



# 震环机床

Zhenhuan Machine Tool

## ***FTL500/550-1500*** ***Technical Data***



 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: gqp@zmat.cn





# 震环机床

## 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







## 2. Structure

### The World's *First and Best* Design

You will be hard pressed to find another linear guide way type CNC lathe that has a center mounted ball screw and stainless covers over the full 1.5 meter length of the ball screw and guide ways. This unique, Z-MaT patented design provides the perfect combination of long-term speed, accuracy and repeatability for a CNC lathe of this size and design.

#### Various Spindle Options

Spindle Bore Options: 81/105/120mm  
Different Spindle Speed Options



#### Center Mounted Ball Screw

Reduces torque – increases speed, efficiency, accuracy and machine life.

#### Heavy-Duty Linear Guideways

Heavy roller and ball-type linear guideways were selected for this heavy duty machine – so it has the efficiency advantages of linear guides, but also can compete with box ways for stability during heavy cutting operations.

#### 500mm Wide Machine Base

Extra wide machine base adds mass and stability to this heavy-duty lathe designed for heavy-duty turning operations.

#### 1 Piece

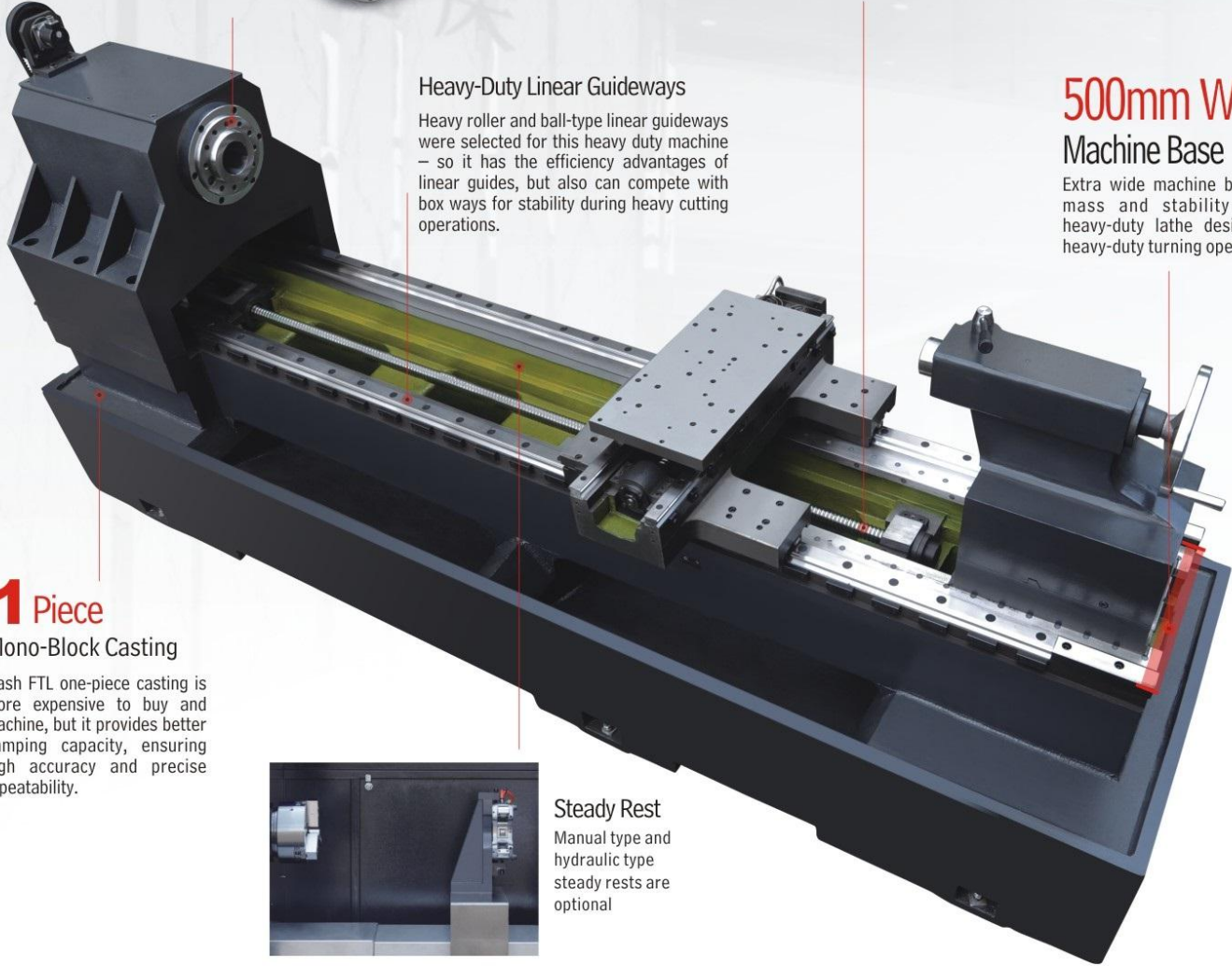
#### Mono-Block Casting

Flash FTL one-piece casting is more expensive to buy and machine, but it provides better damping capacity, ensuring high accuracy and precise repeatability.



#### Steady Rest

Manual type and hydraulic type steady rests are optional



## Standard Configurations

No.	Name	No.	Name
1	GSK CNC system	9	Coolant system
2	GSK feeding system	10	Foundation pads
3	GSK motor 11/15kW	11	indicator light
4	4-station turret	12	LED Lamp
5	Spindle speed 1600rpm	13	Heat exchanger
6	Ø250mm manual chuck	14	USB connector
7	Manual tailstock	15	Rigid tapping function
8	Auto lubrication system	16	Safety door switch

