

# **STAR STL8**Technical Data





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### **Enterprise Culture**



Z-MaT stands for Zhenhuan Machine Tool Company, one of the largest and fastest growing machine tool builders — worldwide. Z-MaT manufactures a wide range of CNC machines, which includes CNC Turning Centers, Horizontal CNC Lathes, Vertical Machining Centers, CNC Milling Machines and Special Purpose Machines.

In addition, Z-MaT is recognized for the company's advanced development and technological advantage in the field of live tooling products. Live tooling operations include axial and radial milling, drilling and tapping. These live tooling applications are available on a wide variety of Z-MaT CNC turning machines.

As of today, Z-MaT has more than 23 machine model series, with more than 100 models of CNC turning machines in the company product line. This broad line of CNC lathes has brought recognition to Z-MaT as a world-wide leader in precision turning machines.

With distribution around the world, investment from Hong Kong, research and development centered in Taiwan, and manufacturing/assembly in China, Z-MaT is a responsible international corporation. Z-MaT is known and recognized for providing unmatched support to customers, employees, and to the environment.

Z-MaT is committed to building partnerships with educational institutions, community organizations, governmental agencies and private companies. Our ultimate goal is to be a conscientious public partner in providing smart manufacturing solutions that serve industry and positively impact the world.

















## **Machine Characteristics**

#### 1. Appearance



STL8 is designed by our R&D center in Taiwan, and with famous function parts the quality is as good as Taiwan machine.

- •One-piece square casting bed with true slant structure keeps machine in good rigidity and stability.
- •Germany Rexroth high precision linear guideway offers good processing accuracy, and Taiwan roller type linear guideway is optional for better rigidity.
- •High precision PMI ballscrew and good rigidity spindle unit with NSK bearings keep machine in good process accuracy in long working life.
- Advanced turret with fast tool indexing and good repeatability offers good efficiency.
- •Hydraulic tailstock makes machine be with good universality, and automatic tailstock (linear guideway, hydraulic driven) is optional for special processing program.



#### 2. Famous Brand Function Parts



Chandox Hydraulic Chuck



Rexroth/PMI Linear Guideway



PMI **Ballscrew** 



**HURUN Lubrication Pump** 



**NSK Bearings** Spindle Unit



YUNHAI Coolant Pump



Schneider **Electrical Component** 



Pragati Turret



**Point** Heat

















































## Partners & Quality Components

Z-MaT only uses high-quality, precision components in the manufacture of our line of professional quality, production grade CNC machines. While this step is more expensive, building quality components into our machines is the only way to achieve the quality results and long service life our customers have come to



## Main Parts List

No.	Name	Manufacturer	Remark
1	CNC System	GSK	
2	Spindle Servo Motor	GSK	
3	X/Z Axis Servo Motor	GSK	
4	Spindle Bearings	NSK	
5	X/Z Axis Ballscrew Bearings	HRB	
6	X/Z Axis Ballscrew	PMI	
7	X/Z Axis Linear Guideway	PMI	
8	Spindle Unit	GIESSEN	A2-6
9	Turret	PRAGATI	8/12 station
10	Coolant Pump	YUNHAI	
11	Lubrication Pump	HURUN	
12	Heat Exchanger	POINT	

# **Standard Configurations**

No.	Name	No.	Name	
1	8-station turret	8	Foundation pads	
2	Spindle unit	9	indicator light	
3	8' hollow hydraulic chuck	10	Lamp	
4	Hydraulic tailstock	11	Heat exchanger	
5	Coolant system	12	USB connector	
6	Auto lubrication system	13	Rigid tapping function	
7	Tool box	14	Safety door switch	



# **Optional Configurations**

No.	Name	No.	Name
1	Fanuc, Mitsubishi	5	Auto tool setter
2	12-station turret	6	Air conditioner
3	Oil water separator	7	Oil mist collector
4	Chip conveyor with cart	8	11kW spindle motor

## **Accessories and manuals list**

No.	Name	Spec.	QTY	Remark
1	Inner hexagon spanner	1.5-10	1 set	
2	Double open-end wrench	12-14	1 pc	
3	Double open-end wrench	17-19	1 pc	
4	Cross screwdriver	2 Slot 2	1 pc	
5	Foundation pads		6 pcs	
6	Conformity certificate with test sheet		1	
7	Operation Manual		1 сору	
8	Operation manual for CNC system		1 сору	
9	Programming manual		1 сору	
10	Spindle driver manual		1 сору	
11	Packing list		1 сору	
12	Tool box		1 pc	



## **Technical Parameters**

## **STAR STL8**

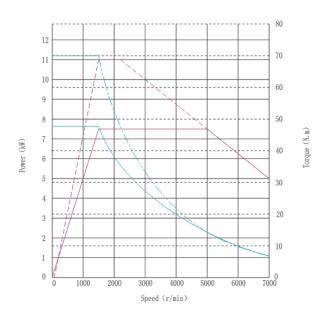
Capacity	Max. swing diam. over bed	mm	420
	Max. length of workpiece	mm	400
	Max. swing diam. over slide	mm	210
	Spindle speed	rpm	2000, 3500*
Continuella	Main motor	kW	7.5/11
Spindle	Diam. of spindle Bore	mm	62
	Max. diam. of through-hole	mm	52
	Travel	mm	180/400
X/Z axis Turret	Rapid traverse	m/min	15/20
	Center height	mm	80
	No. of tool stations		8, 12*
	OD of Tool	mm	25×25, 20×20*
Tailstock	Туре		hydraulic
	Taper of quill		MT4
	Travel of quill	mm	80
	Travel of tailstock	mm	400
Others	Power capacity	kVA	15
	Weight (about)	Kg	3300
	Overall dimension(L×W×H)	mm	3300×1720×1775

Note: "\*" means optional items



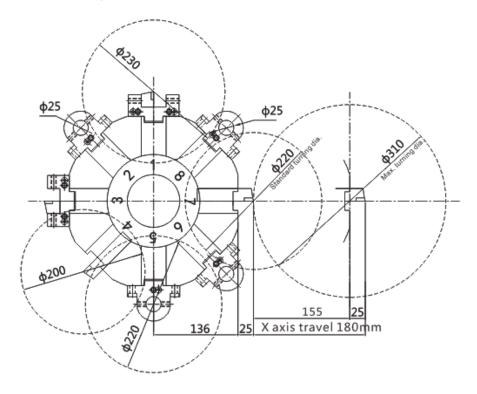
## Main motor torque diagram





## **Interference Figure**

## 1. Turret Interference Figure



Pragati 8-station turret BTP-80



## 2. Mechanical interference figure

