



MEGA 72

Heavy Duty Horizontal CNC Lathe



UTMOST CONVENIENCE & HIGH PRODUCTIVITY

MEGA-72

1. High accuracy

- Adoption of ball screw and servo motor
- Easy checking for spindle speeds by attachment of spindle position encoder
- Guarantee of repeatability $\pm 5^\circ$ by adoption of curvic toolpost

2. Utmost convenience

- Excellent operation & easy loading/ unloading work piece by convenient operation panel
- Semiautomatic tailstock feeding device

3. Heavy duty cutting

- Heavy duty cutting and precision turning by one piece fabricated bed & leg structure
- High rigid headstock supported by cylinder & angular roller bearing
- Ball screw : X-axis = Dia.28 x 6mm, Z-axis = Dia.45 x 12mm(2000T/3000T)
- Guide way : Turcite

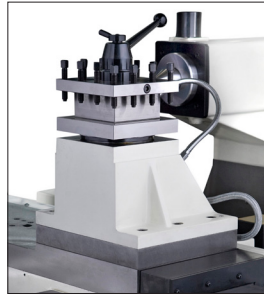
4. High stability

- Long-term maintaining high accuracy by turcite laminated on slide surfaces
- Application of high pressure lubrication pump to guarantee perfect lubrication on slide surfaces
- Prevention of operation error by lock type mono lever switch (Opt. Fixed MPG handle)

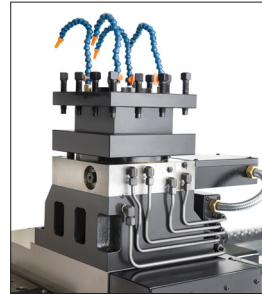


Various Accessories

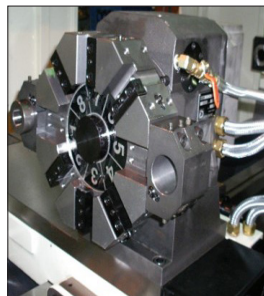
- Turret



Curvic Coupling Toolpost

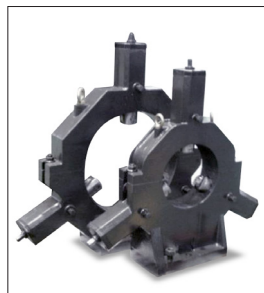


Hydraulic Toolpost (□250)



8 Position Electric Turret

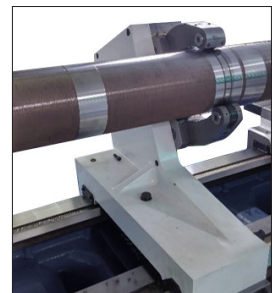
- Rest



Steady Rest



Follow Rest



Hyd. Steady rest

- Tailstock



Manual tailstock (std.)



Hydraulic tailstock (opt.)

