VAST MILLTURN TECHNOLOGIES CO., LTD.

CNC LATHE T SERIES

T6 / T8 / T11 Powerful high-performance turning centers

T6 / T8 / T11 series
Featured Design

T series turning centers are designed from structure to entire operation flexibility; extreme rigidity provides the best stability for long and large diameter work-pieces. With the various spindle choices, make it possible for the best powerful performance for many types of work-pieces. T series are the best choice for any shops.

4 Work capacity

Model	Max. turning diameter	Max. turning length
T6	435mm	800/1100/1400
T8	535mm	900/1400/1900/2400
T11	625mm	900/1400/1900/2400

1 Work-piece support

Suitable support as standard options
for your work-piece and turning work.

Hydraulic chuck

Programmable tailstock

2 User friendly and ergonomically design

Swivel control panel ensures the user convenient operation.

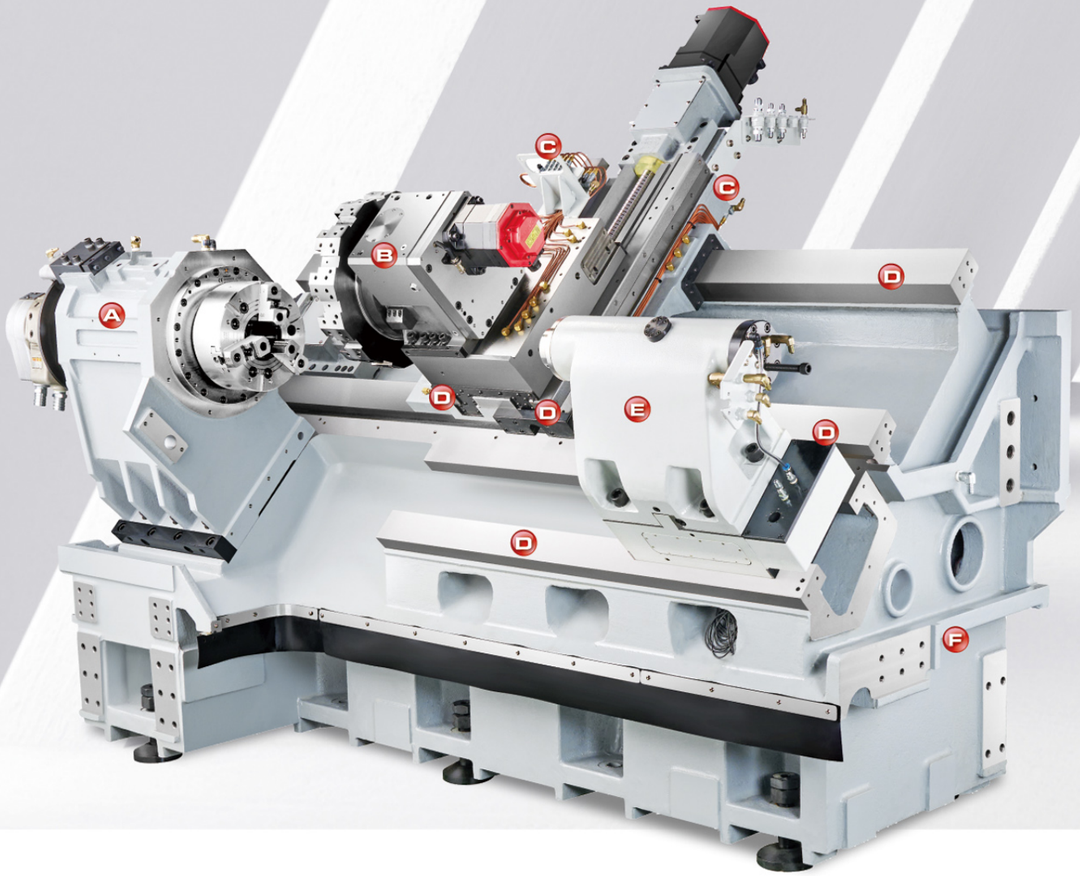
Maintenance door for checking the valves to drive spindle and tailstock.

The hydraulic unit is mounted on the rear side of machine for easy access. Free rear side of compact design saves extra space in your factory.

3 Large opening of door for maximum work-piece

Model	Unit	Max. door opening
T6	mm	800/1100/1400
T8	mm	900/1500/2000/2500
T11	mm	900/1500/2000/2500

T6 / T8 / T11 series *Value*



A High Precision Spindle

- Two types of headstocks are available
- 2-step gear type headstock
- Built in spindle type headstock

B High Rigidity Turret for Quick Tool Indexing

- Driven by servo motor with high accuracy
- High torque, low noise
- Three-piece clutches for coupling

C Auto Lubrication System

- Centralized lubrication
- Oil supply time setting by program

D Hardened Box Slide -ways with Hi-precision & Rigidity

- Extra wide slide-ways
- Larger distance between guide ways
- Endure heavy loading and ensure superior strength

E Programmable Tailstock

- High rigidity & accuracy rotation quill as standard option
- Dual hydraulic cylinders achieve huge clamping force
- The tailstock is connected with carriage and moved to position by a program command
- Large tailstock travel

