+S1+S2+S4**



# A Revolution of Factory Operation

## The turning lathe evolution.

The new technologies are capable of integrating various machining processes with high accuracy, superb cutting abilities and wide machining envelopes.



By combining 2-axis lathe and machining center, the integrated machine can realize a higher return on investment.

### Weakness of old-time lathe



Lack of tool number



Difficult to check the large workpiece interference.



High cost of live tool holders.

### Weakness of adding a vertical milling center

- Need to buy more tooling, and holders.
- Operator needs more time to set up jobs.
- More shop floor needed.



## Milling and Turning processes can be done in one machine

- Shorten the production
- Reduce the secondary operation
- Reduce the transportation cost
- Reduce the equipment cost
- Reduce the footprint
- Enhance the machining precision

- One machine to complete the entire production process from material to finished product.
- Significant reduction of working sequence and production time while improving the working precision.
- Lower fixture costs and less production equipment. Further, labor costs will be reduced as well.
- It not only improves the production efficiency but also reduces the costs and brings.

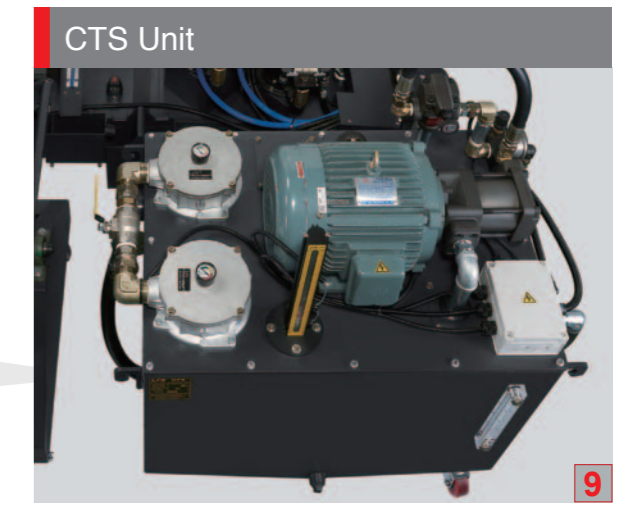
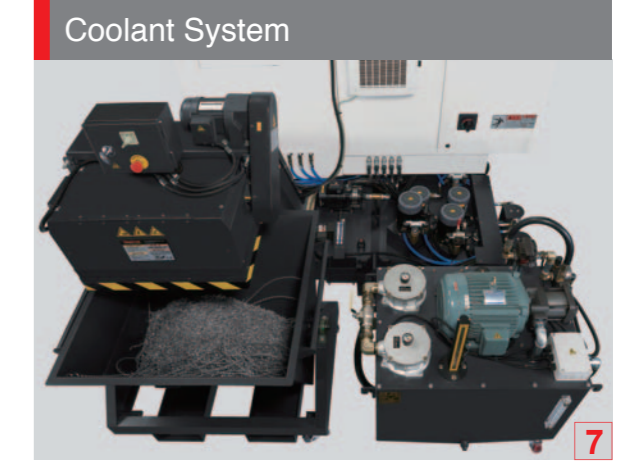
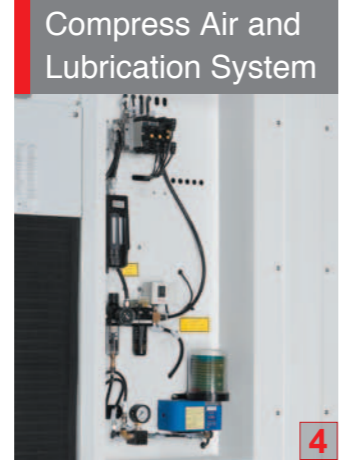
Turning lathe + Vertical Milling center

2 units	2 persons	2 unit costs	2-step process	2-3 times cost	Multiple Setups	Work in progress
Equipment	Manpower	Machine	Working Processes	Cutting Tool	Fixture	Product Holding Location during Production
1 units	1 persons	1 unit costs	1-step process	1 times cost	Chuck or collet	Not required
					—	—
TM-2500STM Series Production Process						



## Various Functions are Available

The functional systems are deployed on both sides the machine for the convenience of daily mechanical maintenance, inspection and repairs.



