

STAR STL SERIES

STAR STL6/STL8/STL8 Plus/STL8-II/STL10/STL12/STL15



Standard Features

- Hydraulic 3-Jaw Chuck
- 8-Station Turret (STL series)
- Automatic Lubrication System
- Automatic Coolant System
- Automatic Tailstock (STL10, STL12)
- Hydraulic Tailstock (STL6, STL8)

Machine Characteristics

- Cast Mono-Block, "True Align" Slant Bed Structure
- Adjustable "Ergonomic" Operator Control Panel
- Servo Spindle Motor – High Speed with Constant Torque
- Handheld Electronic Hand Wheel
- Schneider Superior Quality Electrical Components
- Cylindrical Roller Spindle Bearings and LM for STL10/STL12

Optional Features

- 12-Station Turret
- Different Chucks and Collets
- Different CNC Control Systems
- Different Spindle Bore Diameters
- Chip Conveyor
- Tool Setter
- Bar Feeder
- Center rest (STL15)



Specifications

	Unit	STL6	STL8	STL8Plus	STL8-II	STL10	STL12	STL15	
Capacity	Chuck size	inch	6", *8"	8", *10"	8", *10"	8", *10"	10", *8"	12", *15"	
	Max. swing dia. over bed	mm	Φ400	Φ420	Φ500	Φ420	Φ500	Φ650	
	Max. length of workpiece	mm	300	450	400	500	750, *1000	1500	
	Max. swing dia. over slide	mm	Φ200	Φ210	Φ280	Φ210	Φ270	Φ290	
Spindle	Spindle bore	mm	Φ48 *Φ55 *Φ62	Φ62 *Φ75	Φ62 *Φ75	Φ62 *Φ75	Φ81 *Φ62	Φ105 *Φ105 *Φ120	
	Max. dia. of through-hole	mm	Φ40 *Φ46 *Φ52	Φ52 *Φ65	Φ52 *Φ65	Φ52 *Φ65	Φ70 *Φ52	Φ91 *Φ91 *Φ110	
	Spindle nose	type	A2-5 *A2-5 *A2-6	A2-6 *A2-8	A2-6 *A2-8	A2-6 *A2-8	A2-8 *A2-6	A2-11 *A2-11 *A2-11	
			3000 *2500 *2000	2000 *1600	2000 *1600	2000 *1600	1600 *2000	1000 *1800 *1000	
	Spindle speed	rpm	*4500 *4000 *3500 *4000	*3500 *3000	*3500 *3000	*3500 *3000	*2500 *3500		
	Main motor power	kW	5.5/7.5	7.5/11.0	7.5/11.0	7.5/11.0	7.5/11.0, *11.0/15.0	11.0/15.0, *15.0/18.0	11.0/15.0, *15.0/18.0
Axis	X axis travel	mm	155	180	265	180	280	280	
	Z axis travel	mm	300	450	400	500	750, *1000	1500	
	X/Z rapid traverse	m/min	18/20	15/20	15/20	15/20	15/20	15/20	
Turret	Max. speed of driving tool	rpm	N/A	N/A	N/A	N/A	N/A	N/A	
	No. of tool stations	nos	8, *12	8, *12	8, *12	8, *12	8, *12	8, *12	
	Tool shank size	mm	20x20, *16x16	25x25, *20x20	25x25, *20x20	25x25, *20x20	25x25	25x25	
Tailstock	Type of tailstock		Hydraulic, *LM	Hydraulic, *LM	Hydraulic, *LM	LM	LM	LM	
	Taper of tailstock quill		MT4	MT4	MT4	MT4	MT5	MT5	
	Travel of tailstock quill	mm	80	80	80	0	0	0	
	Travel of tailstock	mm	300	400	400	100-500	100-750	100-750	100-1500
Structure	Slant bed degree		35°	35°	35°	35°	35°	45°	
	Guideway type		LM	LM	LM	LM	LM	LM	
Others	Power capacity	KVA	13	15	15	18	20	25	
	Overall dimension (LxWxH)	mm	2130x1450x1600	2600x1720x1775	2600x1720x1775	2800x1850x1830	3200x1900x2000	3200x1900x2000	4010x2100x2250
	Weight (about)	Kg	2500	3300	3400	3400	5000	5200, *6000	8800

Note: "*" means optional, "LM" means linear motion guide way, automatic hydraulic driven body move tailstock.

Z-MaT ZHEJIANG ZHENHUAN CNC MACHINE TOOL CO., LTD.

Zhejiang Headquarter and Plant:
Add: Mechanical & electrical industrial zone, Yuhuan,
Zhejiang, 317600 China
Phone: +86-576-87226292 Fax: +86-576-87226290
www.zmat.cn E-mail: info@zmat.cn

Jiangsu Z-MaT No.2 Plant:
Shandong Precision Spindle Unit Plant:
Hong Kong Commercial Center:
Taiwan R&D Center:

Nanjing Zhenhuan Machinery Co., Ltd.
Weihai Giessen Seiki Co., Ltd.
Kimway Dragon Holdings limited
GreaMaT Machinery Co., Ltd.
No.1 Tuqiao Industrial Zone, Jiangning District, Nanjing, Jiangsu.
No. 39-3 Hi-tech Industrial Zone, Weihai, Shandong.
701A Caroline Centre, 2-38 Yun Ping Road, Hong Kong.
No. 955, Section 4, Wenxin Rd., Beitun District, Taichung, Taiwan.