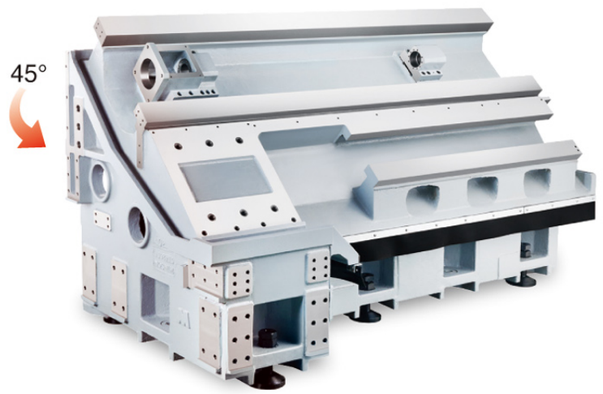
Model	Tailstock travel
T6	700/1000/1300
T8	800/1300/1800/2300
T11	700/1200/1700/2200

STRUCTURE

T series turning centers are high-rigidity, high vibration damping capacity with superior performance. They are specially designed for large turning work-piece and suitable for processing various parts in a wide range of areas including valve body and hydraulic pressure, shipbuilding, automotive, construction and energy industries and general machining shops. Its high precision and excellent heavy-duty cutting ability is your best choice.

F One-piece Slant Bed Design

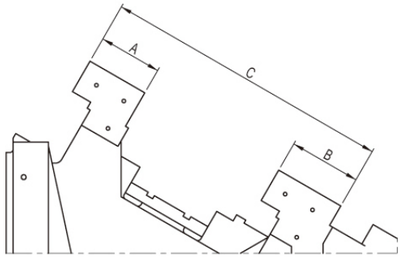
- High vibration damping performance and high reliability
- Outstanding cutting capacities
- Genuine 45° one-piece slant bed enhances the stability for heavy cutting and enables the chip removal smoothly



T6 / T8 / T11 series *Evolution*

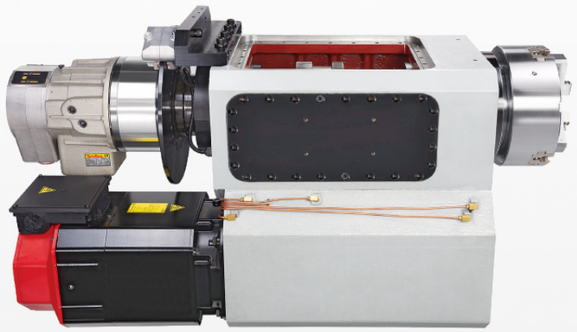
High Rigidity Foundation Bed Design

- Bed casting is made following the Meehanite process and designed through FEM analysis to ensure the high vibration damping performance and excellent cutting capabilities.
- Extra wide X/Z slide-ways and larger distance between the slide-ways enhance the carriage moving stability.
- The slide-ways are hardened by high frequency induction heating treatment which produces a wrap around structure with wear resistance surface and tough internal core to ensure its accuracy through the machine life. Furthermore, after the ground process, it realizes excellent precision and stability under cutting status.



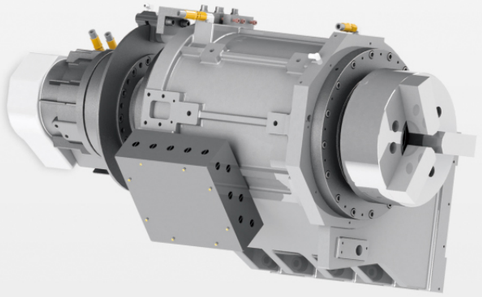
M/C	Unit	A	B	C
T6	mm	100	90	515
T8	mm	125	110	600
T11	mm	158	120	713

Wide range of headstock lineup for your choices



2-step Gear Type Headstock

- Direct driven design ensures the maximum torque transmission
- No belt transmission, eliminating the loss
- High rigidity and less noise

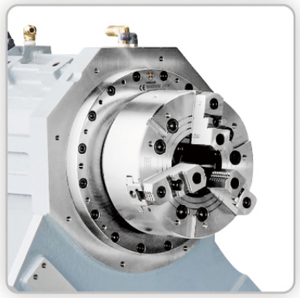


Built-in Spindle Type Headstock

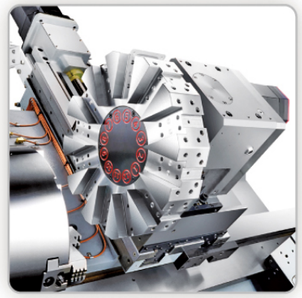
- High speed with high efficiency
- Low speed with high torque
- Centralized coolant to stabilize the temperature
- High rigidity and high precision