(TM-2500)

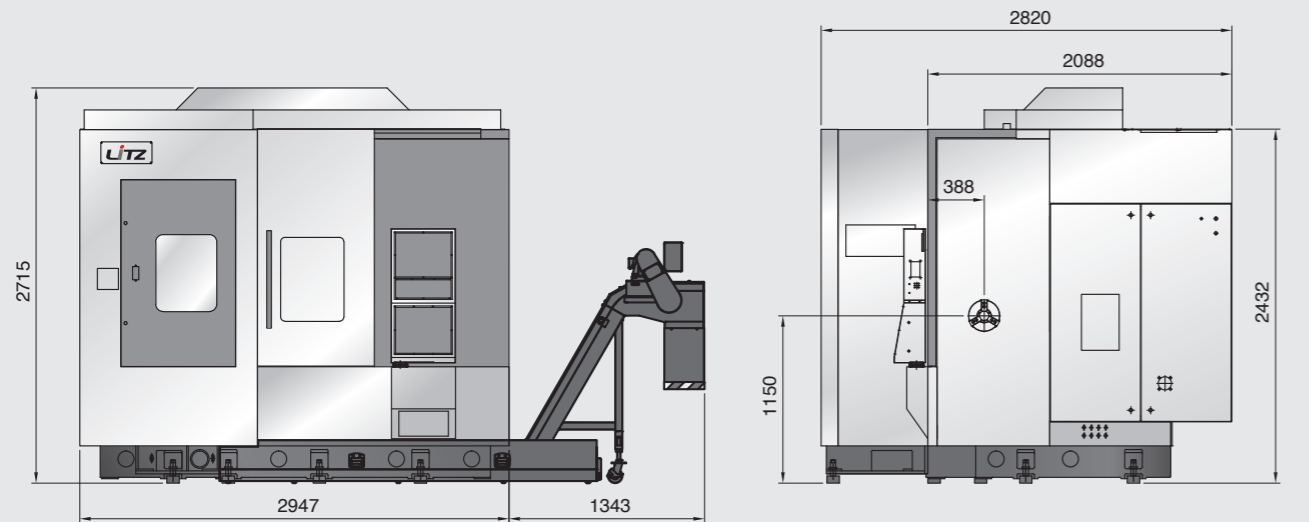
Picture shows 70BAR coolant supply unit <sup>OP</sup>