- Others



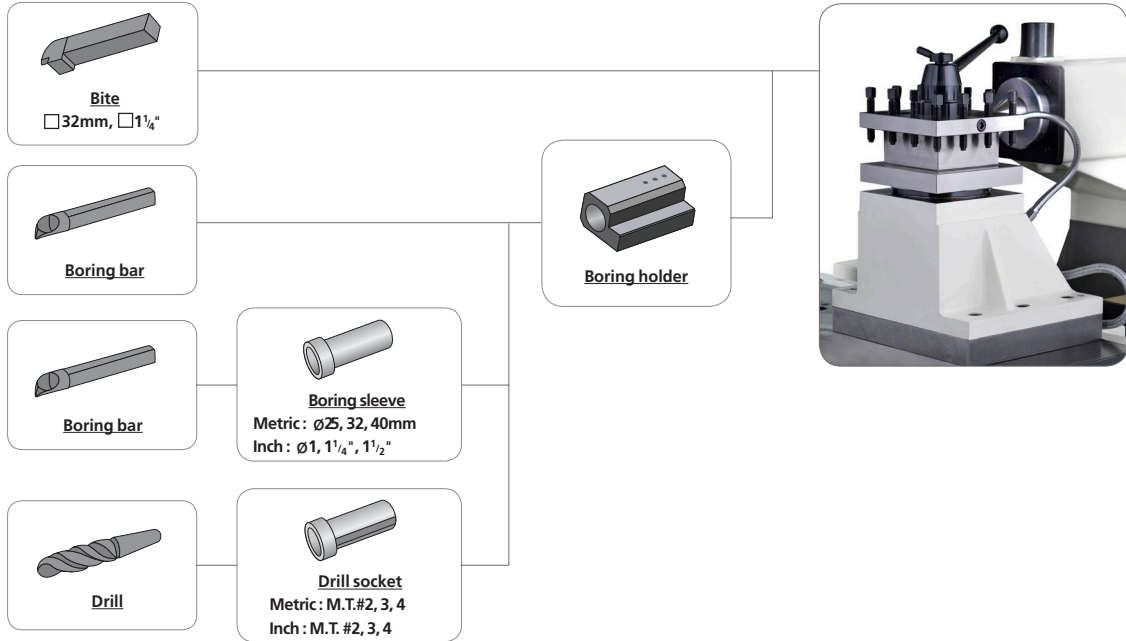
Grinding Attachment



Boring Bar Holder

Tooling system

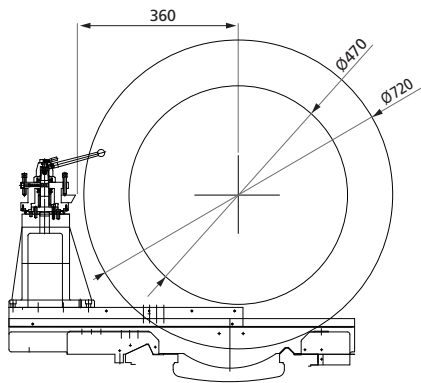
Curvic coupling toolpost (std.)



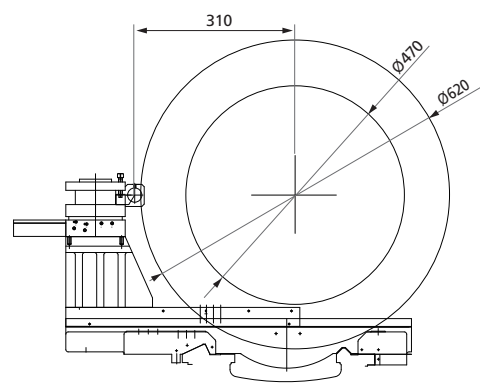
Turret Interference

* Unit: mm

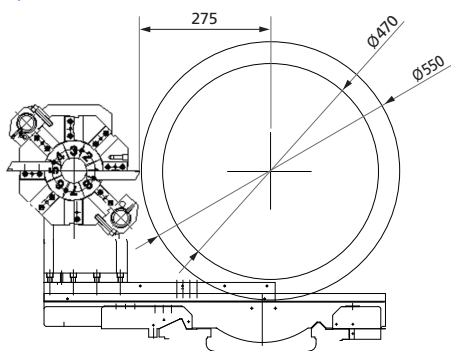
Curvic coupling toolpost (std.)




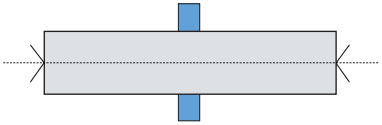
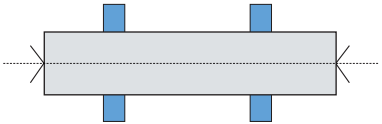
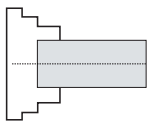
Hydraulic toolpost (opt.)



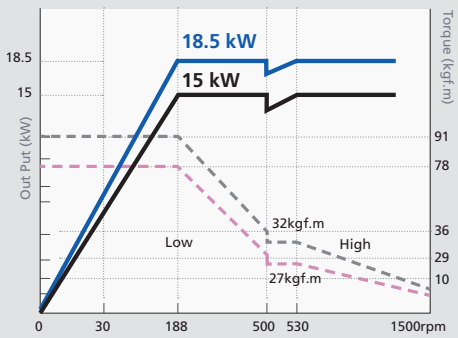
Electric turret (opt.)