High rigidity leading to outstanding cutting performance and high accuracy ▶▶▶▶

Standard accessories

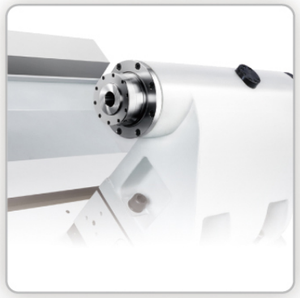


Hydraulic chuck fitting



Turret with 12 stations

Programmable tailstock



Rotating quill

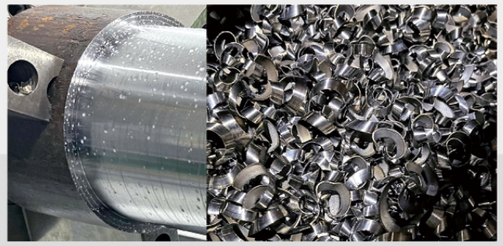
Chip conveyor fitting

Oil skimmer fitting

Coolant system

Oil cooling system

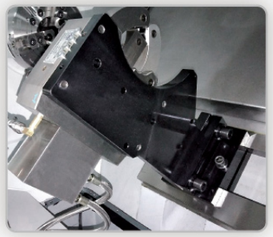
3-color light



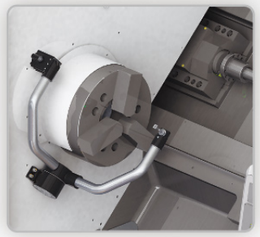
VAST MILLTURN TECHNOLOGIES CO., LTD.

Optional accessories

Hydraulic steady rest



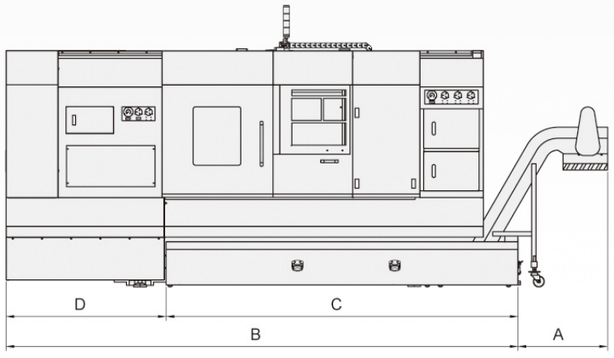
Tool probe

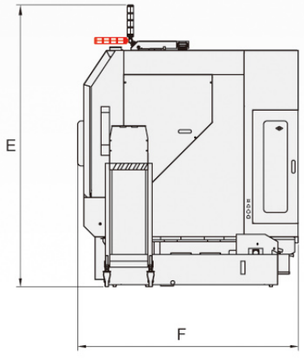


Hydraulic steady rest – selection reference

	T6		T8		T11	
Type	Model	Clamp range (mm)	Model	Clamp range (mm)	Model	Clamp range (mm)
WM	CXA20152	20~150	CXA20170	15~170	CXA45200	40~200
WM-side cylinder	CXB20170	15~170	CXB45200	40~200	CXB45200	40~200
SMW	SLU-3	12~152	SLU-3.1	20~165	SLU-3.2	50~200
SMW-side cylinder	SLUB-3.1	20~165	SLUB-3.1	50~200	SLUB-3.2	50~200

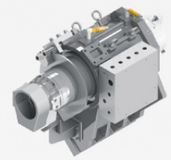
Machine layout



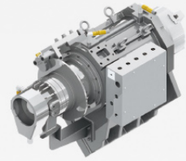


Model	A	B	C	D	E	F
T6-80	750	3430	2330	1100	2422	1865
T6-110		3730	2630			
T6-140		4030	2930			
T8-90	820	3850	2650	1200	2564	2040
T8-140		4735	3255	1480		
T8-190		5230	4030	1200		
T8-240		5730	4530			
T11-90	830	4200	2820	1380	2680	2595
T11-140		4820	3330	1490		
T11-190		5330	3950	1380		
T11-240		5830	4450			

Unit : mm



ML6-280SRC FANUC βil 170S



ML6-280HRC FANUC βil 170M

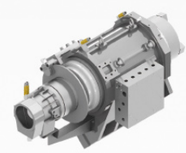
ML8-345RC FANUC βil 200S

T6

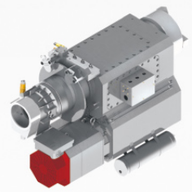
Item / Model	Unit	T6-MS	T6-ML	T6-MX
Spindle				
Spindle drive motor	FANUC	βil 170S	βil 170M	βil 200S
Type of spindle nose	ASA	A2-6		A2-8
Through-spindle hole	mm	86	86	101
Headstock style		Built-in type		

Item / Model	Unit	T6-MS	T6-ML	T6-MX
Hydraulic chuck				
Diameter of chuck	inch	10″	10″	12″
Through-hole dia.	mm	75	75	90

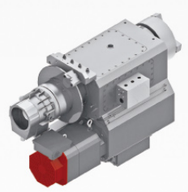
ML8-345C FANUC βil 200M



ML8-345LC FANUC βil 200L



FANUC βil 12-8K



FANUC βil 15-8K

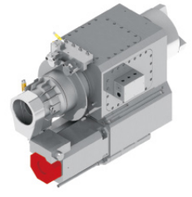
T8

Item / Model	Unit	T8-MS	T8-ML	T8-GS	T8-GL
Spindle					
Spindle drive motor	FANUC	βil 200M	βil 200L	βil 12-8K	βil 15-8K
Type of spindle nose	ASA	A2-8			
Through-spindle hole	mm	101			
Headstock style		Built-in type		Gear type	