## Machine Dimensions

### TM-2500

Unit : mm

#### Appearance Dimensions

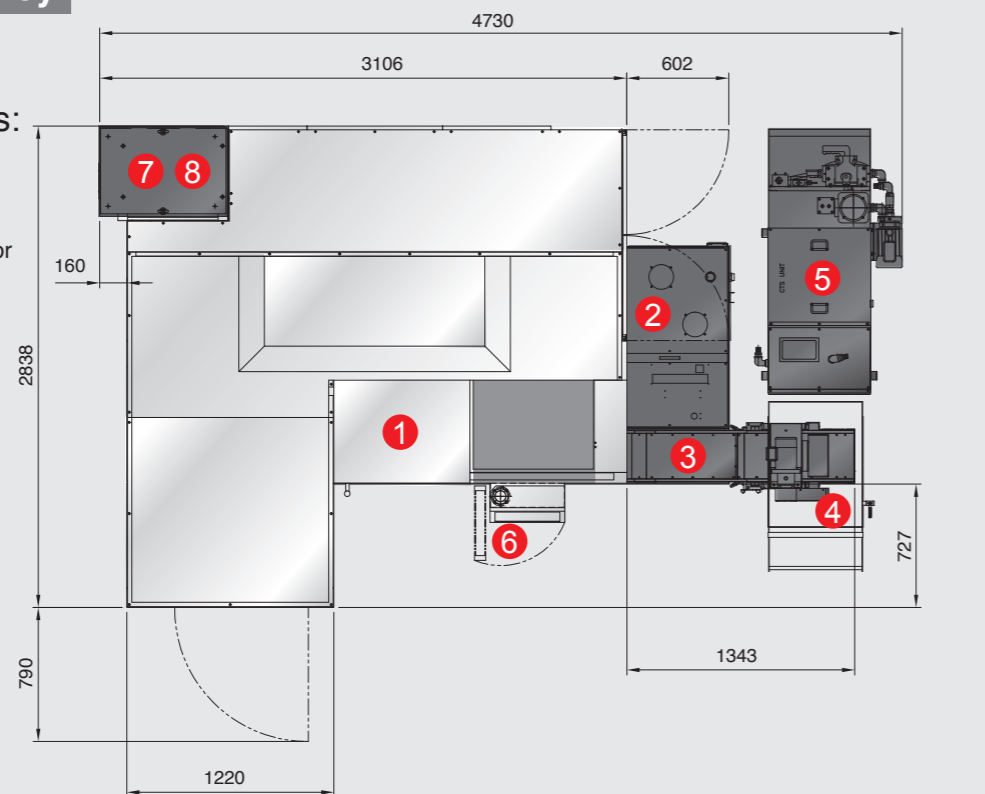


Unit : mm

#### Machine Occupancy

##### Description of parts:

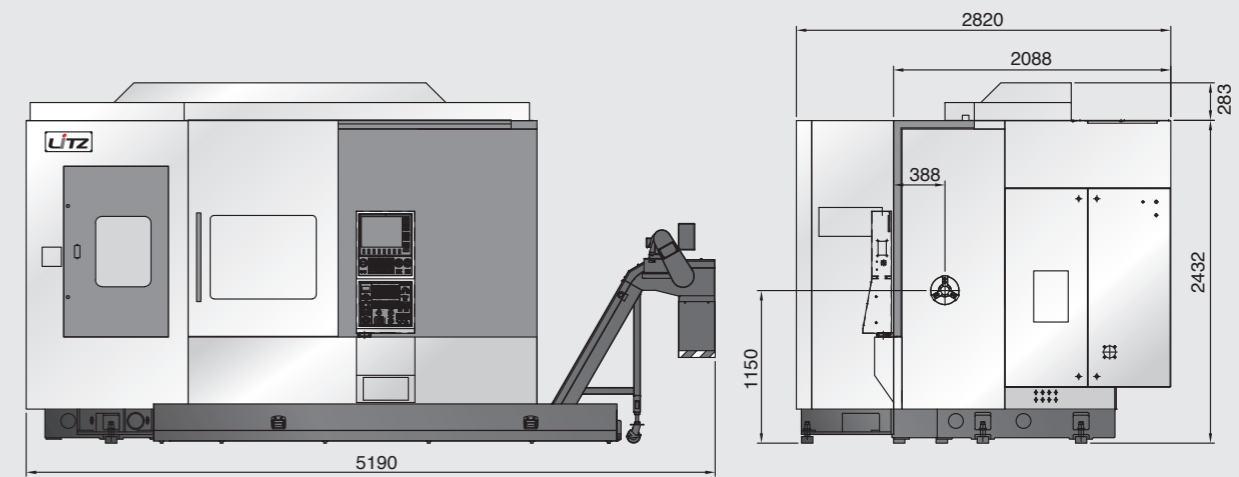
- ① TM-2500 Machine
- ② Water Tank System
- ③ Chain-type Chip Conveyor
- ④ Chip Collection Cart
- ⑤ Spindle Cooling System
- ⑥ Controller
- ⑦ Hydraulic Unit
- ⑧ Oil Cooler Unit



