

# MEGA-T130

Heavy Duty Horizontal CNC Lathe



# UTMOST CONVENIENCE & HIGH PRODUCTIVITY

## HEAVY DUTY CNC LATHE

MEGA-T130 has been specifically designed suitably for ship building, wind power and new energy, mining, oil as well as heavy-precision parts for aircraft industry.

The machine offers special features such as 3-step gear box with cooling system, built-in type tailstock with rack & pinion moving system and large dimensioned special ball screw with driving nut for extreme strong support and precision.

- \* High rigid flat bed structure
- \* 3 point contacts with ultra-precision spindle bearing
- \* Auto 3 step spindle speed range
- \* Spindle motor power : 23 / 18.5kW
- \* Built-in tail stock spindle
- \* Portable / Fixed MPG handle



## Various Accessories

- Spindle Bore



Dia.155mm (A2-15)



Dia.255mm (A2-15)



Dia.320mm (A2-20)

- Turret



Curvic Coupling Toolpost



Hydraulic Toolpost (A250)



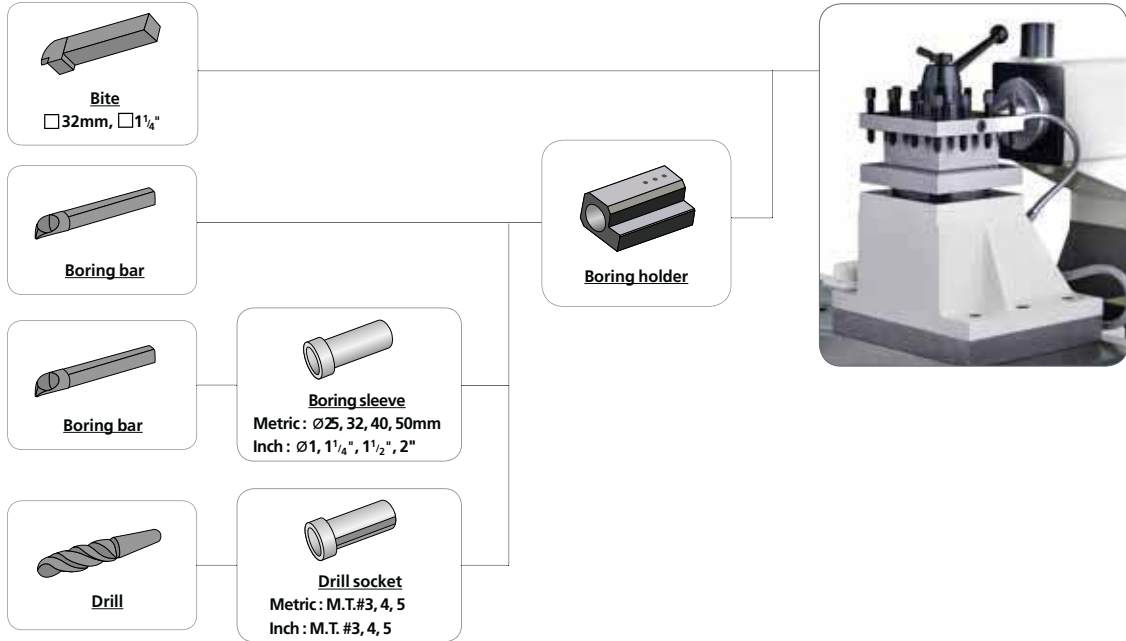
Electric Turret



Turnmill Turret(BMT-75)

## Tooling System

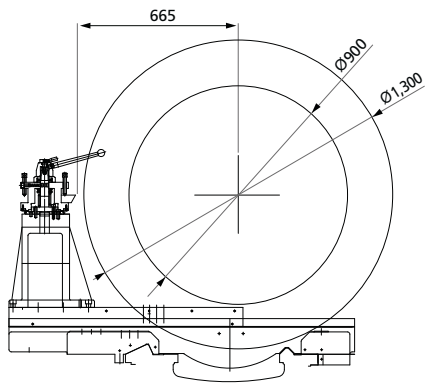
### Curvic coupling toolpost (Std.)