Heavy-Duty Cast Iron Base – PLUS, Quality Components

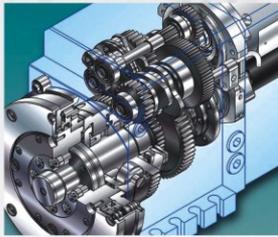
STL lathes have a heavy-duty cast base with “true align” slant bed design. The machine bed, head stock, turret and tail stock are aligned on the same plane. This unique design feature reduces heat build-up and resulting thermal expansion. The net result is a higher precision machine tool.

Additional resulting efficiencies from the “true align” design are greater rigidity and smoother operation – which provides a variety of benefits. You can expect to produce highly accurate parts with extremely fine surface finishes.

There are multiple benefits to having a lathe that combines such a large sized “vibration damping” solid, cast base – PLUS, properly aligned and balanced components. Some of these benefits include: 1) Smoother slide surface operation 2) Higher speed and accuracy 3) Fewer machine adjustments and lower maintenance costs 4) Shortened machine warm-up time, and 5) Lower power consumption.

Turret Features

Indexing, bi-directional 8-Station Turret is standard on the STL. 12-Station Turret is optional. High quality, high speed turret provides optimal tool change efficiency and speed.



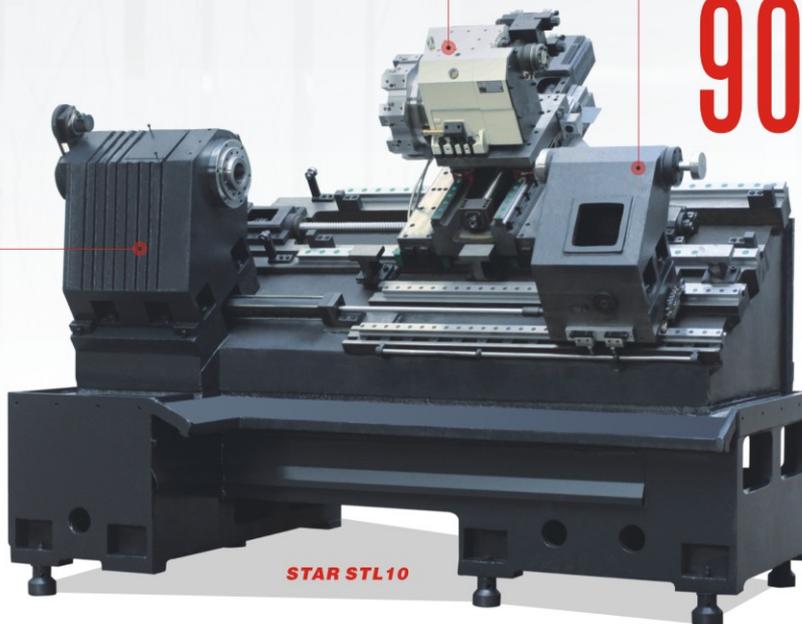
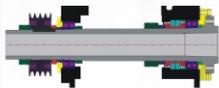
Automatic Tail Stock

This efficient tail stock provides a combination of rigidity, accuracy and rapid set-up times. The tail stock body, with cylindrical roller linear guideway is positioned by a hydraulic traction bar.



Rigid Headstock and Spindle

Heavy duty spindle nose is supported by a double row of tapered cylindrical roller bearings. Back of spindle is supported by angular ball bearings and a double row of cylindrical roller bearings. This combination provides the very best combination of speed and rigidity.



90% reduction in set-up time, compared to manual tail stock lathes.



STAR STL6 STL8 STL8-II'S bases and beds are

One-piece square casting monoblock design

Combined Speed and Rigidity

Machines come standard with a direct mount spindle. Cartridge type spindle units are available as an option.

The headstock and main spindle are manufactured then assembled and tested in clean room. Heavy duty type spindle is supported by a double-row tapered cylindrical roller bearing plus angular ball bearing and double-row cylindrical roller bearing in the rear. It is a perfect marriage of speed and rigidity.