### TM-2500S

Unit : mm

#### Appearance Dimensions

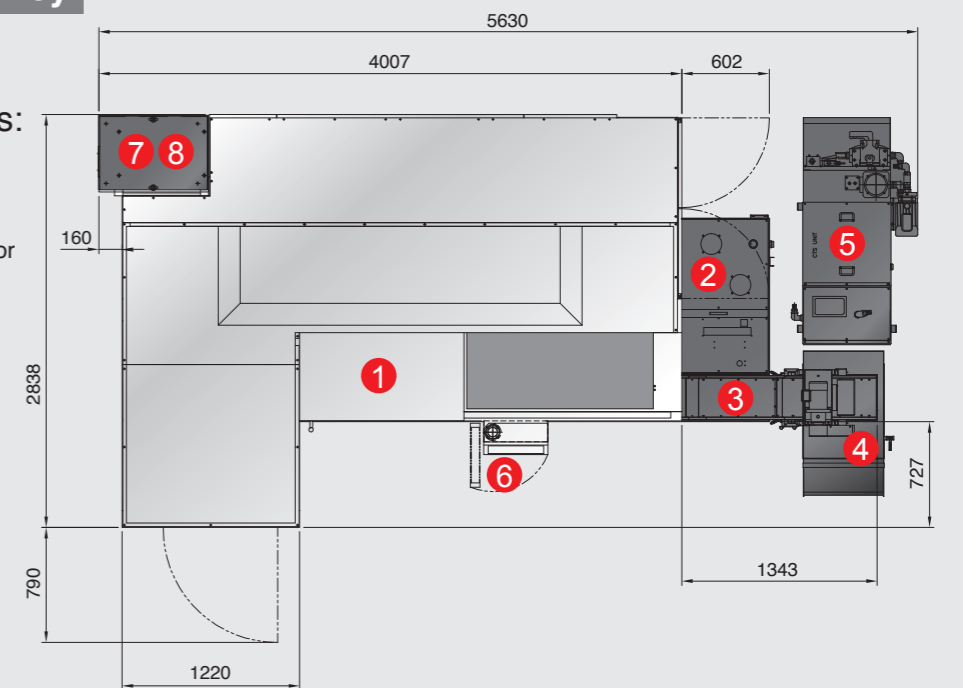


Unit : mm

#### Machine Occupancy

##### Description of parts:

- ① TM-2500S Machine
- ② Water Tank System
- ③ Chain-type Chip Conveyor
- ④ Chip Collection Cart
- ⑤ Spindle Cooling System
- ⑥ Controller
- ⑦ Hydraulic Unit
- ⑧ Oil Cooler Unit