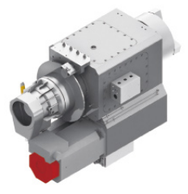
Item / Model	Unit	T8-MS	T8-ML	T8-GS	T8-GL
Hydraulic chuck					
Diameter of chuck	inch	12″			
Through-hole dia.	mm	90			

ML11-420RC FANUC βil 250S

ML11-420LC FANUC βil 250M



FANUC αil 18-8K



FANUC αil 22-8K

T11

Item / Model	Unit	T11-MS	T11-ML	T11-GS	T11-GL
Spindle					
Spindle drive motor	FANUC	βil 250S	βil 250M	αil 18-8K	αil 22-8K
Type of spindle nose	ASA	A2-11			
Through-spindle hole	mm	131			
Headstock style		Built-in type		Gear type	

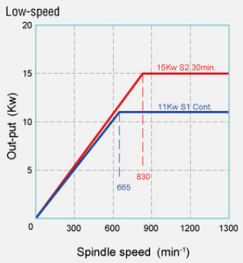
Item / Model	Unit	T11-MS	T11-ML	T11-GS	T11-GL
Hydraulic chuck					
Diameter of chuck	inch	15″			
Through-hole dia.	mm	117			

T6 Main spindle horsepower-torque chart

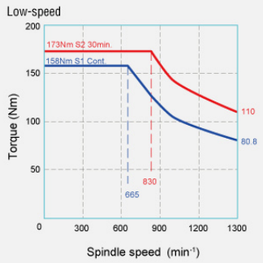
Fanuc spindle motor (built-in type)

1300 rpm / 15 Kw / 173 Nm (T6-MS)

Horsepower chart

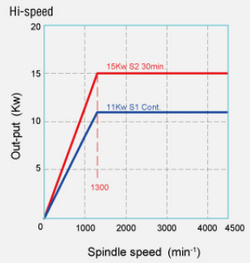


Torque chart

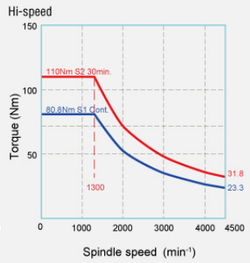


4500 rpm / 15 Kw / 110 Nm (T6-MS)

Horsepower chart

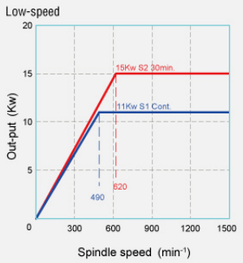


Torque chart

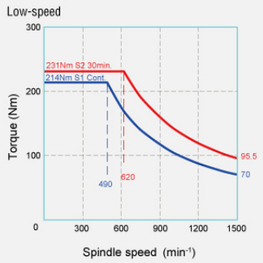


1500 rpm / 15 Kw / 231 Nm (T6-ML)

Horsepower chart

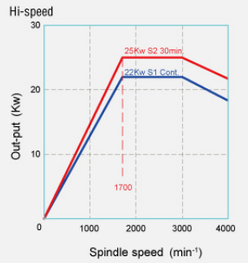


Torque chart

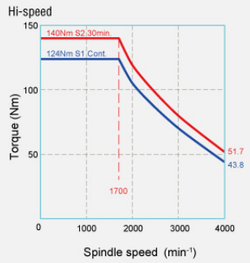


4000 rpm / 25 Kw / 140 Nm (T6-ML)

Horsepower chart

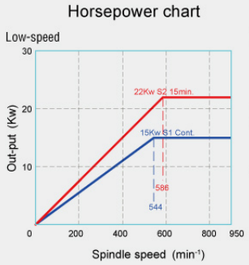


Torque chart

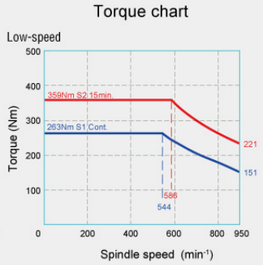


950 rpm / 22 Kw / 359 Nm (T6-MX)

Horsepower chart

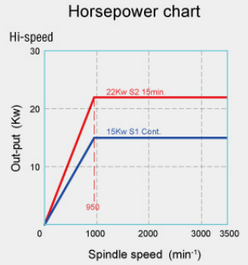


Torque chart

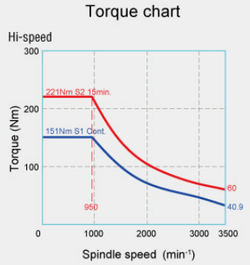


3500 rpm / 22 Kw / 221 Nm (T6-MX)

Horsepower chart



Torque chart

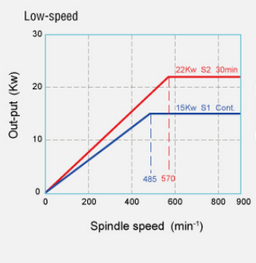


T8 Main spindle horsepower-torque chart

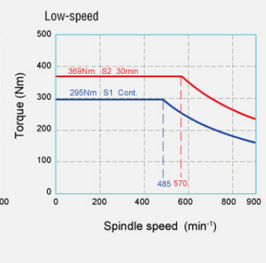
Fanuc spindle motor (built-in type)

