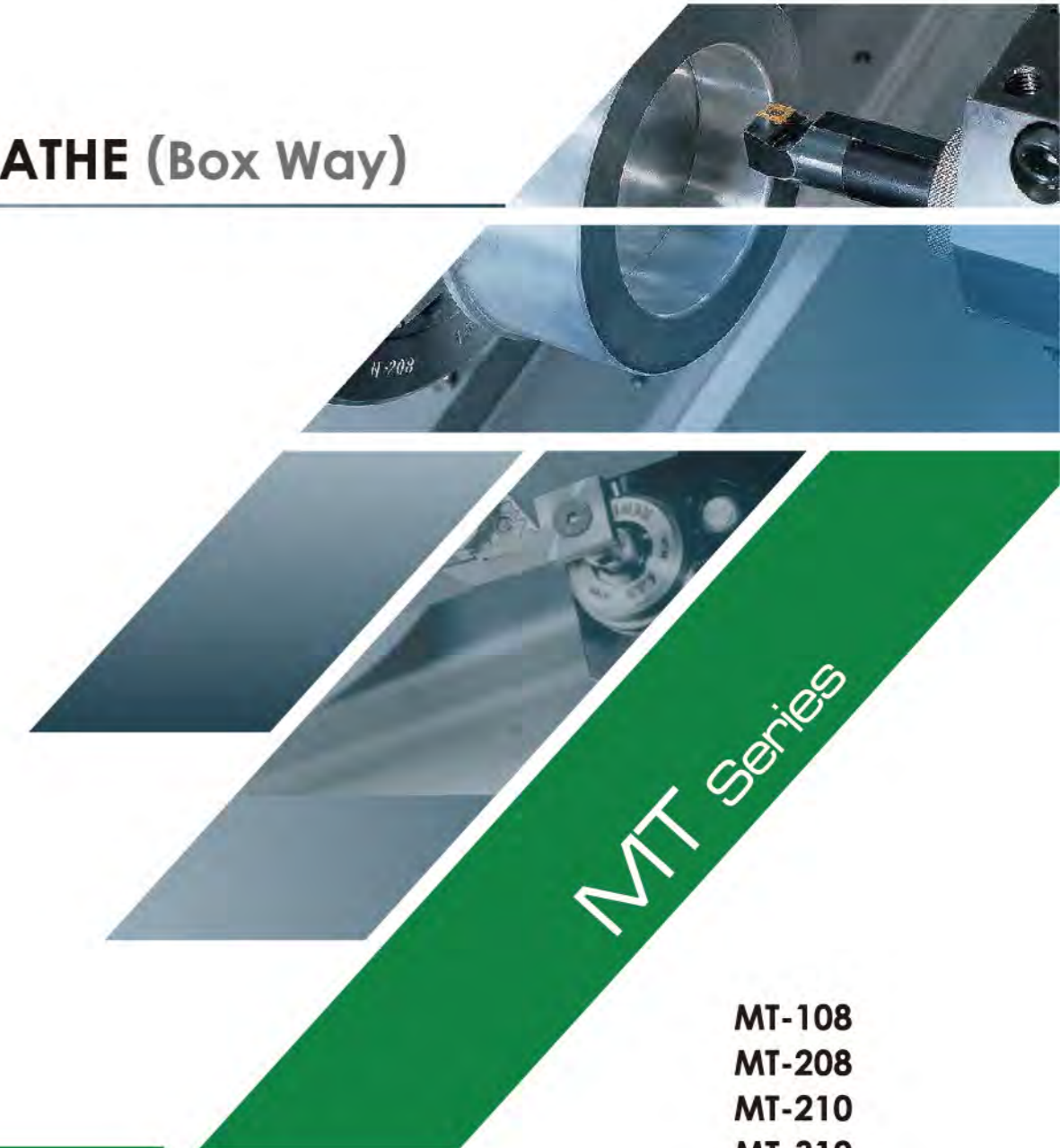


## MACHINE SPECIFICATIONS

Item	MODEL	MT520	MT520MC
SWING OVER BED	Unit mm	1000	
OVER CROSS SLIDE	mm	700	
MAX. TURNING DIA	mm	800	
MAX. WORK LENGTH	mm	3100/4100/5100	
CHUCK SIZE	inch	20"	
DRAW TUBE DIA	mm	Ø142	
SPINDLE SPEED RANGE	RPM	124~496(低)1800(高)(自動兩段變速)	
SPINDLE NOSE	ASA	A2-15	
SPINDLE BORE	mm	Ø153	
FRONT BEARING DIA.	mm	Ø220	
SPINDLE TAPER		1/20	
MILLING SPEED	RPM	-	3000
X AXIS TRAVEL	mm	435	
Z AXIS TRAVEL	mm	3200/4200/5200	
<b>Fanuc</b>			
CONTROLLER TYPE		Fanuc 0i-TF	
SPINDLE MOTOR		37/45 KW	
X AXIS MOTOR		6 KW	
Z AXIS MOTOR		6 KW	
MILLING MOTOR		-	7.5/11 KW
<b>Siemens</b>			
CONTROLLER TYPE		828D	
SPINDLE MOTOR		28 KW	
X AXIS MOTOR		7.7 KW	
Z AXIS MOTOR		7.7 KW	
MILLING MOTOR		-	5.5 KW
<b>Mitsubishi</b>			
CONTROLLER TYPE		M80	
SPINDLE MOTOR		30/37 KW	
X AXIS MOTOR		4.5 KW	
Z AXIS MOTOR		4.5 KW	
MILLING MOTOR		-	7.5/11 KW
X AXIS RAPD TRAVERSE	m/min	12m/min	
Z AXIS RAPD TRAVERSE	m/min	12m/min	
GUIDEWAYS TYPE		硬軌/45°	
NUMBERS OF TOOL STATION		12T	
O.D. TOOL	mm	□32	
BORING BAR DIA	mm	Ø60	Ø50
QUILL DIA	mm	Ø235	
QUILL TRAVEL	mm	200	
TAILSTOCK TRAVEL	mm	2880/3880/4880	
QUILL TAPER		MT#6	
POWER SUPPLY	kva	80	
COOLANT TANK CAPACITY	Liter	950	
COOLANT FLOW	L/min	60	
MACHINE HEIGHT	mm (H)	2850	
FLOOR SPACE (L)	mm (L)	7050/8100/9150	
FLOOR SPACE (W)	mm (W)	2920	
NET WEIGHT	kg	18500/20500/22500	



## CNC LATHE (Box Way)



- MT-108
- MT-208
- MT-210
- MT-310
- MT-312
- MT-412
- MT-415
- MT-415plus
- MT-520



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ECOCA DIVISION

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FAX:+886-37-877071 E-Mail:[biz@ecoca.com](mailto:biz@ecoca.com)

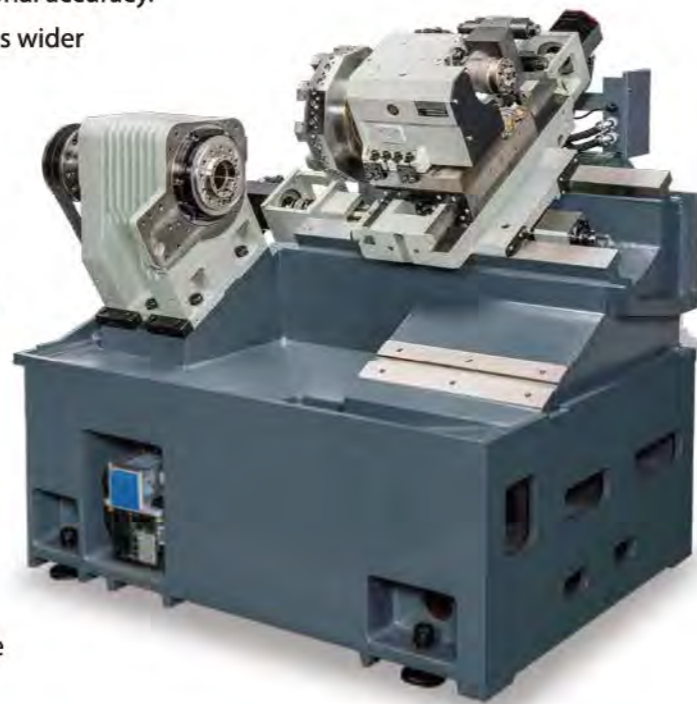
2021.06-R03(E)



