

Machine Specifications

ITEM		MT-208	MT-208MC	MT-210	MT-210MC
SWING OVER BED	mm	525	525	525	525
OVER CROSS SLIDE	mm	384	384	384	384
MAX. TURNING DIA	mm	350	250	350	250
MAX. WORK LENGTH	mm	500/750	500/750	500/750	500/750
DRAW TUBE DIA	mm	52	52	75	75
CHUCK SIZE	inch	8"	8"	10"	10"
SPINDLE DRIVE MOTOR (cont./30min.)		7.5/9KW (9/11KW opt.)	7.5/9KW (9/11KW opt.)	9/11KW	9/11KW
SPINDLE SPEED RANGE	rpm	4800	4800	4200	4200
MILLING SPEED RANGE	rpm	-	4000		3800
SPINDLE NOSE	ASA	A2-6	A2-6	A2-8	A2-8
THROUGH SPINDLE HOLE DIA	mm	62	62	90	90
FRONT BEARING DIA	mm	100	100	130	130
SPINDLE TAPER		1/20	1/20	1/20	1/20
X AXIS TRAVEL	mm	185	175	185	175
Z AXIS TRAVEL	mm	537/787	537/787	537/787	537/787
X AXIS MOTOR		1.6KW (2.1HP)	1.6KW (2.1HP)	1.6KW	1.6KW
Z AXIS MOTOR		1.6KW (2.1HP)	3.0KW (3.8HP)	1.6KW	3.0KW
X AXIS RAPID TRAVERSE	m/min	24 (opt.:30 for LINEAR)	24	24	24
Z AXIS RAPID TRAVERSE	m/min	24 (opt.:30 for LINEAR)	24	24	24
GUIDEWAYS		HARD RAIL (LINEAR opt.)	HARD RAIL (LINEAR opt.)	HARD RAIL (LINEAR opt.)	HARD RAIL (LINEAR opt.)
NO. OF TOOL STATIONS		10	12	10	12
SIZE OF EXTERNAL TURNING TOOL	mm	25	20	25	25
BORING BAR DIA	mm	40	40	40	40
QUILL DIA	mm	58	58	58	58
QUILL TRAVEL	mm	88	88	88	88
TAILSTOCK TRAVEL	mm	415/665	415/665	415/665	415/665
QUILL TAPER		MT#4	MT#4	MT#4	MT#4
ELECTRICAL POWER SUPPLY	kva	30	30	30	30
COOLANT TANK CAPACITY	Liter	125	125	125	125
COOLANT FLOW	L/min	15	15	15	15
TOTAL HEIGHT	mm	1700	1700	1700	1700
FLOORSPACE	LENGTH	mm	2300/3100	2300/3100	2300/3100
	WIDTH	mm	1500	1500	1500
NET WEIGHT	kg	3900/4600	3900/4600	4000/4700	4000/4700

All specifications, designs and characteristics shown in this catalogue are subject to change without prior notice.
Motor specifications are based on machines with FANUC.

STANDARD ACCESSORIES

- 3-jaw hydraulic chuck
 - Hydraulic system
 - Hydraulic tailstock
 - Live center
 - Coolant system
 - Morse Taper Sleeve
 - Auto lubrication system
 - Work light equipment
 - Heat exchanger
 - Soft jaw
- Foot switch for chuck clamp
 - MPG hand wheel
 - Operation & maintenance manuals
 - Hand tool box
 - Levelling pads
 - OD tool holder
 - Facing tool holder
 - Boring bar holder & sleeves
 - Drill sleeves