900 rpm / 22 Kw / 369 Nm (T8-MS)

Horsepower chart

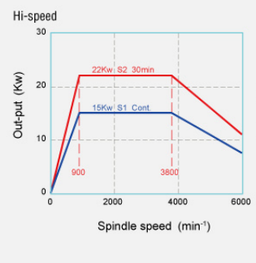


Torque chart

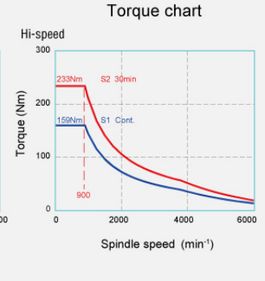


6000 rpm / 22 Kw / 233 Nm (T8-MS)

Horsepower chart

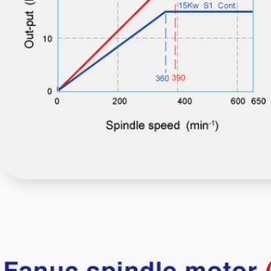


Torque chart

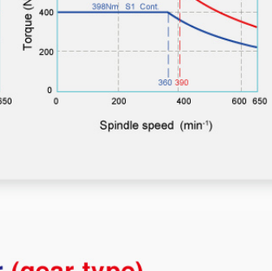


650 rpm / 22 Kw / 539 Nm (T8-ML)

Horsepower chart

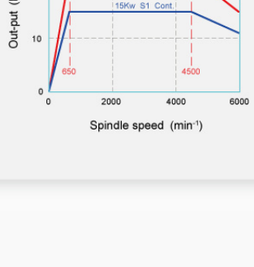


Torque chart

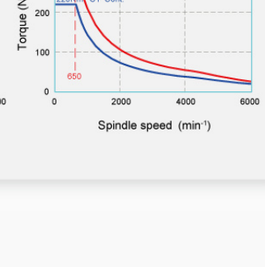


6000 rpm / 22 Kw / 323 Nm (T8-ML)

Horsepower chart



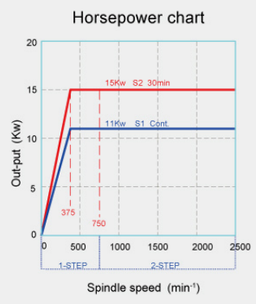
Torque chart



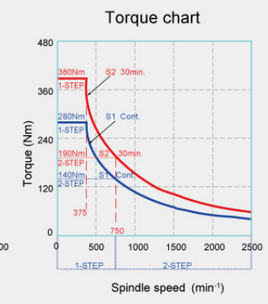
Fanuc spindle motor (gear type)

2500 rpm / 15 Kw / 380 Nm (T8-GS)

Horsepower chart

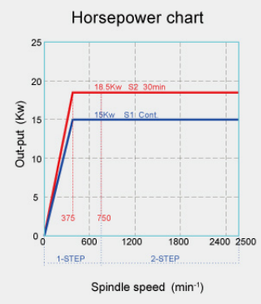


Torque chart

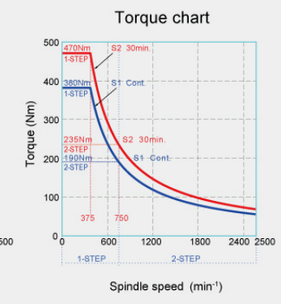


2500 rpm / 18.5 Kw / 470 Nm (T8-GL)

Horsepower chart



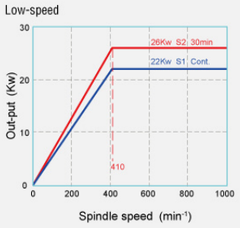
Torque chart



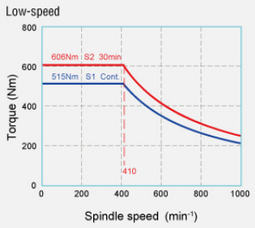
Fanuc spindle motor (built-in type)

1000 rpm / 26 Kw / 606 Nm (T11-MS)

Horsepower chart

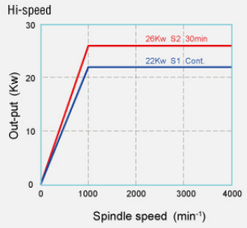


Torque chart

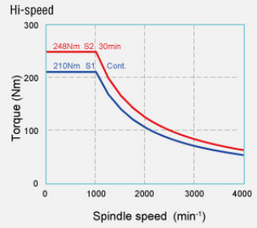


4000 rpm / 26 Kw / 248 Nm (T11-MS)

Horsepower chart

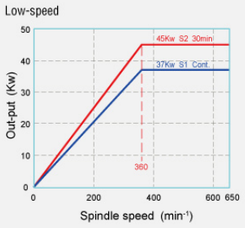


Torque chart

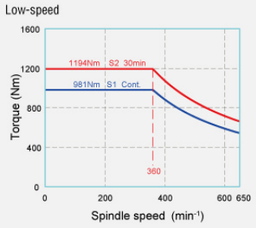


650 rpm / 45 Kw / 1194 Nm (T11-ML)