# MT-108 Series

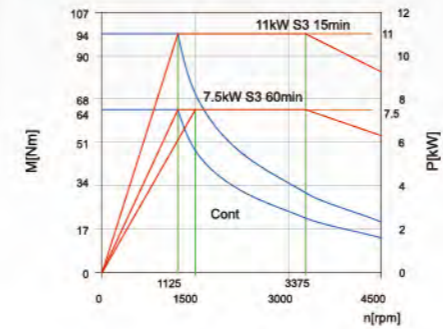


- 30 degree slant bed design with large discharge inside machine itself provides powerful chip disposal capability. This ensures the working area to maintain its temperature while increasing turning stability and accuracy.
- Machine body structure with high rigidity is development cooperation with a well-known Japanese machine tool factory.
- With high rigidity hard rail design, without using Turcite B, and using high accuracy ball screws (C3 class) to reach accurate turning dimensional accuracy.
- A2-6 spindle (8" chuck, bar dia. 52) can effectively process wider range of bar workpieces.
- High efficiency servo turret can be used, not only can improve processing efficiency and extend tool life but also can produce high accuracy.
- MT-108 can choose different controller depends on customers' needs to collocate robot and automatic door to reach automatic loading and unloading system and thereby lower manpower cost and improve machine performance.
- Rear discharge chip conveyor can save more footprint and make customers' produce line more effective and flexible.
- Automatic lubrication can reduce wear on guideway and improve process stability.
- Combine aesthetics and ergonomics machine design and rotary operating box provides operator comfortable environment and improve work efficiency.

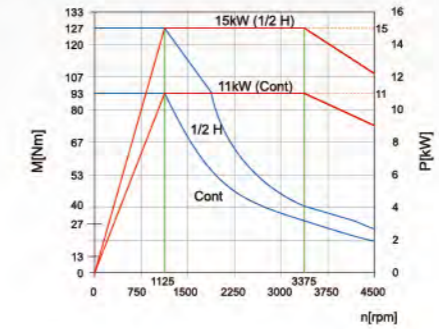


## TORQUE DIAGRAM

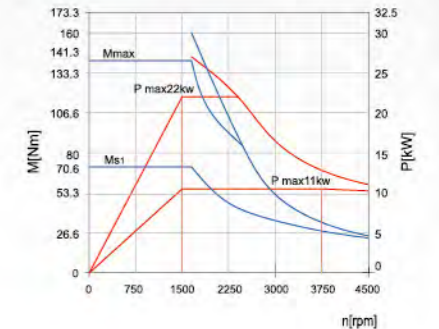
Fanuc  
MT-108 / 108MA



Mitsubishi  
MT-108 / 108MA

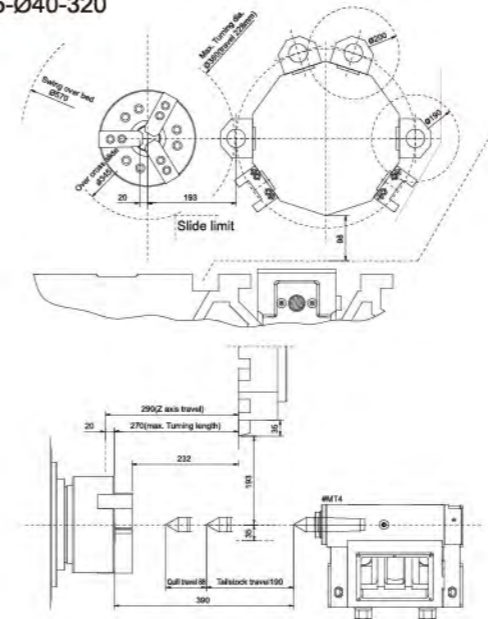


Siemens  
MT-108 / 108MA

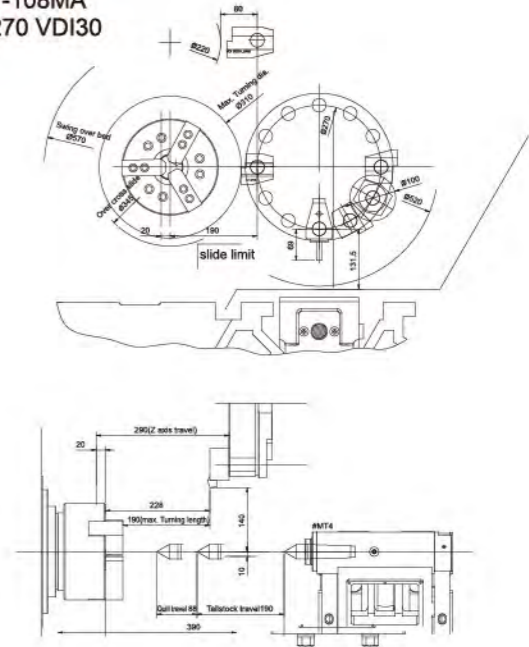


## TOOL INTERFERENCE DIAGRAM

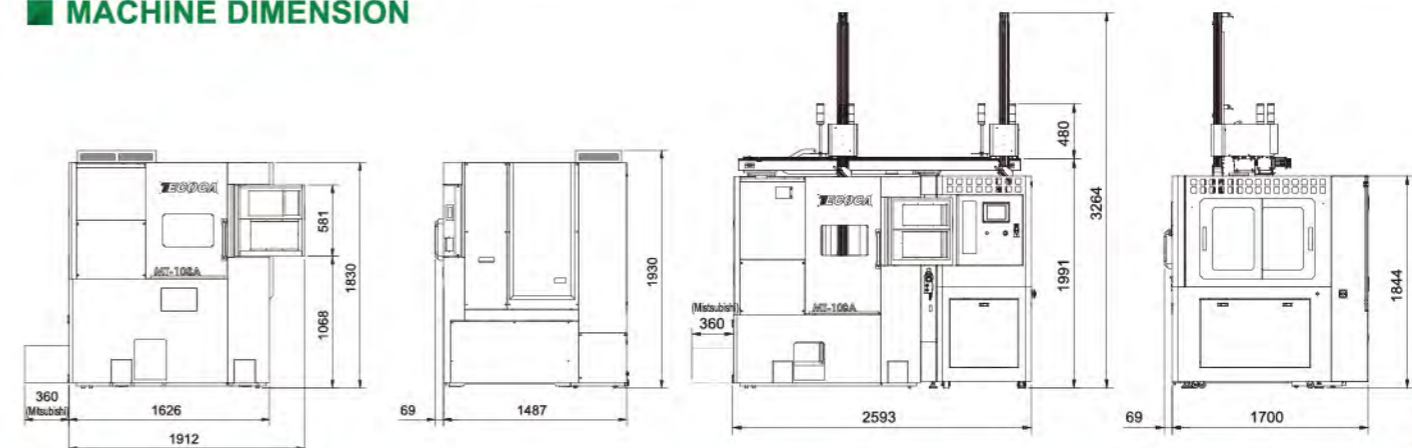
MT-108 / MT-108A  
LS160A-25-Ø40-320



MT-108M / MT-108MA  
TBMA160 -Ø270 VDI30



## MACHINE DIMENSION



# MT-208/210/310/312/412/415/415plus Series

- Offering the most solid base to process up to 4000mm turning length, max. swing over bed 830mm and bar capacity up to 117mm, ECOCA MT series provide the best possible results for CNC lathe operation.
- The sturdy 30 degree slant bed provides a vibration free operation to the machine.
- The ergonomically placed spindle, tailstock, and turret provide the operation with the optimal working condition. The rigid mechanical configurations yield a very high level of reliability and easy access to the machine operation and maintenance. ECOCA MT series is a very fine integration of high quality and affordable prices.