Cartridge Type Spindle As Optional

Various High Class Turret

Increase efficiency and reliability

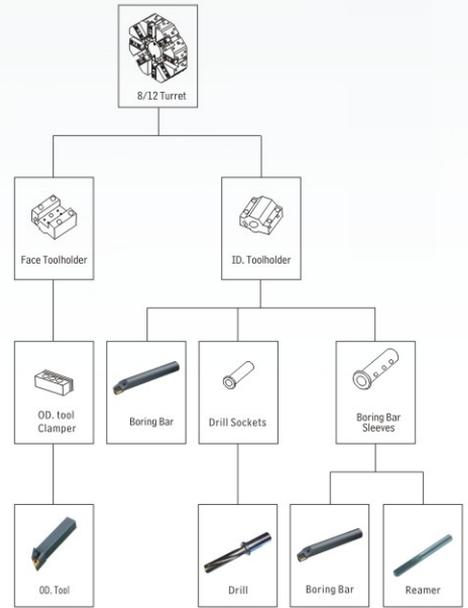
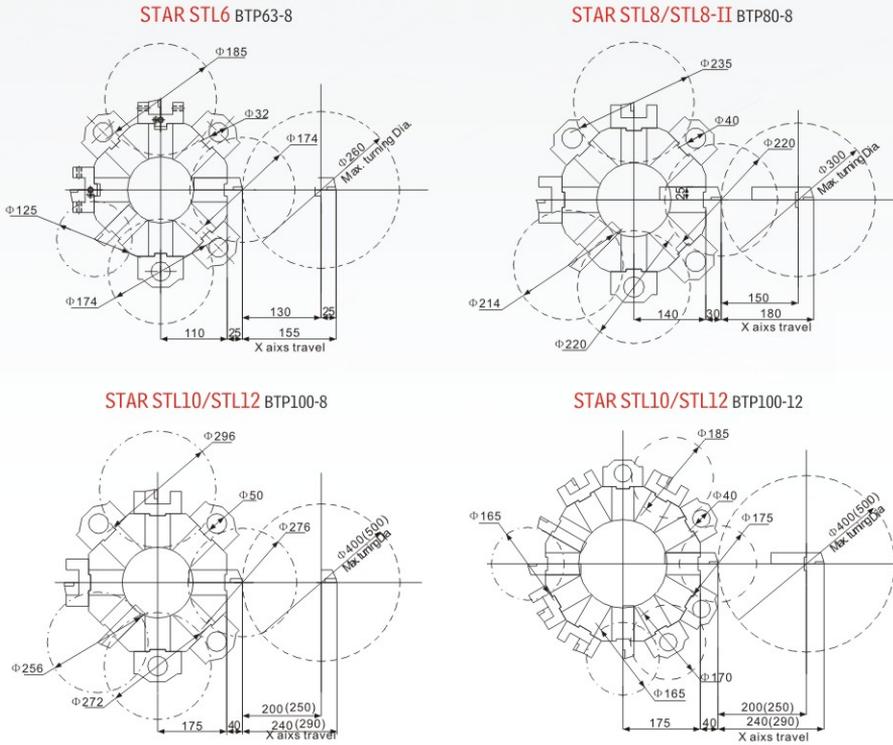
Indexing, bi-directional 8-Station Turret is standard on the STL. 12-Station Turret is optional. High quality, high speed turret provides optimal tool change efficiency and speed.



Tool Interference Diagram

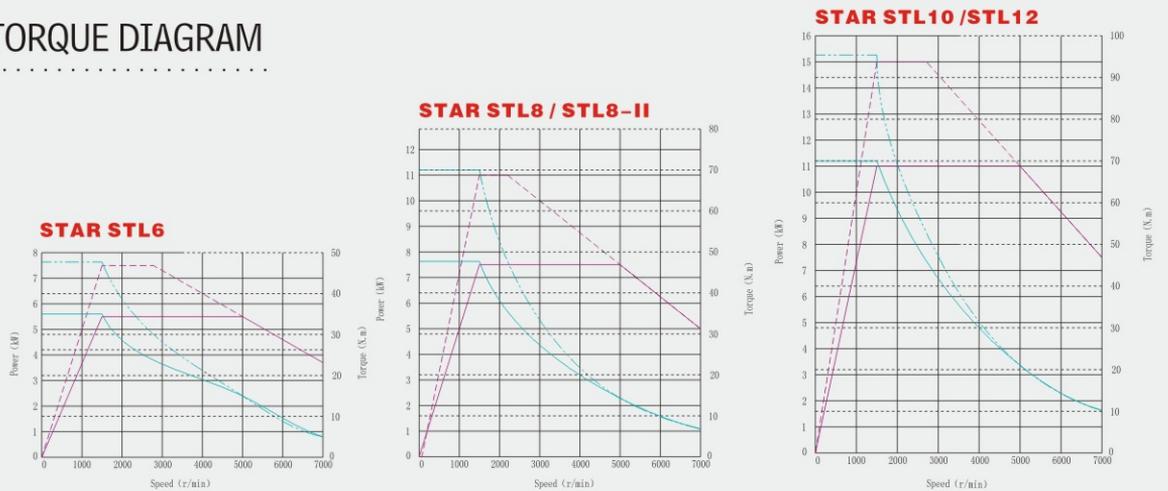
TOOLING SYSTEM

STAR STL6/STL8/STL8-II/STL10/STL12



SPINDLE MOTOR TORQUE DIAGRAM

- Max. Torque
- Continuous Torque of Drive
- Max. Power
- Continuous Power of Drive



Note: The real spindle output torque are converted by actual belt pulley ratio, please contact sales representative to get more technical details.