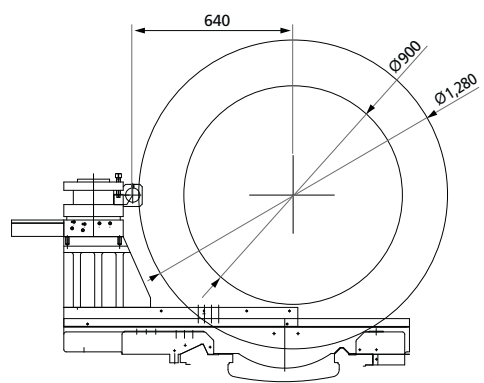
## Turret Interference

\* Unit: mm

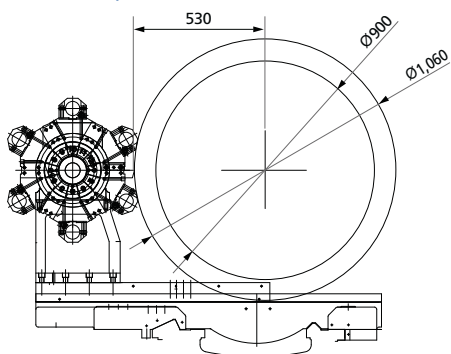
### 4position toolpost (Std.)



### 4position hydraulic toolpost (Opt.)



### 12position electric turret (Opt.)



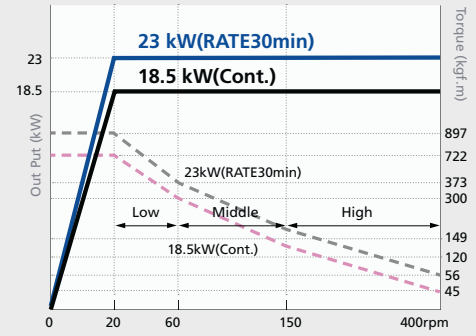
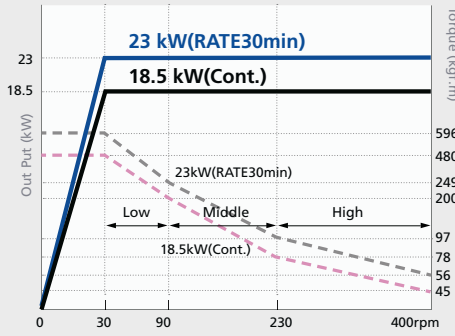
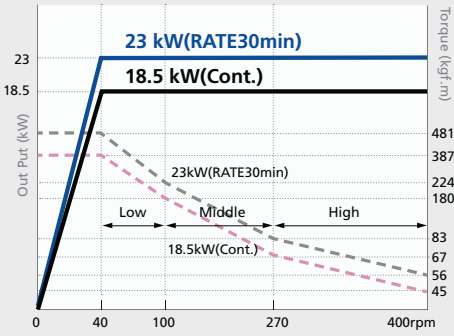
Spindle power-torque diagram

SIEMENS system

[ Dia. 155mm ]

[ Dia. 255mm ]

[ Dia. 320mm ]

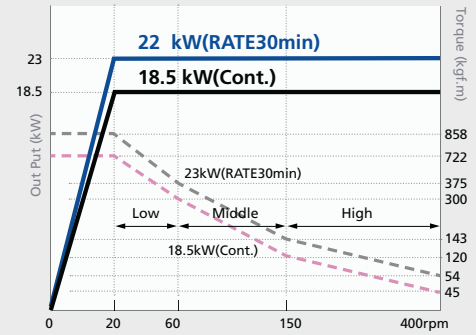
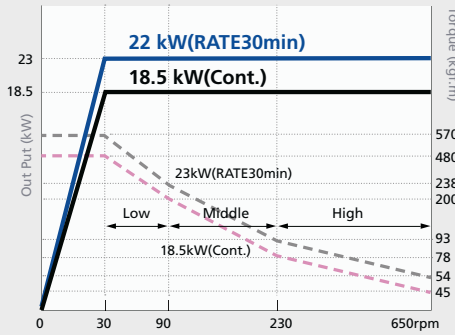
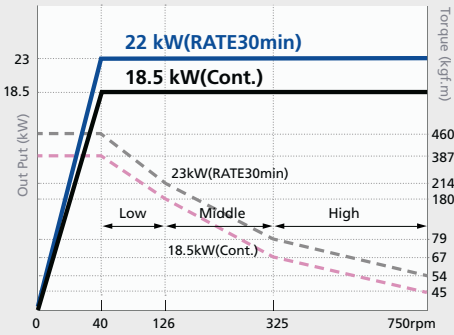