Horsepower chart

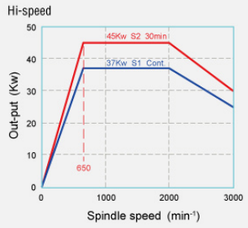


Torque chart

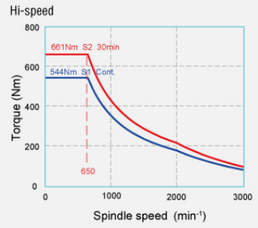


3000 rpm / 45 Kw / 661 Nm (T11-ML)

Horsepower chart



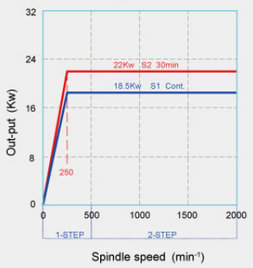
Torque chart



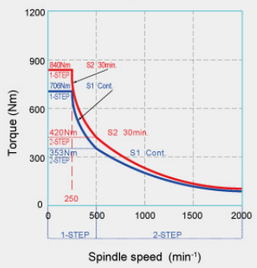
Fanuc spindle motor (gear type)

2000 rpm / 22 Kw / 840 Nm (T11-GS)

Horsepower chart

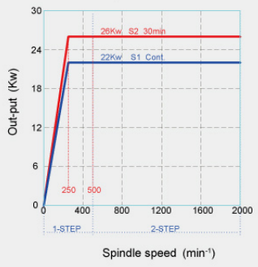


Torque chart

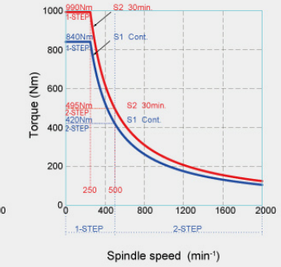


2000 rpm / 26 Kw / 990 Nm (T11-GL)

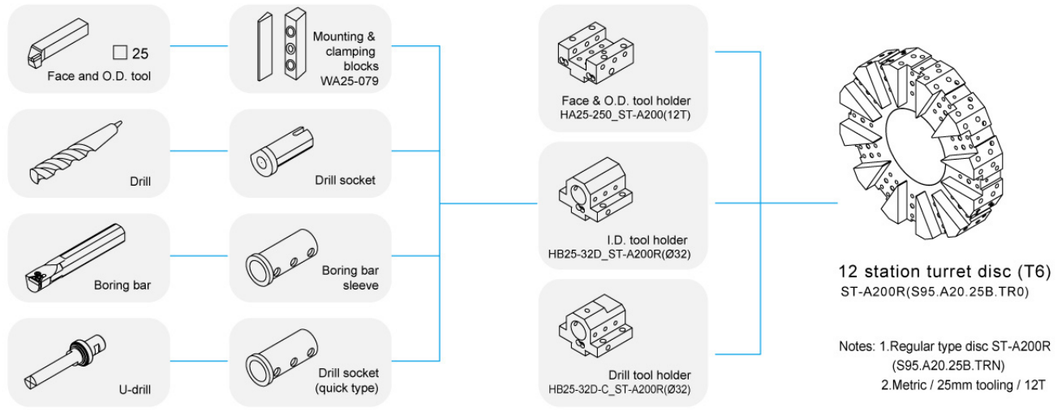
Horsepower chart



Torque chart



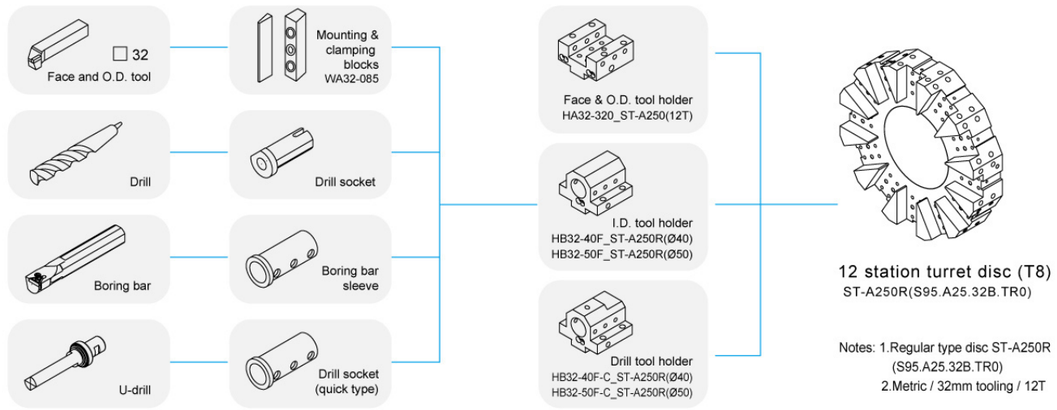
T6 12 station hydraulic servo turret



12 station turret disc (T6)
ST-A200R(S95.A20.25B.TR0)

Notes: 1.Regular type disc ST-A200R (S95.A20.25B.TRN)
2.Metric / 25mm tooling / 12T

