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## CNC LATHE

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### TC Linear Guide Series

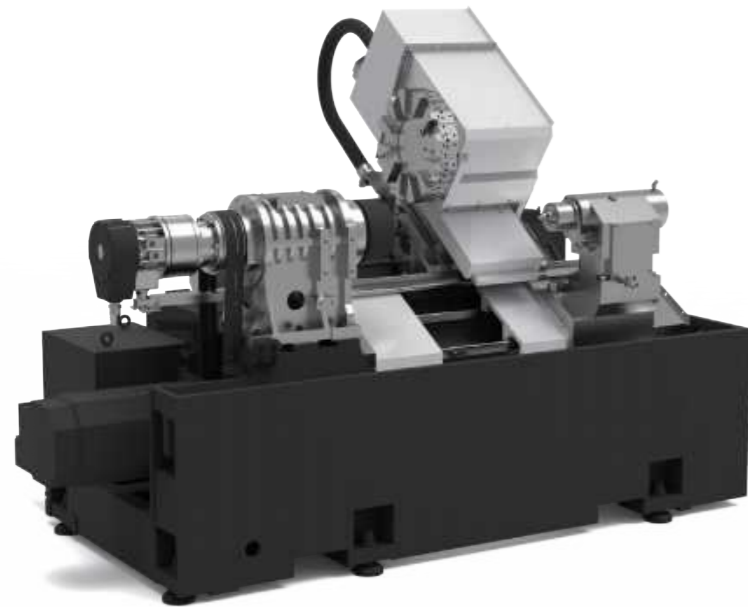
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**HISON**



# TC LINEAR GUIDE SERIES

TC linear guide series adopts an integral casting bed structure,optimize parameters and internal structure,has a smaller footprint,Configure high-precision and high rigidity roller guides,mechanical spindle and servo turret,ensure high precision, efficiency, and stability of machine tools.



## Integrated inclined bed body

- intergrated bed body reduce center height ,improve machine rigidity;
- The main motor has been changed from outside the bed to inside the bed,effectively reducing footprint.



## High rigidity spindle

Large through-hole spindle, the entire series adopts imported bearings, two point support, strong rigidity, suitable for heavy cutting and precision cutting.

# TC LINEAR GUIDE SERIES



## Full rang servo turret

- The entire series of lathes are equipped with servo turrets, turret rotation fast, reliable transmission link.
- The application of servo turret, realized synchronous tool change during the machine tool zeroing process, Improved production efficiency.

## Hydraulic tailstock

Stepped tailstock structure (embedded with steel), The overall movement of the tailstock is driven by the sliding saddle, The telescopic sleeve is hydraulically driven and programmable.





# TC LINEAR GUIDE SERIES

Items	Unit	TC100	TC150
<b>» Machining Capacity</b>			
Swing over bed dia.	mm	φ440	φ550
Swing over saddle	mm	φ220	φ340
Max. turning dia.	mm	φ220	φ300
Max. turning length	mm	200	300
Height of spindle center from ground	mm	1025	1030
X axis travel	mm	125	180
Z axis travel	mm	240	355
<b>» Turret</b>			
Turret capacity	-	Servo V8	Servo V12
Turret center height	mm	63	80
Turret size	mm	250	340
OD tool size	mm	20×20	25×25
Max. boring bar dia.	mm	φ25	φ32
Indexing time	sec/step	0.2	0.2
<b>» Spindle</b>			
Drive type		Mechanical spindle	Mechanical spindle
Max.spindle speed	rpm	6000	5000
Spindle motor power (S1/S6)	kW	5.5/7.5	7.5/11
Spindle torque (S1/S6)	Nm	40/74	57/112
Spindle nose	-	JISA2-5	JISA2-5
Spindle through hole	mm	φ51	φ61
Spindle bearing diameter(Front)	mm	φ80	φ90
Chuck size	inch	6	6
Bar capacity dia.	mm	φ41 (Opt.φ31)	φ44 (Opt.φ51)
<b>» Tailstock</b>			
Quill dia.	mm	φ50 (Opt.)	φ70 (Opt.)
Quill taper	-	MT NO.4	MT NO.4
Quill travel	mm	95	90
Tailstock travel	mm	180	275
Tailstock type	-	-	-
<b>» Feed</b>			
Rapid feed X/Z	m/min	30/30	33/36
<b>» Drive</b>			
Servo motor power	kW	1.2/1.2	1.8/1.8
<b>» Precision (GB/T16462.4—2007)</b>			
Positioning accuracy X/Z	mm	0.008	0.008
Repeatable positioning accuracy X/Z	mm	0.005	0.005
<b>» Others</b>			
Power capacity	kVA	15	20
Coolant tank	L	140	180
Machine weight	t	2	3.7
Machine size(LxWxH)(without conveyor)	mm	1570×1460×1610	2120×1740×1750