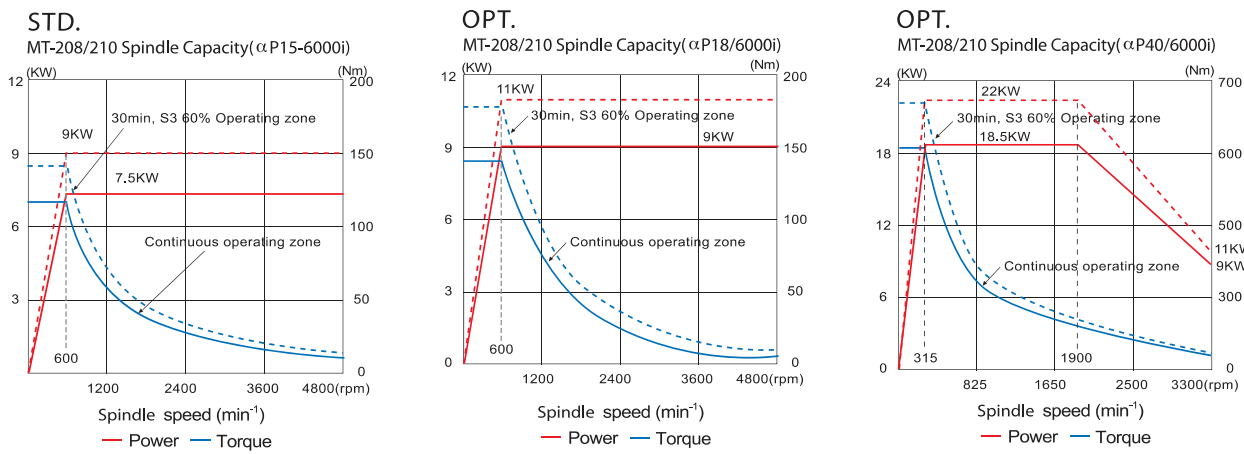
OPTIONAL ACCESSORIES

- Bar feeder
 - Parts catcher
 - Tool setter
 - C-axis
 - VDI turret (without tool holders)
 - VDI tool holders
 - Auto door
 - Chip conveyor
- Chip bucket
 - Transformer
 - CE mark
 - Safety torque limit clutch
 - Hoisting hook package
 - Levelling kit
 - Bar feeder interface (LNS system)
 - Additional tool holders and sleeves