Loading capacity

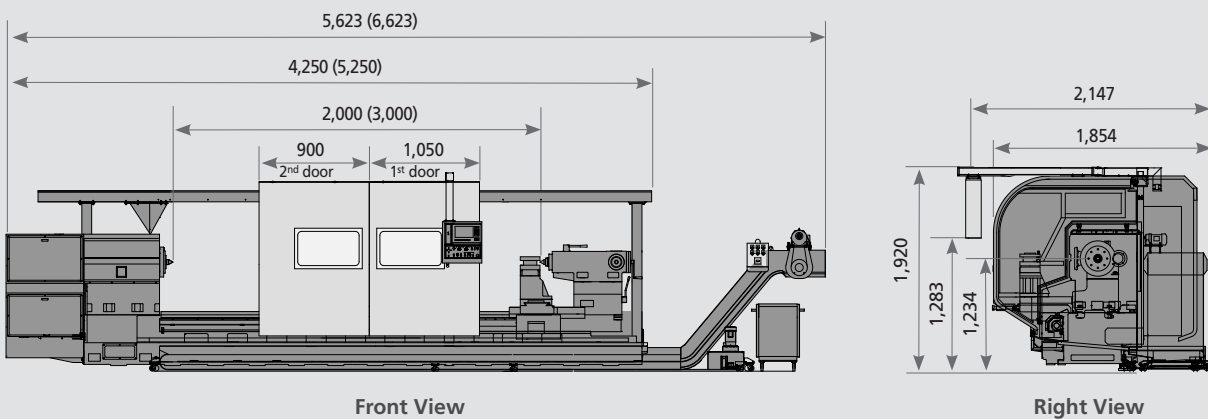
Description	Supporting method	Loading capacity
Chuck+Tailstock		1,100kg
Steady rest(1EA)		1,500kg
Steady rest(2EA)		1,800kg
Chuck		300kg

Spindle power-torque diagram



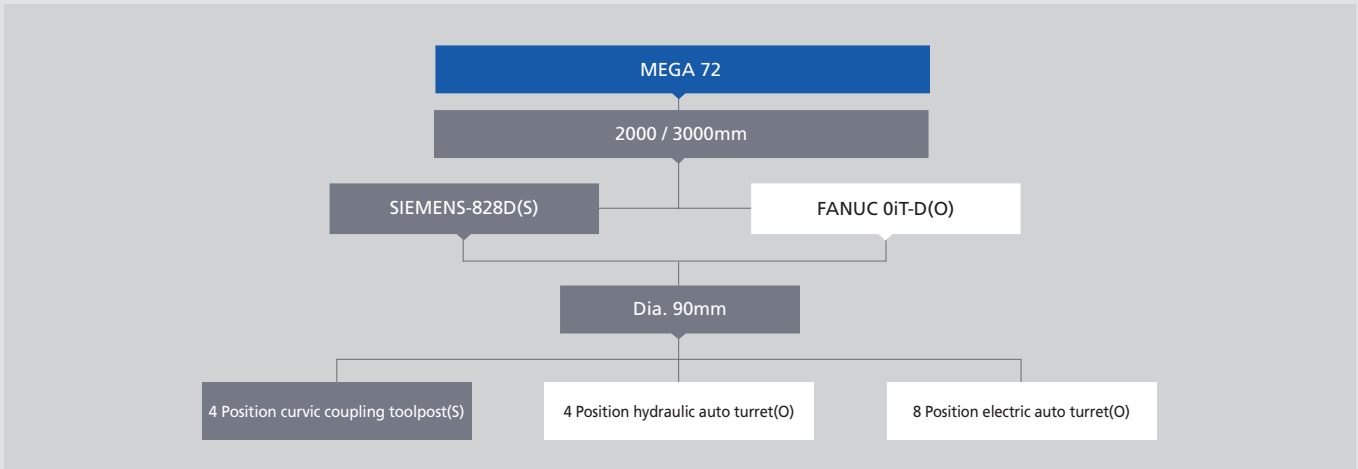
Machine size

* Unit: mm



Product Configuration

Each product can be configured to fit your application.