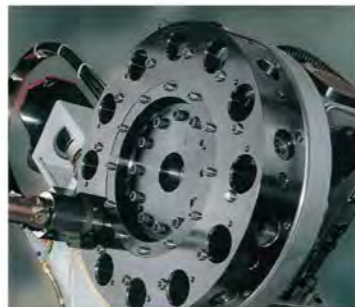
*ECOCA MT series is a very fine integration of high quality and affordable prices*

- 30 degree slant bed design for easy operation and easy chip removal.
- Cast iron bed with optimally designed ribs with integral stiffness provides an very strong rigidity.
- One-piece structure provides massive rigidity.
- Big diameter bearing provides high rigidity.
- High-resolution encoder mounted on spindle to provide accurate C axis positioning.
- C axis with continuous indexing.
- Double supported ballscrews.
- Direct-driven servo motors are used for axial movements.
- Hydraulic 10/12 stations turret as standard, servo turret offered for users as an alternative choice.
- Large disc is equipped for easy tool set up.
- Special spindle motor location design reduces machine floor space.
- Programmable tailstock or rack type tailstock is available as an option.
- Large coolant tank.
- Internal coolant supply through turret disc.
- PLC controlled chip conveyor to improve efficiency.
- High-class hydraulic valve improves stability and reliability.

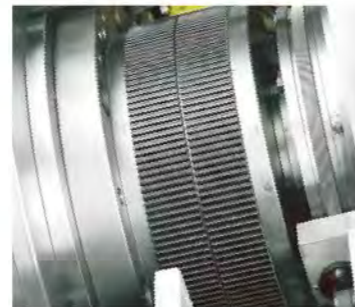
*We have consider all the turning applications you might use :  
Wide range of options available for your choise*



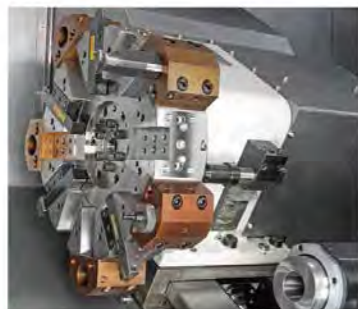
■ Flexible coupling ensures the smooth and accurate movements of the machine



■ Fast and accurate servo-driven turrets for MT-4 series (opt.VDI turret)



■ C axis high resolution encoder (opt.)



■ Fast and accurate servo-driven turrets (opt.)



■ Parts catcher (opt.)



■ Tool setter(opt.)

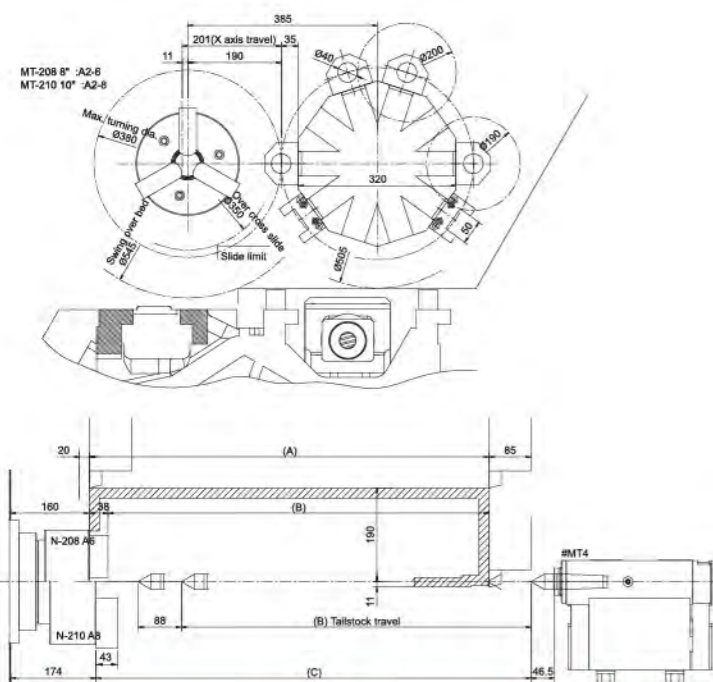


MT-208 with big diameter bearing provides greater cutting performance.

MT series could choose hydraulic turret, ECOCA made servo turret, power turret.

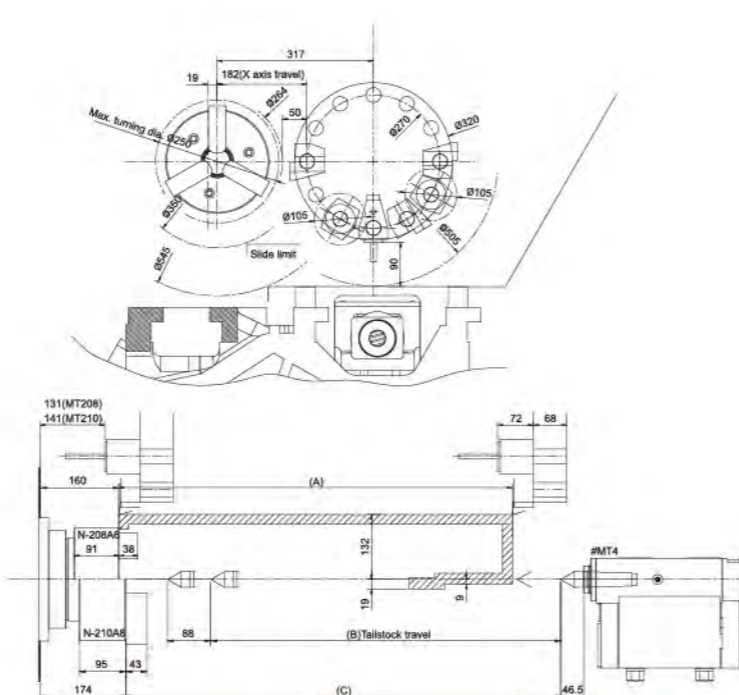
**TOOL INTERFERENCE DIAGRAM**

**MT-208/210**



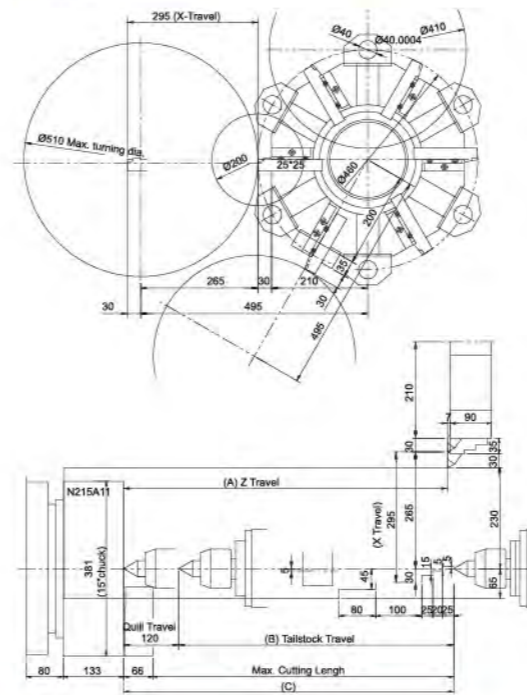
Model	A		B	C	
	MT-208	MT-210		MT-208	MT-210
MT-2 500	mm	530	460	530	
MT-2 750	mm	780	710	780	
MT-2 1000	mm	1030	1190	1030	