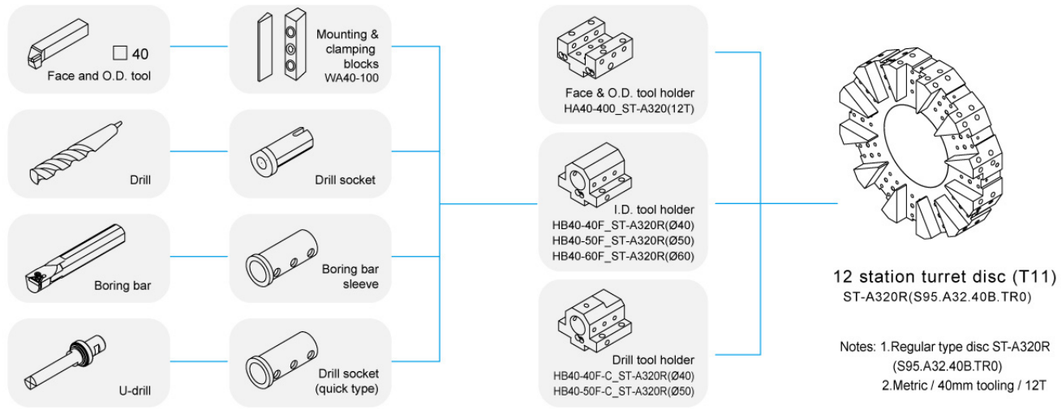
T8 12 station hydraulic servo turret



12 station turret disc (T8)
ST-A250R(S95.A25.32B.TR0)

Notes: 1.Regular type disc ST-A250R (S95.A25.32B.TR0)
2.Metric / 32mm tooling / 12T

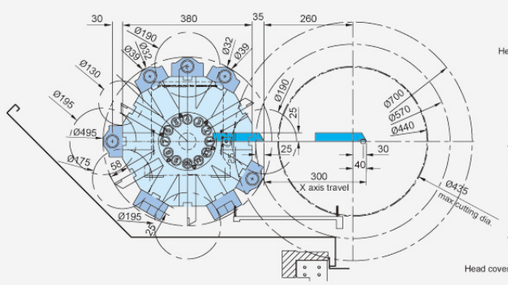
T11 12 station hydraulic servo turret



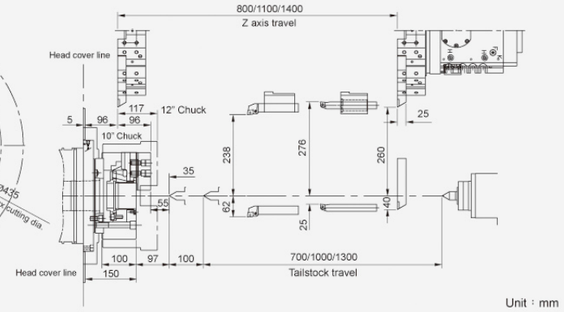
12 station turret disc (T11)
ST-A320R(S95.A32.40B.TR0)

Notes: 1.Regular type disc ST-A320R (S95.A32.40B.TR0)
2.Metric / 40mm tooling / 12T