Machine Specifications

ITEM	MEGA 72	
Capacity		
Swing over bed	mm	Ø720
Swing over cross slide	mm	Ø480
Max. cutting dia. over bed	mm	Ø720
Max. cutting dia. on cross slide	mm	Ø470
Distance between centers	mm	2,000 / 3,000
Bed		
Bed length	mm	3,652 / 4,652
Bed width	mm	510
Bed way type	-	1 bed, 2 slide way
Feed rates		
X-axis stroke	mm/min	400
Z-axis stroke	mm/min	1,900 / 2,900
Rapid speed (X / Z)	mm/min	6,000 / 6,000
Spindle		
Spindle nose	KS	A2-8
Spindle through hole	mm	Dia. 90
Spindle bore taper	MT	No.7
Spindle range	step	Manual 2 steps
Spindle speed	rpm	30 ~ 1,500
Tool post		
Type of toolpost	-	Curvic coupling
Max. No. of tools	ea	4
Standard tool size	mm	□ 32
Tail stock (Built-in)		
Quill dia.	mm	Dia. 90
Quill bore taper	MT	No.5
Quill travel	mm	150
Motor		
Main motor	kW	18.5 / 15
Servo motor (X / Z)	kW	1.86 / 4.29 / 1.86 / 4.29
Coolant pump	W	180
Bed lubrication pump	W	53
Spindle lubrication pump	W	200
Coolant tank capacity	ℓ	145 / 200
Power (isolating)	kVA	35
Machine size		
Length	mm	4,250 / 5,250
Width	mm	2,147
Height	mm	1,920
Weight	kg	4,810 / 5,500
CNC system	Siemens-828D	

Accessories

Standard Accessories		Optional Accessories	
• 4 jaw independent chuck : 14"	• Semi enclosed splash guard : 1door	• 3jaw hyd. chuck : 10",12",15"	• Manual guide i (for Fanuc system)
• 4 position curvic coupling toolpost (Manual type)	• Spindle through hole : Dia. 90mm	• 3jaw scroll chuck :12",14"	• NC cooler
• Boring holder(I.D) : 50mm	• Tool kits & box	• 4jaw indepentent chuck : 16",18",24"	• Semi enclosed splash guard : 2door
• Boring sleeve(I.D) : 25,32,40mm	• Work light	• 4position hydraulic turret	• Shop turn (for Siemens system)
• Center sleeve : M.T No.7 x No.5		• 8position electric turret	• Steady rest
• CNC system : Siemens-828D		• Boring bar	• Dia.50-250mm (Metal/Roller type)
• Coolant equipment		• Boring bar holder & sleeve	• Dia.250-450mm (Roller type)
• Dead center : M.T. No.5		• Chip conveyor (Hinge type)	• Transformer(isolating) : 35kVA
• Drill socket : M.T. No.2, 3, 4		• CNC system : Fanuc 0iT-D	
• Flicker lamp (R/Y/G, 3colors)		• Face plate : Dia.635mm	
• Live center : M.T.No.5		• Fixed MPG handle	
• Operation manual & part list		• Follow rest : Dia.39-127mm(Roller)	
• Portable MPG handle		• Grinding unit	
		• Hydraulic tailstock	

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

🏠 Hwacheon Headquarters 🇺🇸 Hwacheon USA 🇩🇪 Hwacheon Europe 🇸🇬 Hwacheon Asia



HWACHEON

Please contact us for product inquiries.

www.hwacheon.com

The product design and specifications may change without prior notice.

HEAD OFFICE

HWACHEON MACHINERY CO., LTD

46, BANGBAE-RO, SECHO-GU, SEOUL, 137-851, KOREA
TEL: +82-2-523-7766 FAX: +82-2-523-2867

USA

HWACHEON MACHINERY AMERICA, INC.

555, BOND STREET, LINCOLNSHIRE, ILLINOIS,
60069, USA
TEL: +1-847-573-0100 FAX: +1-847-573-9900

GERMANY

HWACHEON MACHINERY EUROPE GMBH

JOSEF-BAUMANN-STR, 25, 44805 BOCHUM, GERMANY
TEL: +49-234-912-8160 FAX: +49-234-912-816-60

SINGAPORE

HWACHEON ASIA PACIFIC PTE. LTD.

21 BUKIT BATOK CRESCENT #08-79, WCEGA TOWER,
SINGAPORE 658065
TEL: +65-6515-4357 FAX: +65-6515-4358