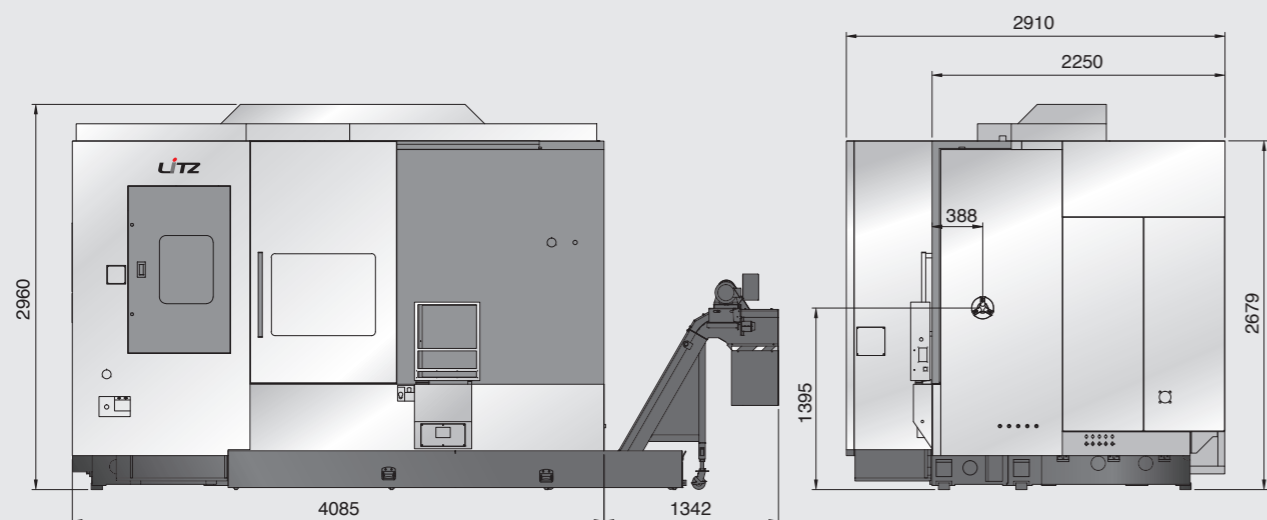


## Machine Dimensions

### TM-2500STM

Unit : mm

#### Appearance Dimensions

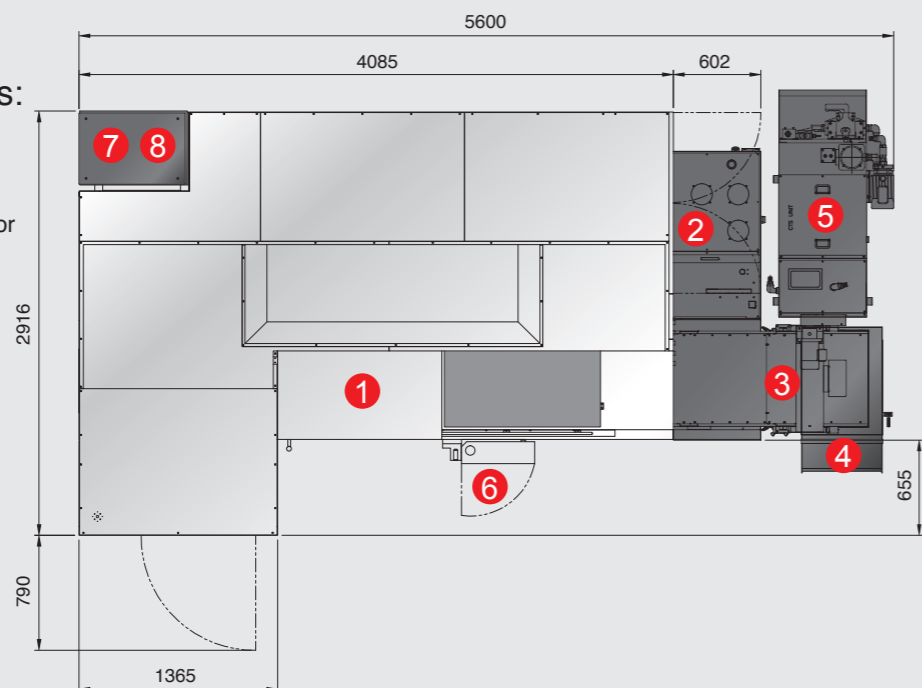


Unit : mm

#### Machine Occupancy

##### Description of parts:

- ① TM-2500 Machine
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## Machine Specifications

