



STAR STL

Smart CNC Solutions

CNC LATHE SERIES

Complete Range Combine With
Flexible Configuration



Heavy-Duty Cast Iron Base – PLUS, Quality Components

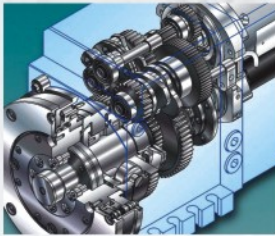
STL lathes have a heavy-duty cast base with “true align” slant bed design. The machine bed, head stock, turret and tailstock are aligned on the same plane. This unique design feature reduces heat build-up and resulting thermal expansion. The net result is a higher precision machine tool.

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.



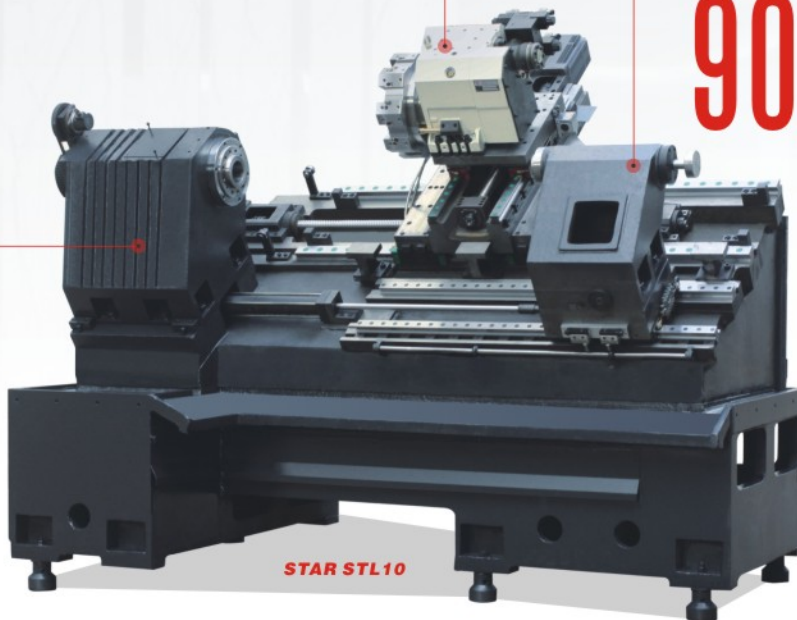
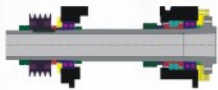
Automatic Tailstock

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



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 tailstock 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.

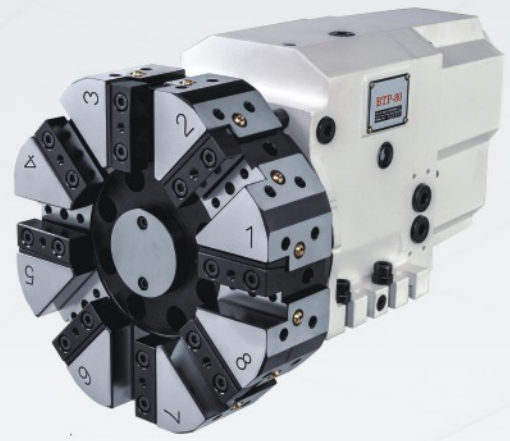


Cartridge Type Spindle As Optional

Various High Class Turret

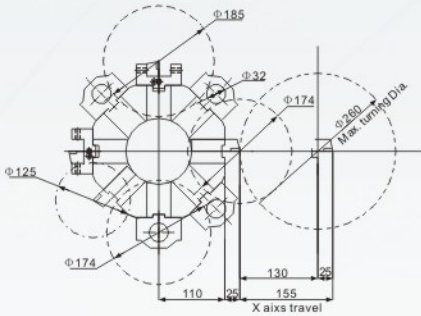
Increase efficiency and reliability

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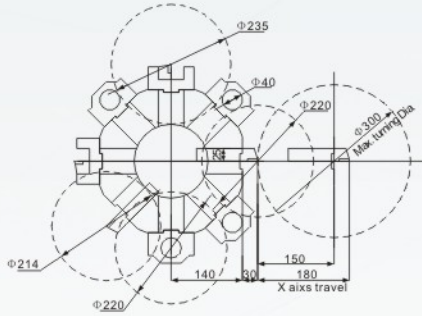