FANUC system

[ Dia. 155mm ]

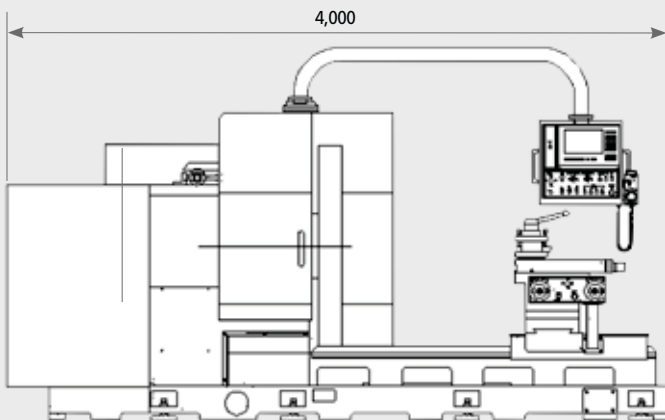
[ Dia. 255mm ]

[ Dia. 320mm ]

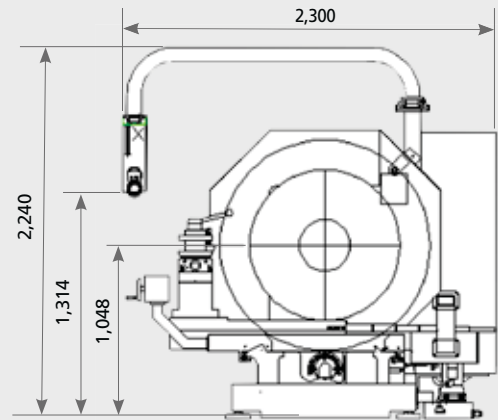


Machine size

\* Unit: mm



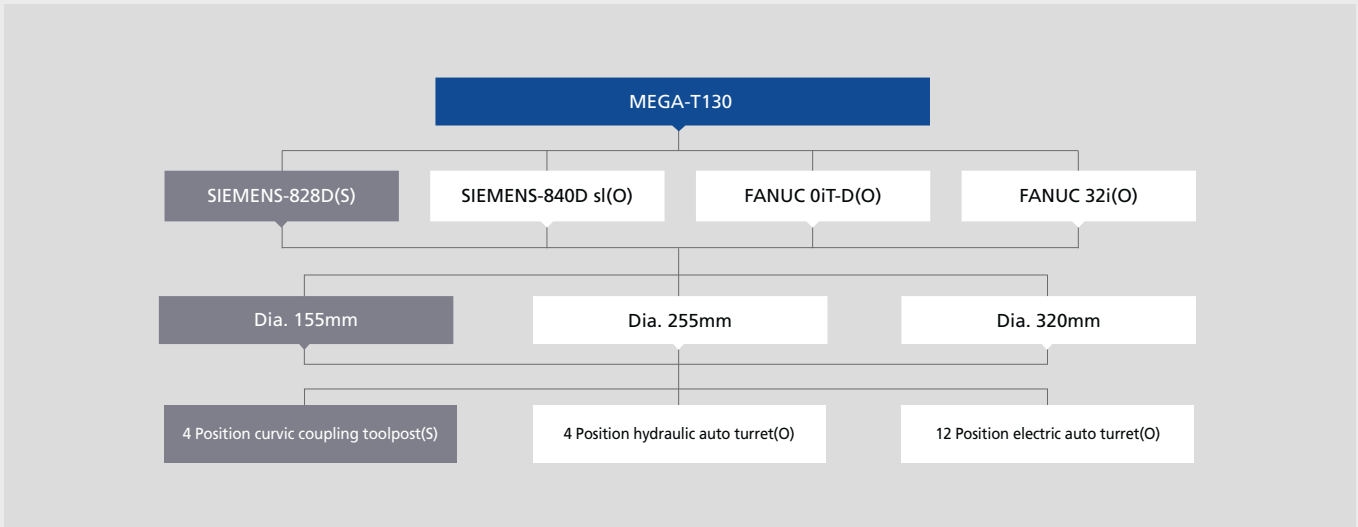
Front View



Right View

## Product Configuration

Each product can be configured to fit your application.



## Machine Specifications

ITEM	MEGA-T130	
<b>Capacity</b>		
Swing over bed	mm	Ø1,300
Swing over cross slide	mm	Ø910
Max. cutting dia. over bed	mm	Ø1,300
Max. turning dia. on cross slide	mm	Ø900
<b>Bed</b>		
Bed length	mm	3,720
Bed width	mm	900
Bed way type	-	1 bed, 2 slide way
<b>Feed rates</b>		
X-axis stroke	mm	670
Z-axis stroke	mm	1,100
Rapid speed (X / Z)	mm/min	4,000 / 4,000
<b>Spindle</b>		
Spindle nose	KS	A2-15 (Dia.155, 255) / A2-20 (Dia.320)
Spindle through hole	mm	Ø155 / Ø255 / Ø320
Spindle bore taper	MT	No.6
Spindle range	step	Auto 3 steps
Spindle speed	rpm	40 ~ 400 (Ø155) / 30 ~ 400 (Ø255) / 20 ~ 400 (Ø320)
<b>Tool post</b>		
Type of toolpost	-	Curvic coupling
Max. No. of tools	ea	4
Standard tool size	mm	⌀ 32
<b>Motor</b>		
Main motor	kW	SIEMENS : 23 / 18.5 (FANUC : 18.5 / 22)
Servo motor (X / Z)	kW	SIEMENS : 2.62 / 5.24 (FANUC : 3 / 4)