	Item	Unit	TM-2500	TM-2500S	TM-2500STM
<b>Capability, Capacity</b>	Max. swing dia.	mm	Ø530	Ø530	Ø530/Ø450
	Max. Machining Diameter	mm	Ø500	Ø500	Ø450/Ø250
	Max. Machining Length	mm	500	1000	1040
	Max. Bar Diameter	mm	Ø65	Ø65	Ø52
<b>Travel</b>	X-Axis Travel	mm	560	560	560
	Y-Axis Travel	mm	±125	±125	±125
	Z-Axis Travel	mm	560+93	1060+93	1080+72
	X2-Axis Travel	mm	-	-	165
	Z2-Axis Travel	mm	-	-	1040
	W-Axis Travel	mm	910	1090	1080
	B-Axis Rotating Angle	degree	-20°~200°	-20°~200°	-20°~200°
C-Axis Rotating Angle	degree	360°	360°	360°	
<b>Feedrate</b>	X-Axis Rapid Feedrate	M/min	36	36	36
	Y-Axis Rapid Feedrate	M/min	36	36	36
	Z-Axis Rapid Feedrate	M/min	36	36	36
	X2-Axis Rapid Feedrate	M/min	-	-	20
	Z2-Axis Rapid Feedrate	M/min	-	-	30
	W-Axis Rapid Feedrate	M/min	8	24	30
	B-Axis Max. RPM	RPM	25	25	25
C-Axis Max. RPM	RPM	250	250	250	
<b>Turning Spindle</b>	Chuck Dimensions S1		8"	8"	8"
	Chuck Nose Type S1		A2-6	A2-6	A2-6
	Hole Diameter S1	mm	Ø75	Ø75	Ø61
	Spindle Max. RPM S1	RPM	4500	4500	4500
	Motor Output Power S1	KW	15/22	15/22	11/15
	Chuck Dimensions S2		-	8"	8"
	Chuck Nose Type S2		-	A2-6	A2-6
	Hole Diameter S2	mm	-	Ø75	Ø61
	Spindle Max. RPM S2	RPM	-	4500	4500
	Motor Output Power S1	KW	-	15/22	11/15
<b>Milling Spindle</b>	Spindle Max. RPM	RPM	12000	12000	12000
	Motor Output Power	KW	11/22	11/22	11/22
	B-Axis Min Indexing Angle	degree	0.001°	0.001°	0.001°
<b>Tool Change</b>	Tool Indexing Angle/Position		90°/4	90°/4	90°/4
	Tool Type		HSK-63T	HSK-63T	HSK-63T
	Tool Magazine Capacity	T	36	36	40
	Max. Tool Diameter (Without adjacent tool)	mm	Ø90(120)	Ø90(120)	Ø90(120)
	Max. Tool Length	mm	250	250	250
<b>Turret</b>	Max. Tool Weight	kg	8	8	8
	Turret Type		-	-	12 sides
	Tool Holder		-	-	BMT45
	O.D. tool type		-	-	□20
	I.D. tool typw		-	-	Ø32
<b>Quill-Type Tailstock</b>	Live tool RPM	RPM	-	-	5000
	Live Tool power	KW	-	-	2.8
<b>Controller</b>	Quill Type		MT5	-	-
	Model		SIEMENS840D	SIEMENS840D	SIEMENS840D
	Machine Height	mm	2715	2715	2960
<b>Machine Dimensions</b>	Occupancy(Without chip conveyor)	mm	3106x2838	4007x2838	4085x2916
	Machine Weight	kg	9200	11000	15000
<b>Energy Requirement</b>	Power Capacity	KVA	35	42	42
	Compress Air Requirement	kg/cm <sup>3</sup>	6	6	6