**MT-208/210 MC**



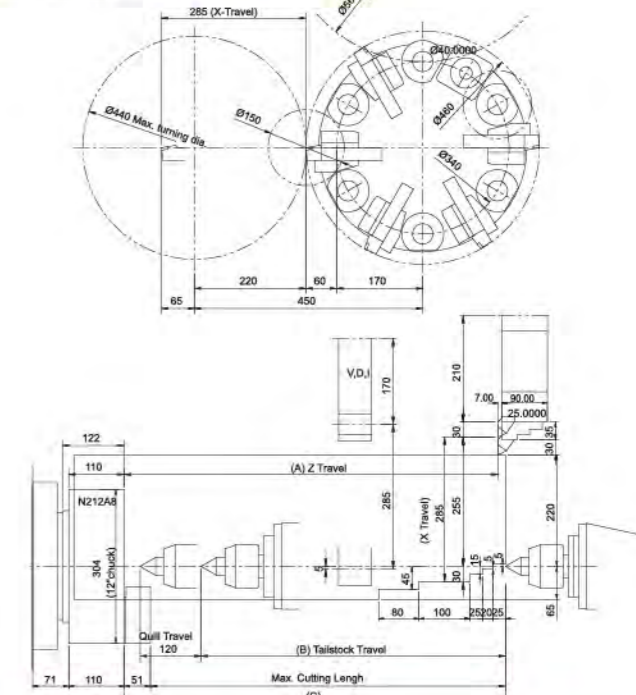
Model	A		B	C	
	MT-208	MT-210		MT-208	MT-210
MT-2 500	mm	530	460	580	
MT-2 750	mm	780	710	820	
MT-2 1000	mm	1030	1190	1070	

**MT-412/415**



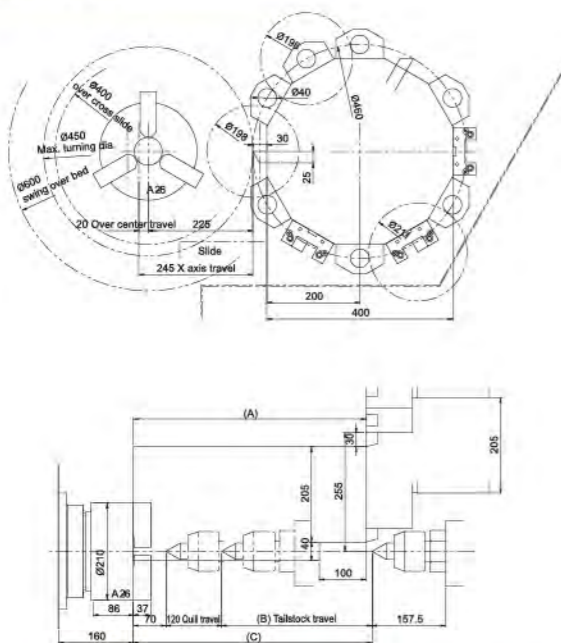
Model	A		B	C	
	MT-415	MT-412		MT-415	MT-412
MT-4 750	mm	740	600	683	713
MT-4 1000	mm	990	850	933	963
MT-4 1500	mm	1490	1350	1433	1463
MT-4 2000	mm	1990	1850	1933	1963
MT-4 3000	mm	3020	2850	3040	3070

**MT-412/415MC**



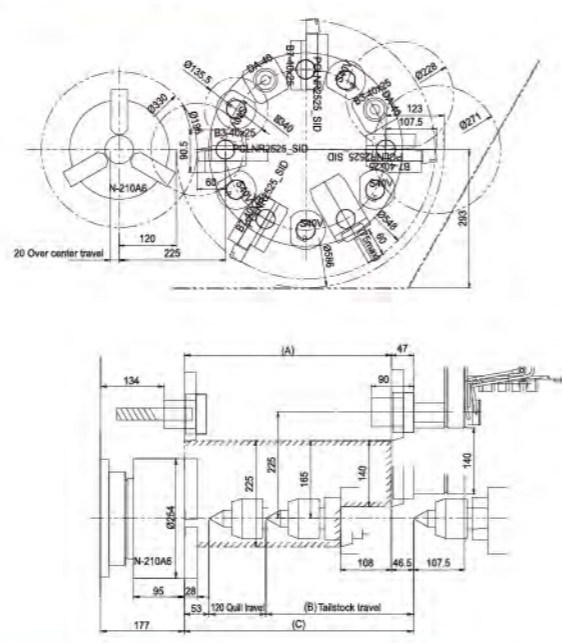
Model	A		B	C	
	MT-415	MT-412		MT-415	MT-412
MT-4 750	mm	740	600	683	713
MT-4 1000	mm	990	850	933	963
MT-4 1500	mm	1490	1350	1433	1463
MT-4 2000	mm	1990	1850	1933	1963
MT-4 3000	mm	3020	2850	3040	3070

**MT-310/312**



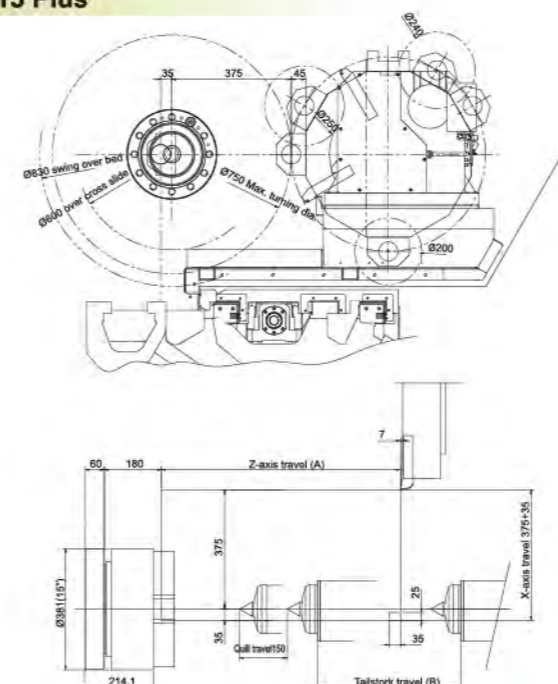
Model	A		B	C	
	MT-310	MT-312		MT-310	MT-312
MT-3 500	mm	510	415	510	500
MT-3 750	mm	760	660	750	740
MT-3 1000	mm	1010	940	1090	1080

**MT-310/312 MC**



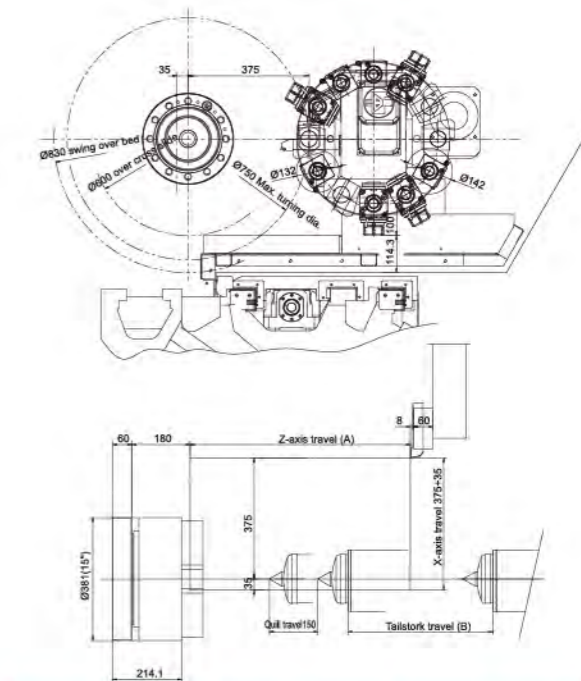
Model	A		B	C	
	MT-310	MT-312		MT-310	MT-312
MT-3 500	mm	510	415	510	500
MT-3 750	mm	760	660	750	740
MT-3 1000	mm	1010	940	1090	1080