Tool Interference Diagram

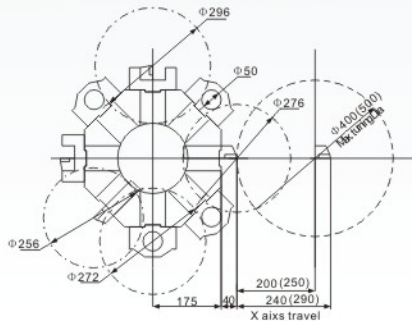
STAR STL6 BTP63-8



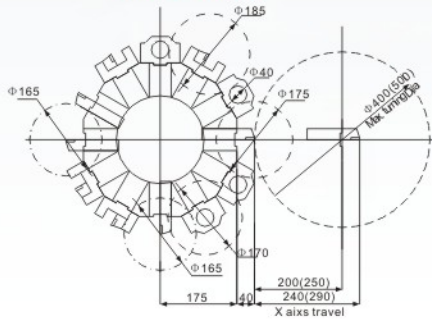
STAR STL8/STL8-II BTP80-8



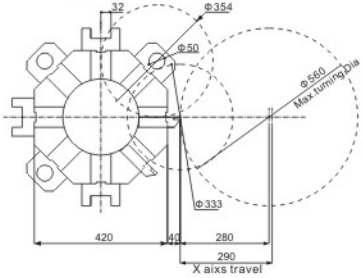
STAR STL10/STL12 BTP100-8



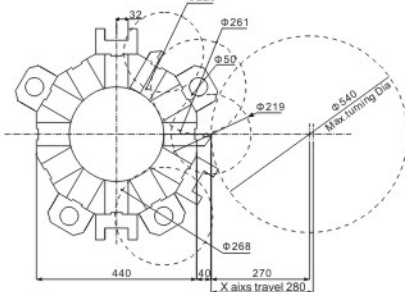
STAR STL10/STL12 BTP100-12



STAR STL15 BTP125-8

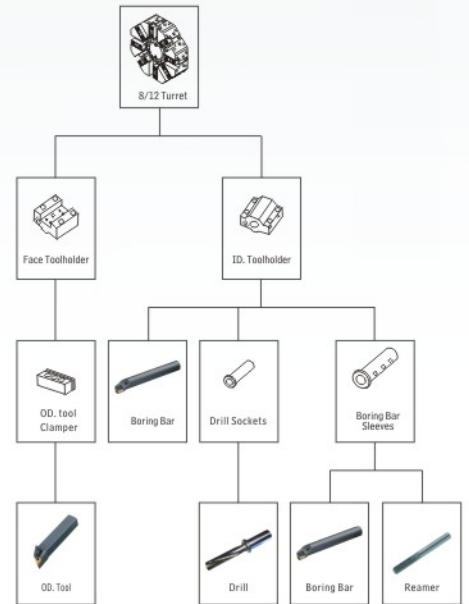


STAR STL15 BTP125-12



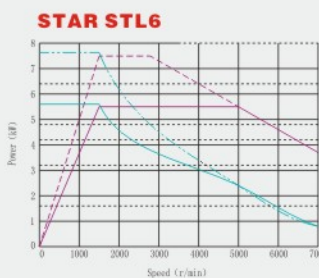
TOOLING SYSTEM

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

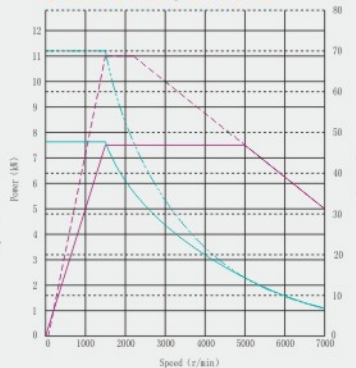


SPINDLE MOTOR TORQUE DIAGRAM

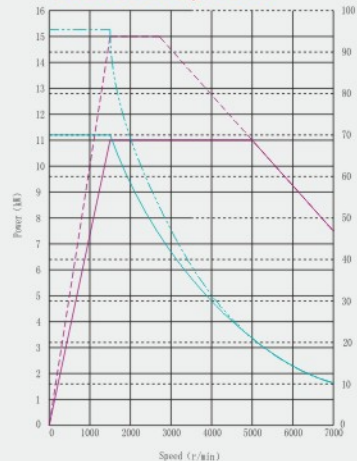
Max. Torque
 Continuous Torque of Drive
 Max. Power
 Continuous Power of Drive