## Machine Specifications

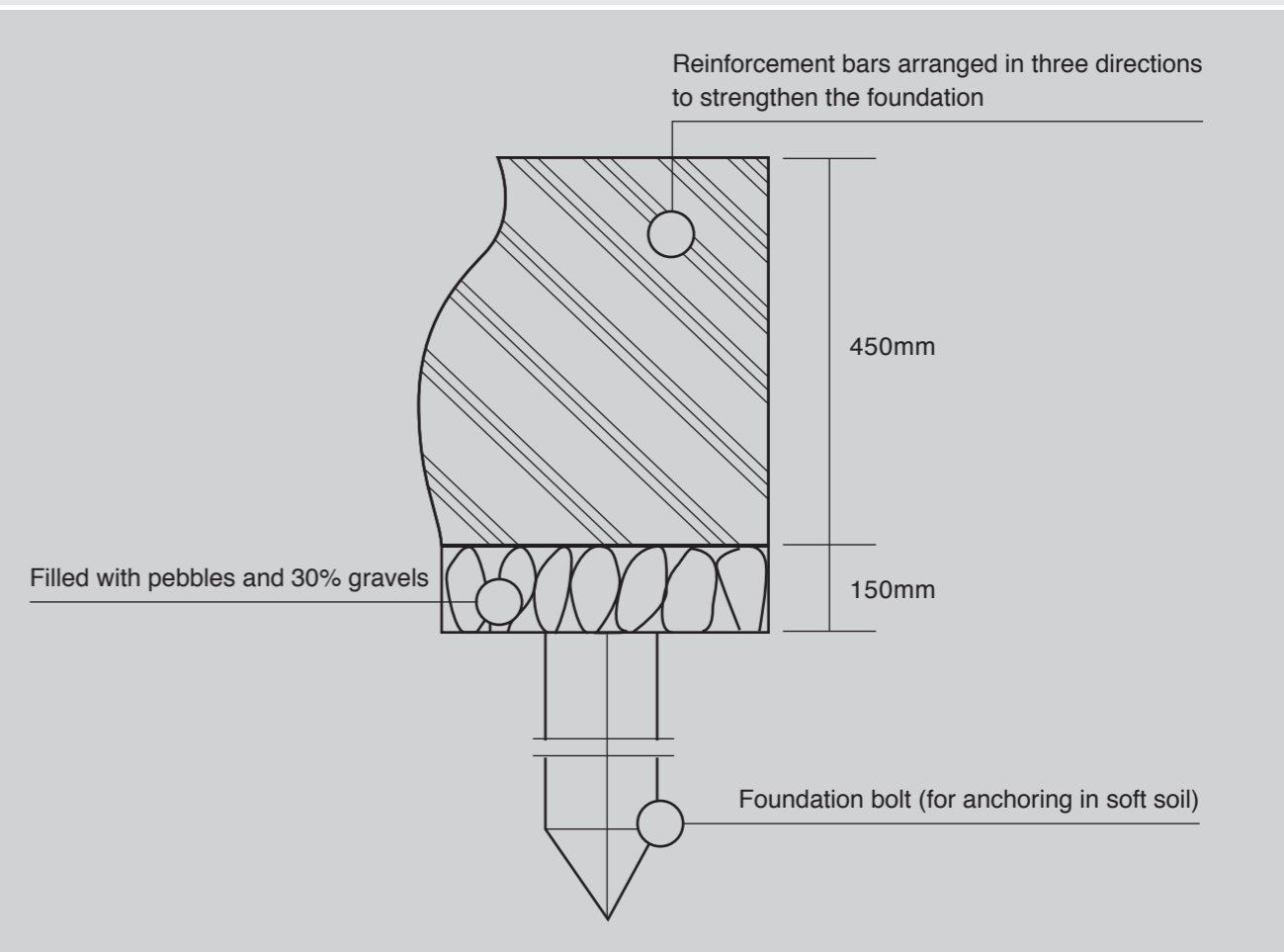
	● Standard	○ Optional	★ Please inquire
	TM-2500	TM-2500 S	TM-2500 STM
<b>Spindle System</b>			
1st Turning Spindle Max. Speed 4500RPM	●	●	●
2nd Turning Spindle Max. Speed 4500RPM	-	●	●
Milling Spindle Max. Speed 12000RPM	●	●	●
Milling Spindle Max. Speed 18000RPM	○	○	○
Chuck 8"	●	●	●
Chuck 10"	○	○	-
Sleeve Chuck(Ø60)	○	○	○
<b>NC Tailstock</b>			
Quill-Type Tail Stock(W-Axis)	●	-	-
Rotary Quill	●	-	-
Fixed Quill	○	-	-
Tailstock Reverse-Pulling System	○	-	-
Automatic live center installation	-	★○	★○
<b>High-Accuracy System</b>			
X/Y/Z Axis Optical Linear Scale	○	○	○
X/Y/Z Axis Guideway Hollow Cooling	●	●	●
B-Axis Optical Linear Scale	●	●	●
C-Axis Encoder	●	●	●
Spindle Oil Cooling System	●	●	●
<b>Measurement System</b>			
Milling spindle tool length measurement	○	○	○
Workpiece measurement	★○	★○	★○
B/C axis center calibration	★○	★○	★○
Turret tool length measurement	-	-	★○
<b>Environmental System</b>			
Oil Mist Collector Device	○	○	○
<b>Coolant</b>			
High-Pressure Coolant System(30Bar)	●	●	●
High-Pressure Coolant System(70Bar)	○	○	○
Coolant level gauge	●	●	●
Coolant level/Temp. gauge	○	○	○
<b>Steady Rest</b>			
	★○	★○	★○
<b>Controller System</b>			
FANUC 31i-B(4+1)	○	○	○
FANUC 31i-B5(5 axes simultaneous)	○	○	○
SIEMENS 840D(5 axes simultaneous)	●	●	★●
<b>Chip Management</b>			
Chain-type Chip Conveyor	★●	★●	★●
Chip Collection Cart(not tiltable)	●	●	●
Chip Collection Cart(tiltable)	○	○	○
Coolant filtration system	○	○	○
<b>Automation System</b>			
Rod Automatic Feeder	★○	★○	★○
Workpiece Arrestor	★○	★○	-
Automatic Front Door	○	○	○
<b>Tool Magazine System</b>			
Storage Number 36T(TM-2500/2500S)	●	●	-
Storage Number 40T(TM-2500STM)	-	-	●
Storage Number 72T(TM-2500/2500S)	○	○	-
Storage Number 80T(TM-2500STM)	-	-	○
<b>Tool Specifications</b>			
HSK 63T	●	●	●
CAPTO C6	○	○	○
<b>Lower turret(TM-2500STM)</b>			
Boring tool holder	-	-	●
End-cut tool holder	-	-	●
O.D. tool holder	-	-	●
Axial live tool holder	-	-	●
Radial live tool holder	-	-	●
Boring tool sleeve	-	-	●
<b>Machining Function</b>			
Tooth Milling Function	○	○	○
<b>Safety Measures</b>			
CE Specification	○	○	○
Dual-link Pedal Switch	○	○	○
Stabilizer	○	○	○
Transformer	○	○	○