**MT-415 Plus**



Model	A		B
	Model	A	
MT-4 Plus 750	mm	750	750
MT-4 Plus 1000	mm	1000	1000
MT-4 Plus 2000	mm	2000	2000
MT-4 Plus 3000	mm	3000	3000
MT-4 Plus 4000	mm	4000	4000

**MT-415 MC Plus**

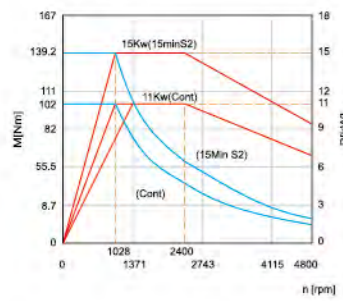


Model	A		B
	Model	A	
MT-4 Plus 750	mm	682	750
MT-4 Plus 1000	mm	932	1000
MT-4 Plus 2000	mm	1932	2000
MT-4 Plus 3000	mm	2932	3000
MT-4 Plus 4000	mm	3932	4000

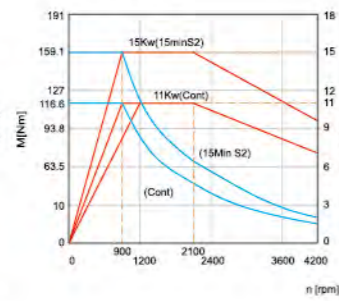
**TORQUE DIAGRAM**

**Fanuc**

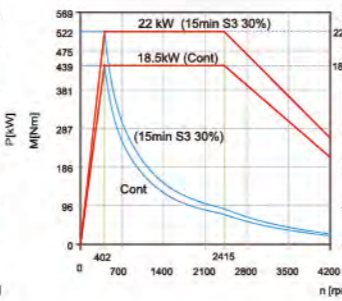
MT-208  
MT-208 MC



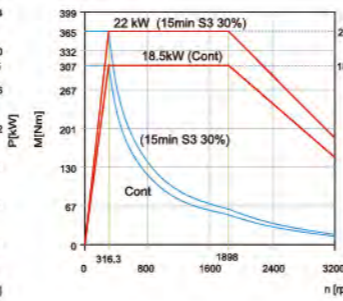
MT-210  
MT-210 MC



MT-310  
MT-310MC

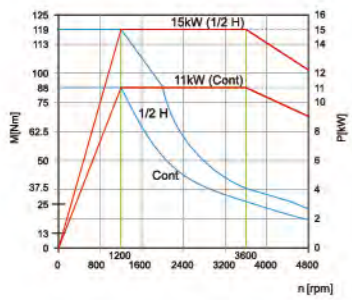


MT-312  
MT-312MC

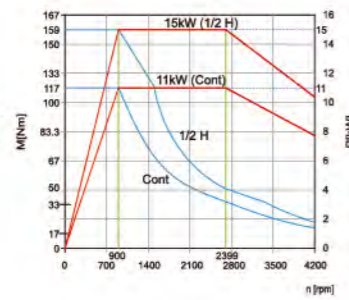


**Mitsubishi**

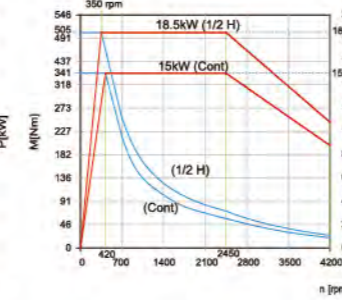
MT-208  
MT-208 MC



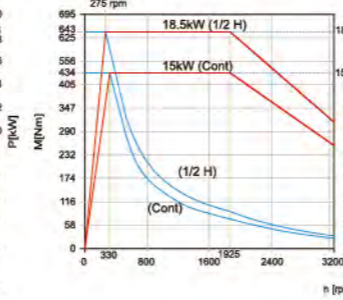
MT-210  
MT-210 MC



MT-310  
MT-310MC

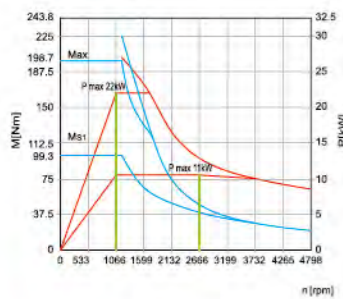


MT-312  
MT-312MC

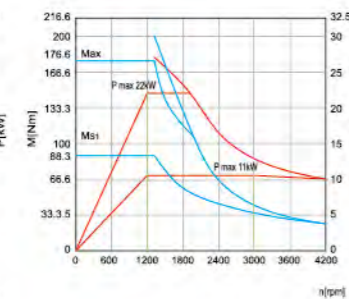


**Siemens**

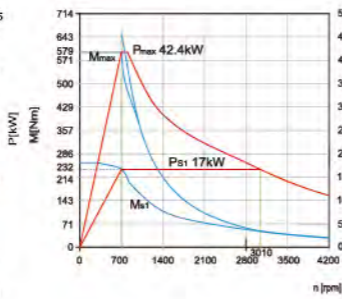
MT-208  
MT-208 MC



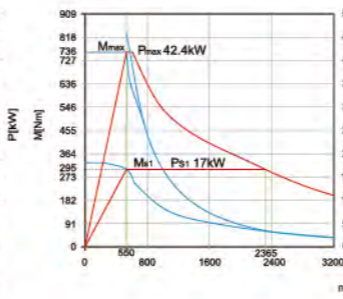
MT-210  
MT-210 MC



MT-310  
MT-310MC

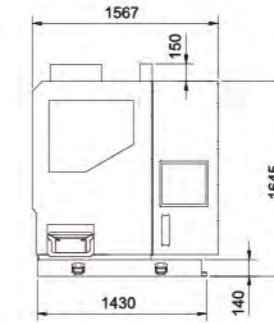
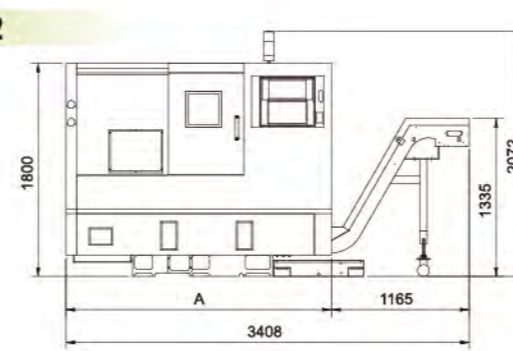


MT-312  
MT-312MC



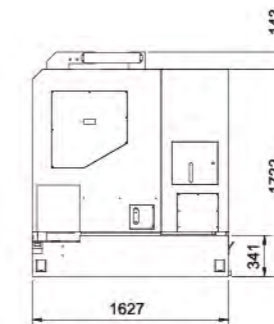
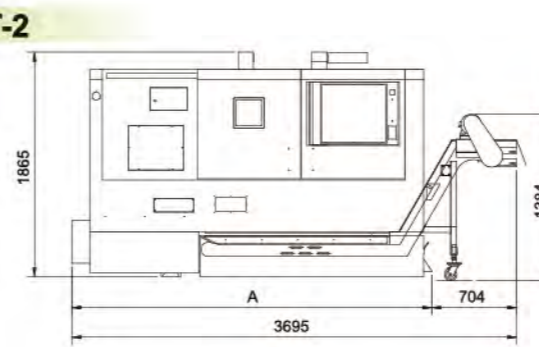
**MACHINE DIMENSIONS**