## Standard Configuration

1. Contoller: FANUC 0i β5
2. Servo turret
3. Solid chuck  
(TC100 with hollow chuck)
4. Chuck foot switch
5. Full enclosure
6. Cutting cooling
7. Tool holder
8. Safty door lock
9. Soft jaw
10. Manual chip box
11. 3-color signal light, working light
12. Standard accessories
13. Common maintenance tool

## Option Configuration

1. Contoller: SIEMENS 828D
2. MC function(TC150)
3. 2MPa coolant through spindle
4. 2/7MPa coolant through tool
5. Hollow chuck with hollow cylinder
6. External chain type chip conveyor and trolley(TC150)
7. Auto tool setter
8. Hydraulic tailstock
9. AC for electrical cabinet
10. Water gun
11. Air gun

# TC LINEAR GUIDE SERIES

Items	Unit	TC200×290	TC200×520	TC250×560
<b>» Machining Capacity</b>				
Swing over bed dia.	mm	φ550	φ550	φ620
Swing over saddle	mm	φ340	φ340	φ410
Max. turning dia.	mm	φ330	φ330	φ420
Max. turning length	mm	290	520	560
Height of spindle center from ground	mm	1030	1030	1035
X axis travel	mm	204	204	225
Z axis travel	mm	357	590	615
<b>» Turret</b>				
Turret capacity	-	Servo V12	Servo V12	Servo V12
Turret center height	mm	100	100	125
Turret size	mm	380	380	400
OD tool size	mm	25×25	25×25	25×25
Max. boring bar dia.	mm	φ40	φ40	φ40
Indexing time	sec/step	0.2	0.2	0.2
<b>» Spindle</b>				
Drive type		Mechanical spindle	Mechanical spindle	Mechanical spindle
Max.spindle speed	rpm	4500	4500	3500
Spindle motor power (S1/S6)	kW	11/15	11/15	15/18.5
Spindle torque (S1/S6)	Nm	140/255	140/255	248/409
Spindle nose	-	JISA2-6	JISA2-6	JISA2-8
Spindle through hole	mm	φ66	φ66	φ81
Spindle bearing diameter(Front)	mm	φ100	φ100	φ120
Chuck size	inch	8	8	10
Bar capacity dia.	mm	φ51 (Opt.φ65)	φ51 (Opt.φ65)	φ71
<b>» Tailstock</b>				
Quill dia.	mm	φ70 (Opt.)	φ100	φ100
Quill taper	-	MT NO.4	MT NO.4	MT NO.5
Quill travel	mm	90/120	90/120	120
Tailstock travel	mm	275	442	520
Tailstock type	-	-	Hydraulic	Hydraulic
<b>» Feed</b>				
Rapid feed X/Z	m/min	33/36	33/36	30/36
<b>» Drive</b>				
Servo motor power	kW	1.8/1.8	1.8/1.8	3.0/3.0
<b>» Precision (GB/T16462.4—2007)</b>				
Positioning accuracy X/Z	mm	0.008	0.008/0.010	0.008/0.010
Repeatable positioning accuracy X/Z	mm	0.005	0.005	0.005
<b>» Others</b>				
Power capacity	kVA	25	25	30
Coolant tank	L	180	220	210
Machine weight	t	3.8	4.2	5.2
Machine size(LxWxH)(without conveyor)	mm	2180×1740×1750	2510×1850×1750	3260×1900×1770



## Standard Configuration

1. Contoller: FANUC 0i β5
2. Servo turret
3. Solid chuck
4. Chuck foot switch
5. Full enclosure
6. Cutting cooling
7. Tool holder
8. Safty door lock
9. Soft jaw
10. Manual chip box (TC200)
11. External chain type chip conveyor (Rear middle) (TC250)
12. Hydraulic tailstock (Except TC200×290)
13. 3-color signal light, working light
14. Standard accessories
15. Common maintenance tool

## Option Configuration

1. Contoller: SIEMENS 828D
2. MC function
3. Increase spindle bore(TC200)
4. 2MPa coolant through spindle
5. 2/7MPa coolant through tool
6. Hollow chuck with hollow cylinder
7. External chain type chip conveyor and trolley
8. Auto tool setter
9. Hydraulic tailstock
10. AC for electrical cabinet
11. Water gun
12. Air gun



-  Manufacturing Base
-  Overseas Subsidiary
-  Overseas Market



## MORE THAN PRECISION

Ningbo Haitian Precision Machinery Co., Ltd. is a listed company specializing in machine tooling industry. It has developed Ningbo Dagang production base, Ningbo Yanshan production base and Dalian production base. It has a modern constant temperature processing and assembly plant of over 500,000 square meters with nearly 1900 employees. It is awarded honors such as “national major technical equipment enterprise”, “national high-tech enterprise”, and “provincial high-tech research and development center”.