- All the photos contained herein are for reference only. In case of any discrepancy with the actual machine parts, the actual machine shall prevail.
- LITZ reserves the right to modify the product specifications, appearance, equipment or discontinue the products.

## Power and Environment requirements

<b>Power requirement</b>	3 phase 400V±10%50Hz (Voltage stabilizer must be installed in areas with unstable voltage)
<b>Operating temperature</b>	General condition: 10°C-40°C Excellent condition: 17°C-25°C
<b>Relative humidity</b>	≤75%
<b>Atmospheric pressure</b>	≥0.5Mpa
<b>Oil type</b>	Hydraulic unit: (ISO VG32) 50L Oil Cooling unit: (ISO VG32) 36L Guide way/ballscrew: grease (Provided one unit per machine)

Foundation requirement: Minimum 300mm concreted floor



**Notice:**

1. Siting location should avoid larger deviation of temperature, direct sunlight, dusty, and large vibrations.
2. Concrete foundation flatness within 10 mm.
3. Average concrete surface pressure 0.029 MPa.
4. Surface strength 0.043 MPa.
5. Nearby high frequency voltage generator, electrical charge machines, or shared power supply unit may cause interference and damage the NC. Please contact Litz before commissioning.
6. Follow closely the grounding instruction regulated by Litz.