**MT-2**



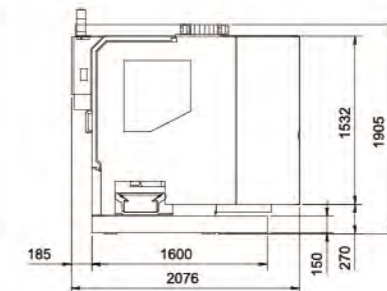
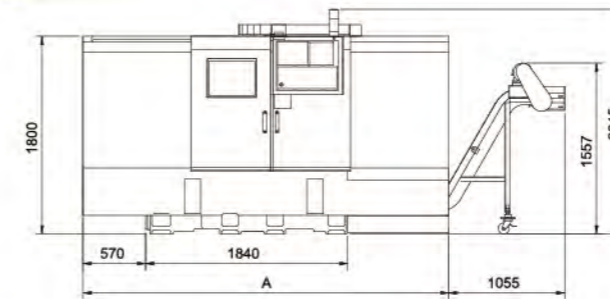
Z axis spec	A
500	2300

**MT-2**



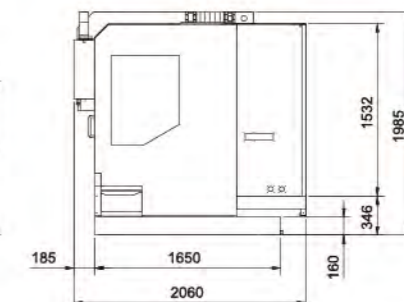
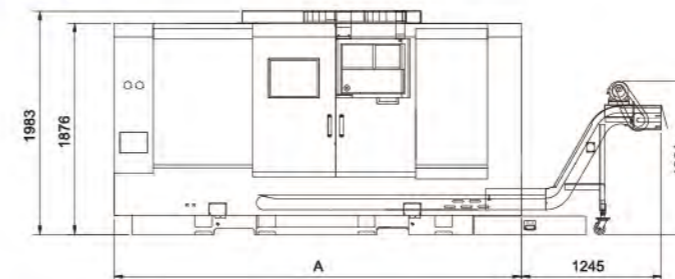
Z axis spec	A
750	3100
1000	3520

**MT-3**



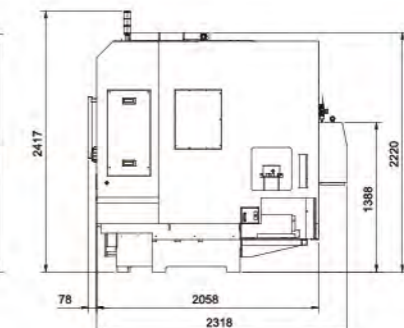
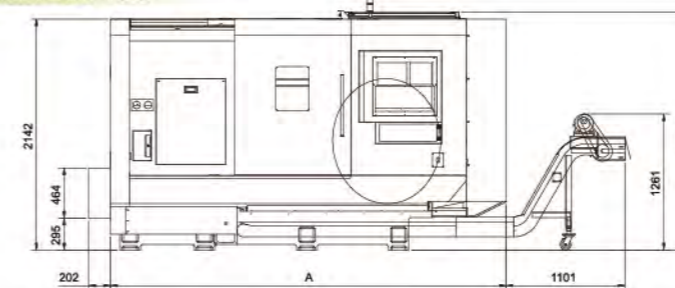
Z axis spec	A
500	2940
750	3300
1000	3740
1500	4450
2000	4950

**MT-4**



Z axis spec	A
750	3300
1000	3900
1500	4400
2000	4900
3000	6250

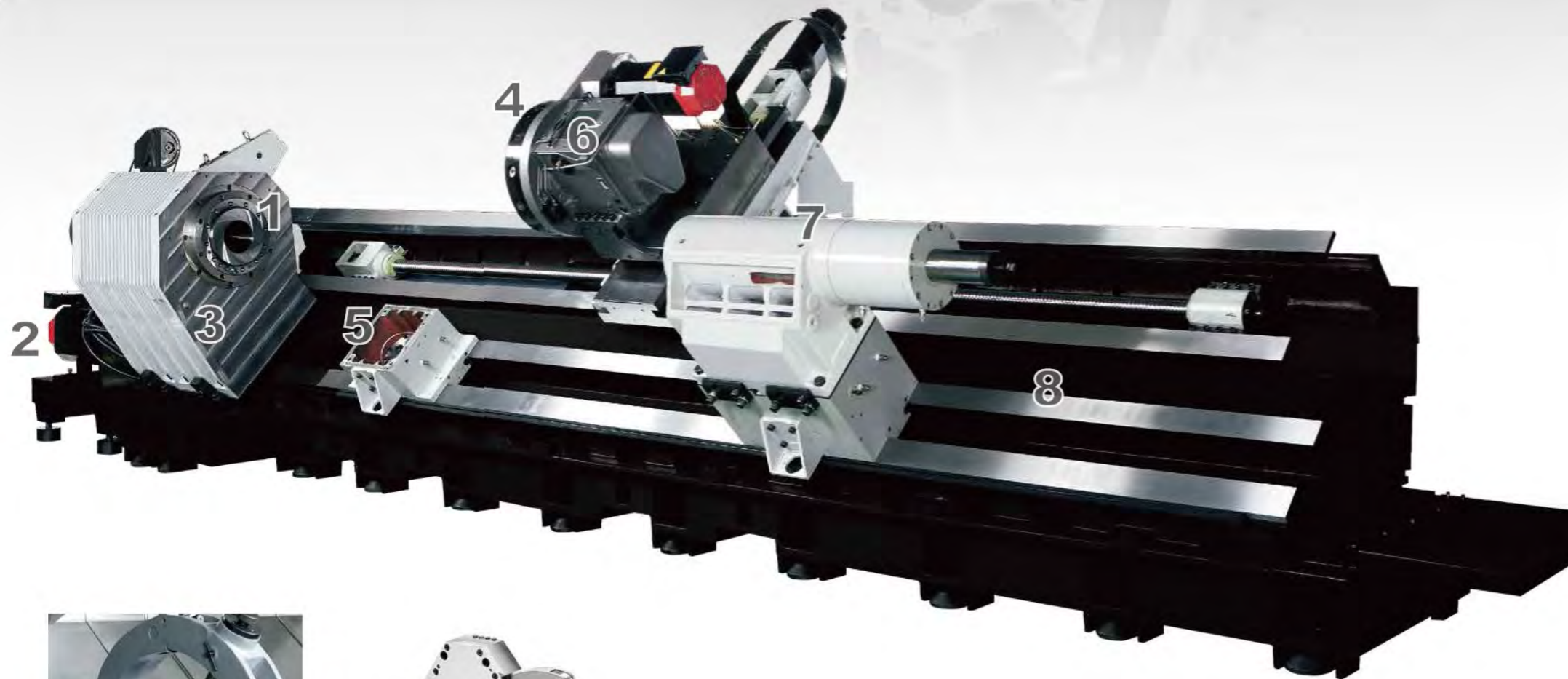
**MT-4 Plus**



Z axis spec	A
750	3700
1000	4350
1500	4850
2000	5350
3000	6350
4000	7350

# MT-520 Series

- 1 meter swing with 5 meter cutting length meets the trend for bigger and longer turning demands.
- 45 degree bed slantness provides good chip disposal function necessary for big turning jobs.
- High-rigidity turret with sturdy programmable tailstock and steady rest (optional) provides a structure with massive rigidity.



■ Sturdy spindle headstock with heat dissipation design



■ Preparation for hydraulic steady rest(opt.)



■ Spindle gear box transmission



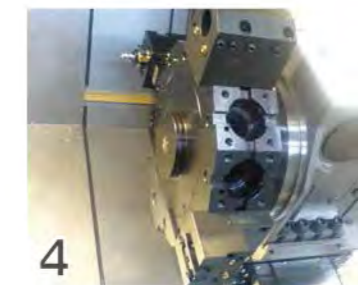
■ Live tooling VDI turret (opt.)