Coolant pump	W	180
Bed lubrication pump	W	53
Spindle lubrication pump	W	200
<b>Coolant tank capacity</b>		
Power (isolating)	kVA	45
<b>Machine size</b>		
Length	mm	4,000
Width	mm	2,300
Height	mm	2,240
Weight	kg	7,550
<b>CNC system</b>		<b>SIEMENS-828D</b>



## Accessories

Standard Accessories		Optional Accessories	
• 4 position curvic coupling toolpost (Manual type)	• Spindle through hole : Dia. 155mm	• 3jaw hyd. chuck(Dia.155only) : 15,21,32"	• NC cooler
• Boring holder(I.D) : 60mm	• Tool kits & box	• 3jaw scroll chuck : 20,25,32,40"	• PCU 50
• Boring sleeve(I.D) : 25,32,40,50mm	• Work light	• 4jaw independent chuck : 40,50"	(built-in hard disc for SIEMENS-840DsI)
• CNC system : Siemens-828D		• 4position hydraulic turret	• Semi enclosed splash guard : 1door
• Coolant equipment		• 12position electric turret	• Shop turn (for Siemens system)
• Flicker lamp (R/Y/G, 3colors)		• CNC system : SIEMENS-840D	• Spindle through hole : Dia.255 / 320mm
• Headstock : Auto 3 steps		Fanuc 0iT-D, Fanuc32i	• Transformer(isolating) : 45kVA
• Operation manual & part list		• Face plate : Ø1,200mm	
• Operation panel		• Fixed MPG handle	
• Portable MPG handle		• Manual guide i (for Fanuc system)	