T6 (12T) Tool interference diagram

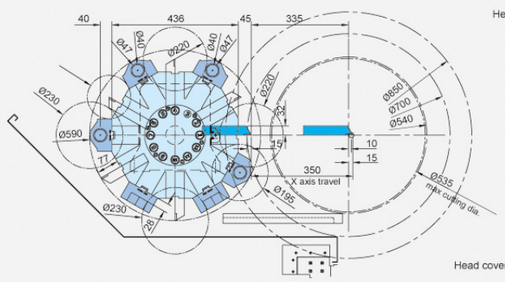


T6 (12T) Cutting range diagram

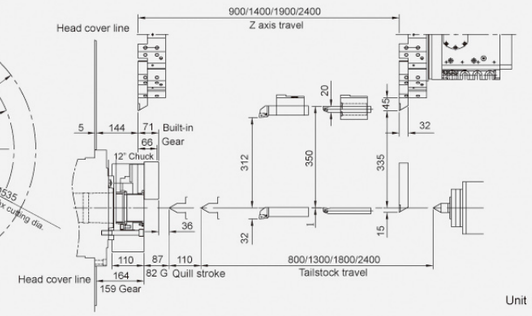


Unit : mm

T8 (12T) Tool interference diagram

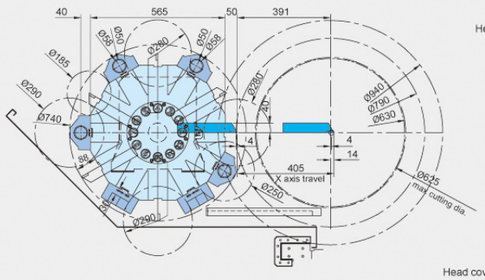


T8 (12T) Cutting range diagram

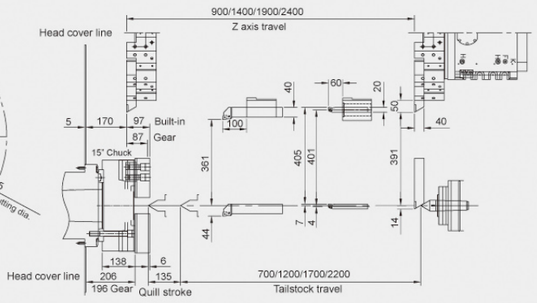


Unit : mm

T11(12T) Tool interference diagram



T11 (12T) Cutting range diagram



Unit : mm

Features / Model		T6-80/110/140 (MS/ML/MX)			T8-90/140/190/240 (MS/ML/GS/GL)		T11-90/140/190/240 (MS/ML/GS/GL)	
Capacity	**Unit**							
Swing over carriage cover	mm	Ø570			Ø700		Ø790	
Max. turning diameter	mm	Ø435			Ø535		Ø625	
Standard turning diameter	mm	Ø190			Ø220		Ø280	
Max. turning length	mm	800/1100/1400			900/1400/1900/2400		900/1400/1900/2400	
Spindle								
Type of spindle nose	ASA	A2-6		A2-8	A2-8		A2-11	
Hydraulic chuck size	inch	10″	10″	12″	12″		15″	
Spindle taper	-	1/20			1/20		1/20	
Through hole diameter	mm	86	86	101	101		131	
Max. bar capacity	mm	75	75	90	90		117	
Headstock type	-	Built-in			Built-in	Gear	Built-in	Gear
Spindle drive motor	kw	L 11/15 H 11/15	L 11/15 H 22/25	L 15/22 H 15/22	MS : L 15/22 H 15/22	GS : L 11/15 H 11/15	MS : L 22/26 H 22/26	GS : L 18.5/22 H 18.5/22
					ML : L 15/22 H 15/22	GL : L 15/18.5 H 15/18.5	ML : L 37/45 H 37/45	GL : L 22/26 H 22/26
Spindle torque	Nm	L 158/173 H 80.8/110	L 214/231 H 124/140	L 263/359 H 151/221	MS : L 295/369 H 159/233	GS : L 280/380 H 140/190	MS : L 515/606 H 210/248	GS : L 706/840 H 353/420
					ML : L 398/539 H 220/323	GL : L 380/470 H 190/235	ML : L 981/1194 H 544/661	GL : L 840/990 H 420/495
Max. spindle speed	rpm	4000	4000	3500	3000	2500	2500	2000
Axes								
Slide-way type	-	Box way			Box way		Box way	
X-axis travel	mm	300			350		405	
Z-axis travel	mm	800 / 1100 / 1400			900 / 1400 / 1900 / 2400		900 / 1400 / 1900 / 2400	
X-axis rapid feed	m/min	15			12		12	
Z-axis rapid feed	m/min	20			15		15	
X-axis servo motor	kw	3			4		7	
Z-axis servo motor	kw	4			7		6	
X-axis ballscrew	mm	Ø32			Ø40		Ø40	
Z-axis ballscrew	mm	Ø40			Ø50		Ø50	
Turret								
Turret model	-	ST-A200R			ST-A250R		ST-A320R	
Number of tools	-	12			12		12	
Tool shank size	mm	□25			□32		□40	
Boring bar diameter	mm	Ø32			Ø40		Ø50	
Max. speed of servo motor	rpm	3000			3000		3000	
Servo motor	kw	1.2 (bis8)			1.2 (bis8)		1.8 (bis12)	
Tailstock								
Tailstock travel	mm	700 / 1000 / 1300			800 / 1300 / 1800 / 2300		700 / 1200 / 1700 / 2200	
Tailstock quill travel	mm	85 (Max 100)			110 (Max 120)		135 (Max 150)	
Tailstock quill diameter	mm	Ø85			Ø130		Ø160	
Taper of tailstock quill	mm	MT3			MT4		MT5	
Controller		**FANUC 0i-TF**			**FANUC 0i-TF**		**FANUC 0i-TF**	
Hydraulic tank								
Tank capacity	L	60			70		70	
Motor	HP	3			3		3	
Max. pressure force	Kg/cm²	30			40		40	
Miscellaneous								
Lubrication oiler	kw	0.03			0.03		0.03	
Chip conveyor	kw	0.2			0.2		0.2	
Coolant tank capacity	L	260 / 280 / 300			280 / 360 / 345 / 380		280 / 360 / 345 / 380	
Coolant pump (50/60HZ)	kw	1.4 / 2.1			1.4 / 2.1		1.4 / 2.1	
Chiller	kw	0.75	0.75	0.75	0.75	0.18	0.75	0.18
Heat exchange	kw	0.07			0.07		0.07	
Machine size								
Length with chip conveyor	mm	4260 / 4560 / 4860			4670 / 5570 / 6080 / 6580		5000 / 5550 / 6250 / 6750	
Width	mm	1865			2040		2180	
Height	mm	2420			2565		2880	
Machine net weight	kg	7200 / 8010 / 8820			10350 / 11700 / 13050 / 14400		12450 / 13800 / 15150 / 16500	

* Machine specifications are subject to change without notice.

VAST MILLTURN TECHNOLOGIES CO., LTD.

No. 66-1, Zhuangquian Rd., Shengang Dist.,
Taichung City 429, Taiwan
TEL:886-4-2561 2197
FAX:886-4-2561 2190
E-mail: vast.mail@vast-millturn.com.tw
Website : www.vast-millturn.com

Apr. 2023