■ C-Axis (CF) mechanism (opt.)



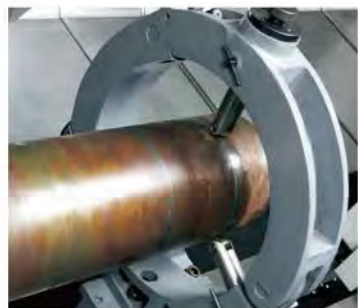
■ High rigidity and strength programmable tailstock



■ Live tooling BMT turret(opt.)



■ Hardened and ground box guide-ways



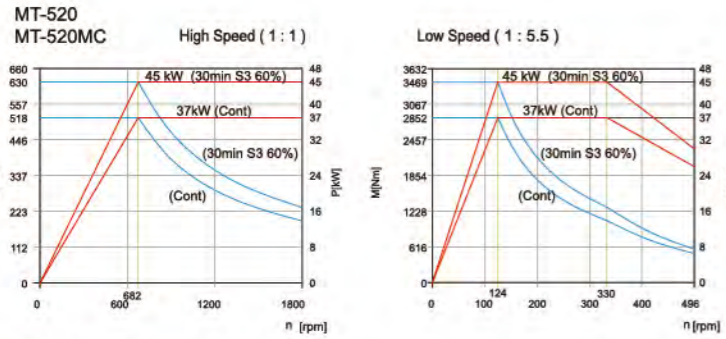
■ Manual steady rest (opt.)



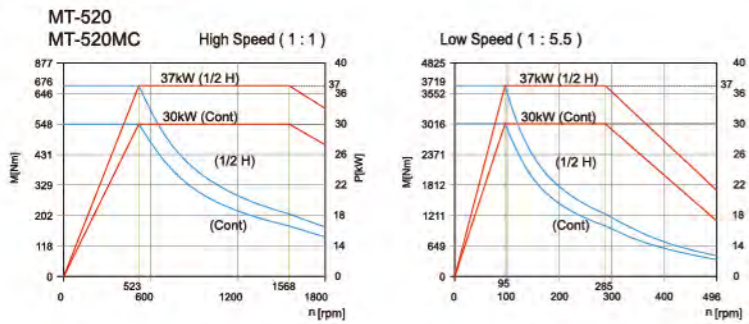
■ Hydraulic steady rest(opt.)

**TORQUE DIAGRAM**

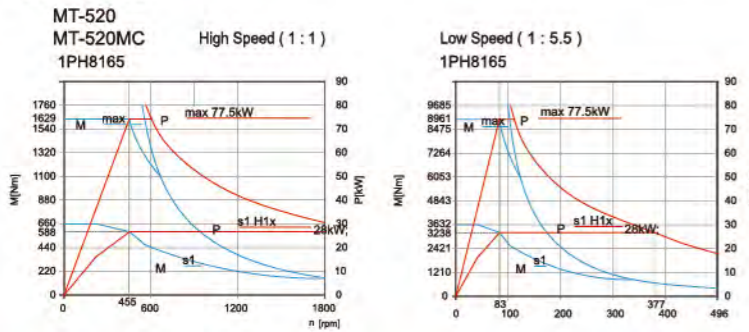
**Fanuc**



**Mitsubishi**

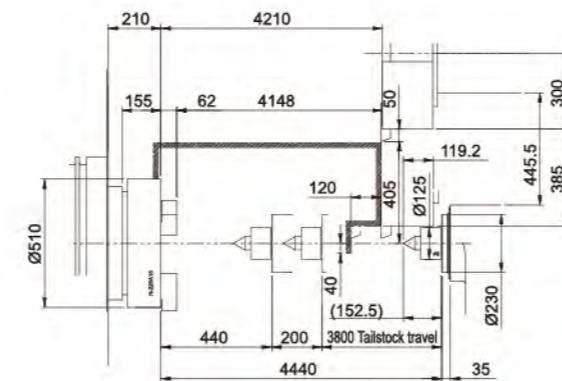
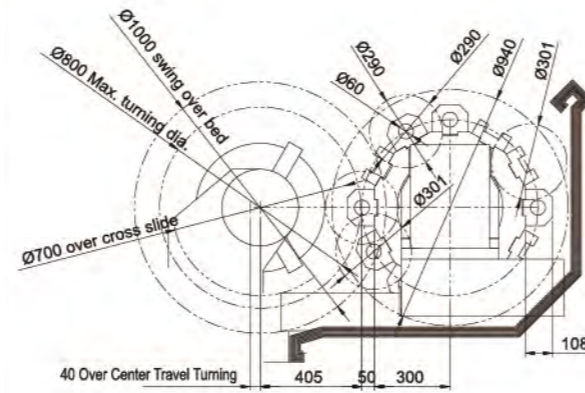


**Siemens**



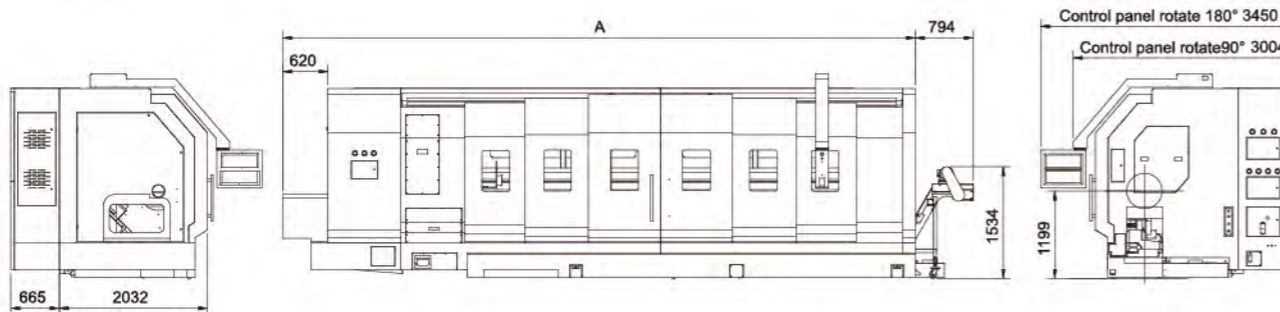
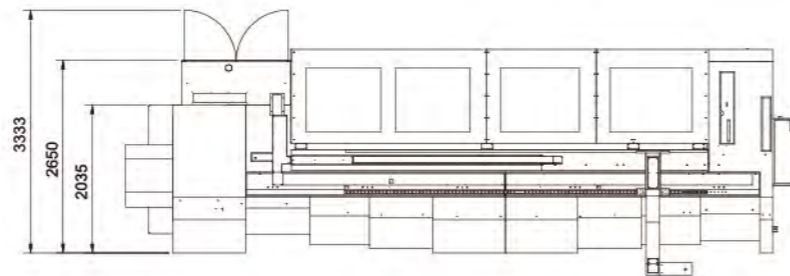
**TOOL INTERFERENCE DIAGRAM**