## Options

No.	Name	No.	Name
1	Fanuc, Mitsubishi, Siemens	6	Manual operation package
2	8/12-station turret	7	Air conditioner
3	Hydraulic chuck	8	Hydraulic tailstock
4	Manual steady rest	9	Spindle unit (NSK, 2500rpm)
5	Hydraulic steady rest	10	Vertical BT30 live tooling

## 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	P4
6	X/Z Axis Ballscrew	PMI	
7	X/Z Axis Linear Guideway	HIWIN/PMI	
8	Spindle Unit	GIESSEN	
9	Standard Turret	YASUN	
10	Coolant Pump	YUNHAI	
11	Lubrication Pump	HURUN	
12	Heat Exchanger	POINT	
13	Electric Component	SCHNEIDER	
14	Hydraulic Steady Rest	SCHUNK	

## 2. Famous Brand Function Parts



Chadox  
Manual Chuck



PMI  
Linear Guideway



PMI  
Ballscrew



YASUN  
4-position Turret



NSK Bearings  
Spindle Unit (optional)



YUNHAI  
Coolant Pump



SCHNEIDER  
Electrical Component



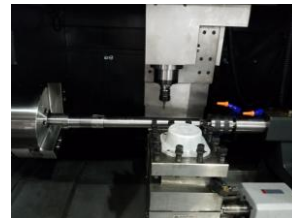
HURUN  
Lubrication Pump



Point  
Heat Exchanger



SCHUNK  
Hydraulic Steady Rest  
(optional)



BT30  
Vertical Live Tooling  
(optional)



Manual operation  
package (optional)



## 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 expect.

## Technical Parameters

### FLASH FTL500/550-1500

Items		Unit	FTL500	FTL550
Capacity	Max. swing diam. over bed	mm	500	550
	Max. length of workpiece	mm	1000, 1500*	1000, 1500*
	Max. swing diam. over slide	mm	260	320
Spindle	Chuck size	rpm	10	12, 15*
	Spindle speed	rpm	1600, 2500*	1000, 1800*
	Main motor	kW	11/15	15/18
	Diam. of spindle Bore	mm	81	105, 120*
	Max. diam. of through-hole	mm	70	91, 110*
X/Z axis	Travel	mm	280/1000, 1500*	280/1000, 1500*
	Rapid traverse	m/min	20/20	20/20
Turret	No. of tool stations	nos	4, 8*	4, 8*
	OD of Tool	mm	25×25	25×25
Tailstock	Type		Manual, Hydraulic*	Manual, Hydraulic*
	Taper of quill	MT	MT50	MT50
	Travel of quill	mm	100	100
Others	Power capacity	kVA	15	18
	Weight (about)	Kg	3600	3800
	Overall dimension(LxWxH)	mm	3400×1600×2010	3400×1600×2010

Note: “\*” means optional items