## NC Specifications [SIEMENS-828D]

— : Not available S : Standard O : Option

ITEM	SPECIFICATION		ITEM	SPECIFICATION	
Controlled axis			Program input		
Controlled axis	2-axis	S	Programmable mirroring	Mirror, Amirror	S
Interpolation axis	2-axis	S	No. of zero offset	100ea(G54..)	S
Least input increment	0.001mm, 0.001deg, 0.0001inch	S	Manual measurement of zero offset	Scratch funtion	S
Working area limit		S	Subroutine call	11levels	S
Software traverse limit 1, 2		S	Custom macro		S
Measuring system error compensation		S	User parameter	R-parameters (300ea)	S
Backlash compensation		S	Turning cycle	Cycle 93 ~ 97	S
Operation			Drilling cycle	Cycle 81 ~ 82	S
Number of channels	1 Channels	S	Contour programming		S
Number of mode groups	1 Mode groups	S	Compare and logic operations		S
Inch/Metric conversion	G70, G71	S	Arithmetic and trigonometric funtion		S
Reference positon approach	G74	S	Spindle speed function		
Dry run, single block		S	Constant surface speed control	G96 / G97	S
Block search with/without calculation		S	Spindle override	50 - 120%	S
Repositioning on the contour	Repos, Reposa	S	Spindle orientation	M19	S
Program execution from RS 232C interface		S	Digital load meter		S
Program execution from network drive	Network manager	S	Spindle synchronous control		-
Interpolation function			Tool function / compensation		
Positioning	G00	S	Tool function	T-number	S
Linear interpolation	G01	S	No. of tool/cutting edges	128 / 256ea	S
- straight line with angle	ANG	S	Tool nose radius compensation		S
Circular interpolation	G02, G03	S	Tool geometry/wear compensation		S
- polar coordinates	AP, RP	S	Manual tool offset calculator		S
- tangential transition	CT	S	Tool data backup		S
Dwell (Per seconds)	G04	S	Editing operation		
Thread cutting		S	Part program storage size	CNC User memory 3MB	S
- with constant lead	G32	S	Text editor with editing funtions	Select, Copy, Delete..	S
- with variable lead	G33, G34	S	Dual editor		S
Polar coordinates	G110, G111, G112	S	Write protection for lines		S
Chamfer, rounding	CHF, CHR, RND ...	S	Suppression of line in the display		S
Approaching a fixed point	G75	S	Screen saver		S
Helical, involute interpolation		O	Cyclical alarm display		S
Feed function			Timer & counter funtion		S
Rapid traverse override	0 - 120%	S	Graphic simulation		S
Feed per minute (mm/min)	G94	S	Pocket calculator mode		S
Feed per revolution (mm/rev)	G95	S	Easy program selection		S
Feedrate for positioning axis	FA, FPR ...	S	Multi-language display		
Jog feed velocity (X, Z)	0 - 2,000 mm/min	S		English, German, French, Italian, Chinese, Spanish,Japanese, Korean, Portuguese, Polish, Hungarian, Swedish,Russia	S
Rapid velocity (X, Z)	0 - 6,000 mm/min	S	Data input/output		
Separate override control	2 Channels	S	Interface devices	USB, CF Card	S
Program input			Memory card		O
G-code system	Siemens G-code (DIN66025)	S	Ethernet connection		S
ISO-dialect mode	ISO-A	S	Others		
Separate operating mode	2 Channels	S	Machine step programming	Shop Turn	O
Absolute/Incremental dimension	G90, G91	S	Extended operation		S
Working area limitation	G25, G26	S	Shopmill HMI funtions		S
Exact stop	G60, G9 ...	S	Service Planner	Maintenance scheduler	S
Programmable rotation	Rot, Arot	S	Easy extend	Managing machine unit	S
Programmable scale factor	Scale, Ascale	S	Display unit	10.4" color LCD	S

## Hwacheon Global Network

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**HWACHEON**

Please contact us for product inquiries.

[www.hwacheon.com](http://www.hwacheon.com)

The product design and specifications may change without prior notice.

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