**MT-520**



**MACHINE DIMENSIONS**

Spec	A
3200	7677
4200	8677
5200	9677



**MACHINE SPECIFICATIONS**

Item	MODEL	MT-108 MT-108A		MT-108MC MT-108MA	
SWING OVER BED	Unit mm			570	
OVER CROSS SLIDE	mm			345	
MAX. TURNING DIA	mm	380		310	
MAX. WORK LENGTH	mm	270		228	
CHUCK SIZE	inch			8"	
DRAW TUBE DIA	mm			$\phi 52$	
SPINDLE SPEED RANGE	RPM			4500	
SPINDLE NOSE	ASA			A2-6	
THROUGH SPINDLE HOLE DIA	mm			$\phi 62$	
FRONT BEARING DIA	mm			$\phi 100$	
MILLING SPEED RANGE	RPM	-		6000	
X AXIS TRAVEL	mm	225		225	
Z AXIS TRAVEL	mm			290	
<b>FANUC</b>					
CONTROLLER TYPE				Fanuc Oi-TF3	
SPINDLE DRIVE MOTOR				7.5/11 KW	
X AXIS MOTOR		1.2 KW		1.8 KW	
Z AXIS MOTOR		1.2 KW		1.8 KW	
MILLING MOTOR		-		2.2/3.7 KW	
<b>SIEMENS</b>					
CONTROLLER TYPE				828D	
SPINDLE DRIVE MOTOR				11 KW	
X AXIS MOTOR				1.71 KW	
Z AXIS MOTOR				1.71 KW	
MILLING MOTOR		-		2.8 KW	
<b>MITSUBISHI</b>					
CONTROLLER TYPE				M80	
SPINDLE DRIVE MOTOR				5.5/7.5 KW	
X AXIS MOTOR				1.5 KW	
Z AXIS MOTOR				1.5 KW	
MILLING MOTOR		-		2.2/3.7 KW	
X AXIS RAPID TRAVERSE	m/min			15m/min	
Z AXIS RAPID TRAVERSE	m/min			18m/min	
GUIDEWAYS TYPE				BOX WAY	
NO. OF TOOL STATIONS		10T		12T	
O.D. TOOL	mm	$\square 25$		$\square 20$	
BORING BAR DIA	mm	$\phi 40$		$\phi 32$	
QUILL DIA	mm			$\phi 58$	
QUILL TRAVEL	mm			88	
TAILSTOCK TRAVEL	mm			190	
QUILL TAPER				MT#4	
POWER SUPPLY	kva	21		25	
COOLANT TANK CAPACITY	Liter			110	
COOLANT FLOW	L/min			60	
MACHINE HEIGHT	mm (H)			1930/3264(A)	
FLOOR SPACE (L)	mm (L)			1626/2593(A)	
FLOOR SPACE(W)	mm (W)			1487/1700(A)	
NET WEIGHT	kg			3350/3510(A)	

Remarks: 1.Tailstock is optional 2. A is Automatic robot arm

MACHINE SPECIFICATIONS

Item	MODEL	MT-208	MT-208MC	MT-210	MT-210MC	MT-310	MT-310MC	MT-312	MT-312MC	MT-412	MT-412MC	MT-415	MT-415MC	MT415-Plus	MT415MC-Plus		
SWING OVER BED	Unit mm	545				600				690				830			
OVER CROSS SLIDE	mm	350				400				480				650			
MAX. TURNING DIA	mm	380	250	380	250	450	330	450	330	510	440	510	440	750	570		
MAX. WORK LENGTH	mm	500/750/1000				500/750/1000/1500/2000				480/730/990/1500/2000				730/1000/1500/2000/3000		750/1000/1500/2000/3000/4000	
CHUCK SIZE	inch	8"				10"				12"				15" (opt:20")			
DRAW TUBE DIA	mm	Ø52				Ø75				Ø91				Ø117 (opt:Ø142)			
SPINDLE SPEED RANGE	RPM	4800				4200				3200				2500 (opt:1200)			
SPINDLE NOSE	ASA	A2-6				A2-8				A2-8				A2-11 (opt:A2-15)			
THROUGH SPINDLE HOLE DIA	mm	Ø62				Ø92				Ø102				Ø131 (opt:Ø160)			
FRONT BEARING DIA	mm	Ø100				Ø130				Ø140				Ø170 (opt:Ø240)			
SPINDLE TAPER														1/20			
MILLING SPEED RANGE	RPM	-	6000	-	6000	-	5000	-	5000	-	5000	-	5000	-	3000		
X AXIS TRAVEL	mm	200	200	200	200	245	245	245	245	295	285	295	285	410			
Z AXIS TRAVEL	mm	530/780/1030				530/780/1030/1530/2030				760/1020/1520/2020/3020				850/1100/1600/2100/3100/4100			
<b>FANUC</b>																	
CONTROLLER TYPE		Fanuc 0i-TF3						Fanuc 0i-TF1									
SPINDLE DRIVE MOTOR		11/15 KW (B12)						18.5/22KW						30/37 KW 37/45KW(≥4000mm)			
X AXIS MOTOR		2.5KW(B22)				3KW	4KW	3KW	4KW	3KW	4KW	3KW	4KW	4 KW 6 KW(≥4000mm)			
Z AXIS MOTOR		2.5KW(B22)				4KW				4 KW 7 KW(≥3000mm)				7 KW 6 KW (≥4000mm)			
MILLING MOTOR		-	2.2/3.7KW	-	2.2/3.7KW	-	3.7/5.5KW	-	3.7/5.5KW	-	3.7/5.5KW	-	3.7/5.5KW	-	3.7/5.5 KW OPT:5.5/7.5KW 7.5/11 kW(≥4000mm)		
<b>Siemens</b>																	
CONTROLLER TYPE														828D			
SPINDLE DRIVE MOTOR		11KW				11KW				17KW				28 KW			
X AXIS MOTOR		2.85KW				2.85KW				3.3KW				7.7 KW			
Z AXIS MOTOR		2.85KW				2.85KW				3.3KW				3.3 KW 5.2 KW(≥3000mm)			
MILLING MOTOR		-	2.8 KW	-	2.8 KW	-	2.8 KW	-	2.8 KW	-	2.8 KW	-	2.8 KW	-	3.7 KW		
<b>Mitsubishi</b>																	
CONTROLLER TYPE														M80			
SPINDLE DRIVE MOTOR		11/15 KW				15/18.5KW				18.5/22 KW				30/37 KW			
X AXIS MOTOR						2.2 KW								3.5 KW			
Z AXIS MOTOR		2.2 KW				3 KW								4.5 KW			
MILLING MOTOR		-	2.2/3.7 KW	-	2.2/3.7 KW	-	2.2/3.7 KW	-	2.2/3.7 KW	-	2.2/3.7 KW	-	2.2/3.7 KW	-	2.2/3.7 KW		
X AXIS RAPID TRAVERSE	m/min					20m/min											
Z AXIS RAPID TRAVERSE	m/min					20m/min				20m/min 16m/min(Z≥1500)				20m/min 16min(Z≥1500)			
GUIDEWAYS TYPE														Box Way			
NO. OF TOOL STATIONS		10T	12T	10T						12T							
O.D. TOOL	mm	□25	□20	□25	□20	□25				□32				□25			
BORING BAR DIA	mm	Ø40	Ø32	Ø40	Ø32	Ø40				Ø40/Ø50(選)				Ø40			
QUILL DIA	mm	Ø90				Ø90 (opt:φ110)				Ø100 (opt:φ130)				Ø150			
QUILL TRAVEL	mm	85				120				120				150			
TAILSTOCK TRAVEL	mm	460/710/960				400/660/1020/1520/2020				695/850/1350/1850/2850				750/1000/1500/2000/3000/4000			
QUILL TAPER		MT#5								MT#5				MT#6			
POWER SUPPLY	kva					30								50 60 (≥3000)			
COOLANT TANK CAPACITY	Liter					125								150 200 (≥3000)			
COOLANT FLOW	L/min	30				30				40				30			
MACHINE HEIGHT	mm (H)	1700				1905				2000/2350(3M)				2250			
FLOOR SPACE (L)	mm (L)	2300/3100/3900				2900/3300/3700/4350/4950				3300/3900/4400/4900/5400				3700/4350/4850/5350/6350/7350			
FLOOR SPACE(W)	mm (W)	1500				2100				2248				2150			
NET WEIGHT	kg	4300/4900/5500				5100/5500/6000/6500/7100				7400/7900/8400/9000/9500				8900/9400/9900/10500/11600/12700			