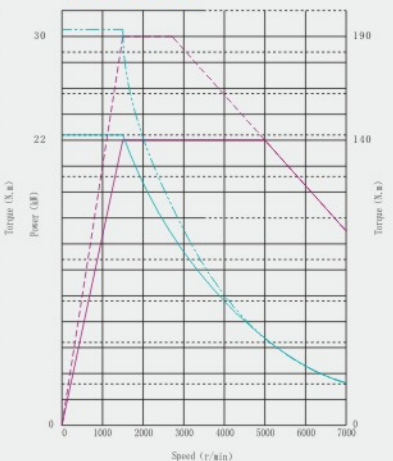
STAR STL8 / STL8-II



STAR STL10/STL12



STAR STL15



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

Standard Features

- Hydraulic 3-jaw Chuck
- 8-station Turret
- Automatic Lubrication System
- Automatic Coolant System
- Hydraulic Tailstock
- 3 Color Indicator Lamp
- Work Lamp
- Fully Enclosed Guard
- Hydraulic System
- Heat Exchanger Of Electric Cabinet



Optional Features

- 12-Station Turret
- Different Chucks And Collets
- Different Spindle Bore Diameters
- Automatic tailstock
- Chip Conveyor
- Tool Setter
- Bar Feeder
- Oil Mist Collector
- Air Conditioner Of Electric Cabinet
- Oil Skimmer



Specifications

Unit	STL8	STL8-II	STL8 Plus	STL8-750	STL8-1100	
Capacity						
Chuck size	inch	8", *10"	8", *10"	8", *10"	8", *10"	
Max. swing dia. over bed	mm	Φ450	Φ450	Φ550	Φ600	
Max. length of workpiece	mm	450	500	400,*550	750	1100,*1700
Max. swing dia. over slide	mm	Φ220	Φ220	Φ320	Φ360	Φ360
Spindle						
Spindle bore	mm	Φ62 *Φ75	Φ62 *Φ75	Φ62 *Φ75 *Φ86	Φ62 *Φ75	Φ62 *Φ75
Max. dia. of through-hole	mm	Φ52 *Φ65	Φ52 *Φ65	Φ52 *Φ65 *Φ75	Φ52 *Φ65	Φ52 *Φ65
Spindle nose	type	A2-6 *A2-8	A2-6 *A2-8	A2-6 *A2-8 *A2-8	A2-6 *A2-8	A2-6 *A2-8
Spindle speed	rpm	4000 *1600 *2000 *3500	4000 *1600 *2000 *3500	4000 *1600 *3000 *2000 *3500	4000 *1600 *2000 *3500	4000 *1600 *2000 *3500
Main motor power	kW	7.5/11, *11/15	7.5/11, *11/15	7.5/11, *11/15	7.5/11, *11/15	7.5/11, *11/15
Axis						
X axis travel	mm	170	170	260	260	260
Z axis travel	mm	450	500	400,*550	750	1100,*1700
X/Z rapid traverse	m/min	20/20	20/20	20/20	20/20	20/20
Turret						
Center height	mm	80	80	100	100	100
No. of tool stations	nos	8, *12	8, *12	8, *12	8, *12	8, *12
Tool shank size	mm	25x25, *20x20	25x25, *20x20	25x25	25x25	25x25
Tailstock						
Type of tailstock		Hydraulic, *SST, *HPT	HPT, *Hydraulic, *SST	Hydraulic, *HPT, *SST	SST, *SPT	SST, *SPT
Taper of tailstock quill		MT4	MT4	MT4	MT3	MT3
Travel of tailstock quill	mm	90	0	90	0	0
Travel of tailstock	mm	100-450	100-500	100-400, *550	100-750	100-1100, *1500
Structure						
Slant bed degree		35°	35°	35°	35°	35°
Guideway type		LM	LM	LM	LM	LM
Others						
Power capacity	kVA	15	15	16	16	18
Overall dimension (LxWxH)	mm	2650x2000x2050	2650x2000x2050	2650x2000x2050	3080x2000x2350	3380x2000x2350
Weight (about)	kg	3700	3800	4500	5200	5600

Note: "*" means optional. "LM" means linear motion guideway. Tailstock: "Hydraulic" means automatic hydraulic driven tailstock sleeve. "HPT" means linear motion guide way, automatic hydraulic driven body move tailstock. "SST" means small spindle hydraulic tailstock. "SPT" means servo programmable tailstock. "STL8-1700" is special purpose design for slim shaft workpiece standard with programmable steady rest and servo programmable tailstock.



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