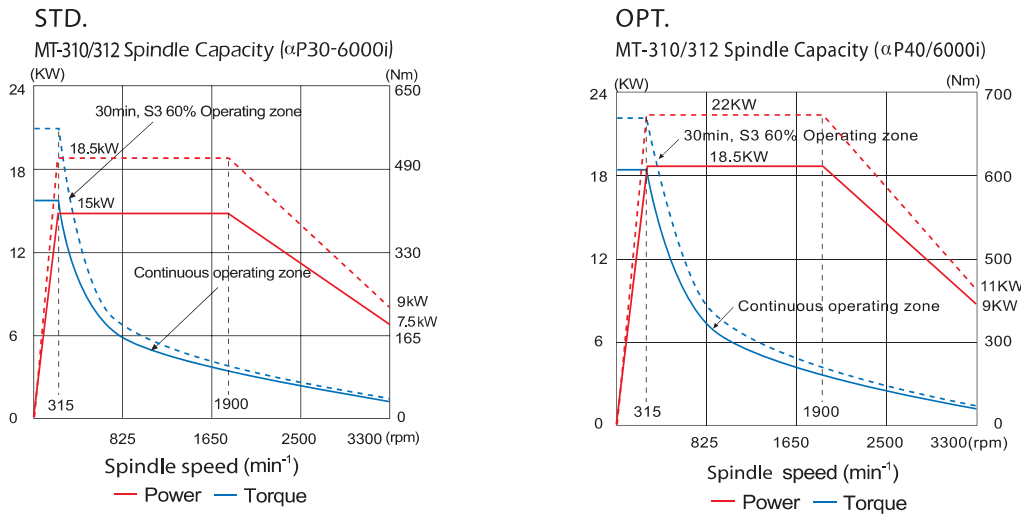


Power Diagram

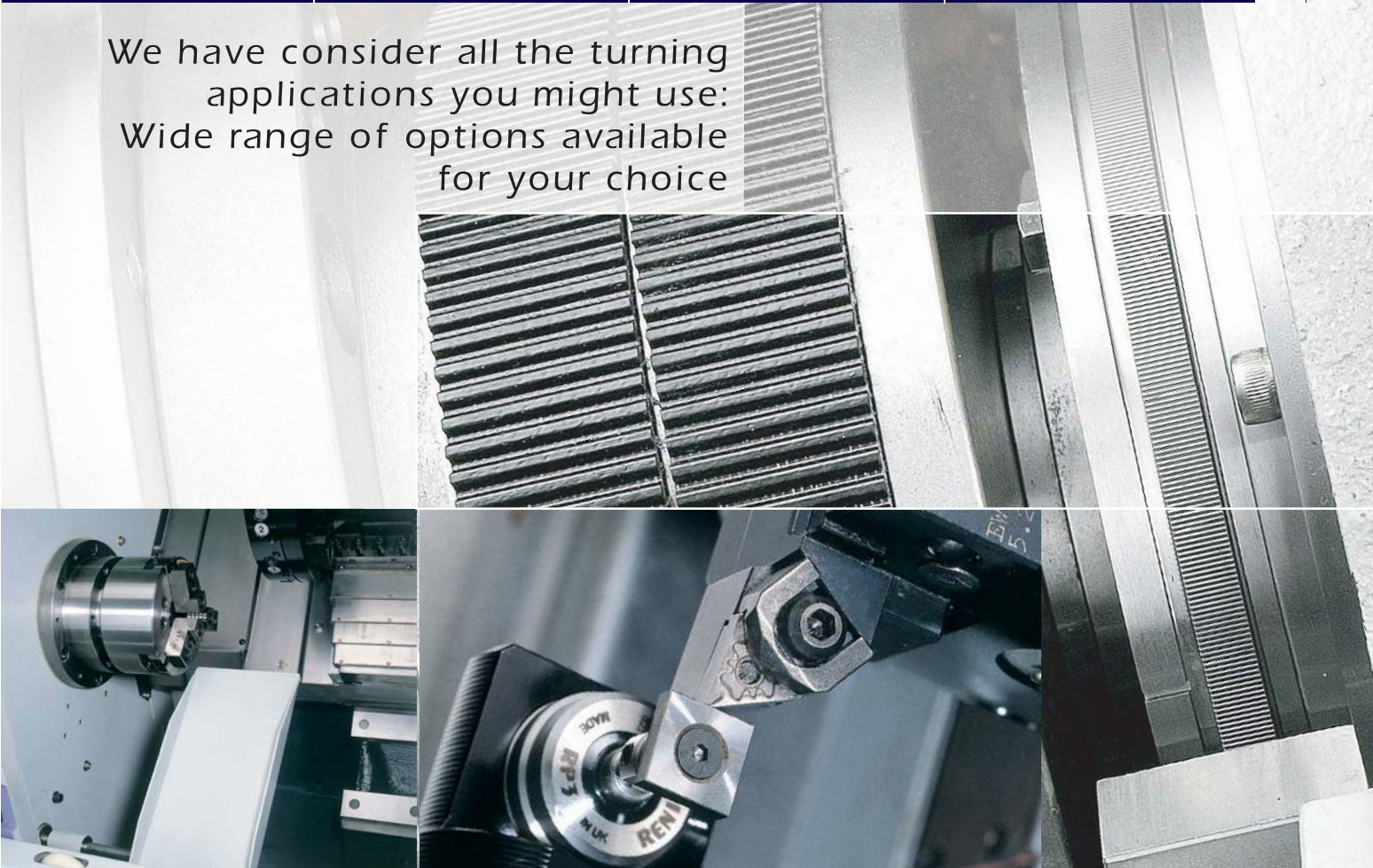
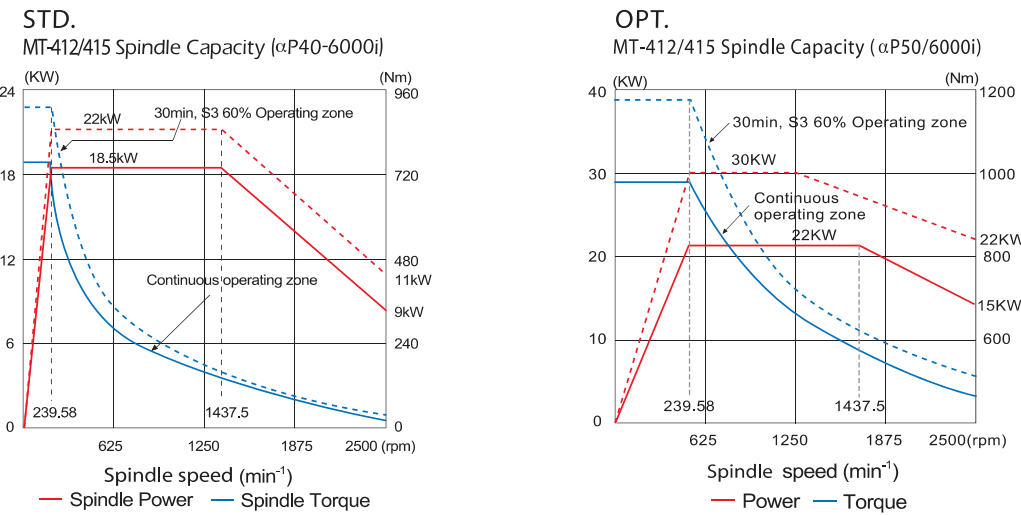
Power Diagram



Power Diagram



Power Diagram



Parts catcher is available for full automation job. (opt.)

Tool setter from Renishaw provides quick and easy tooling set up. (opt.)

C axis high resolution encoder from FANUC (opt.)

The 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.
 - Big diameter bearing provides high rigidity.
 - High-resolution encoder mounted on spindle to provide accurate C axis positioning.
 - C axis with continuous indexing.

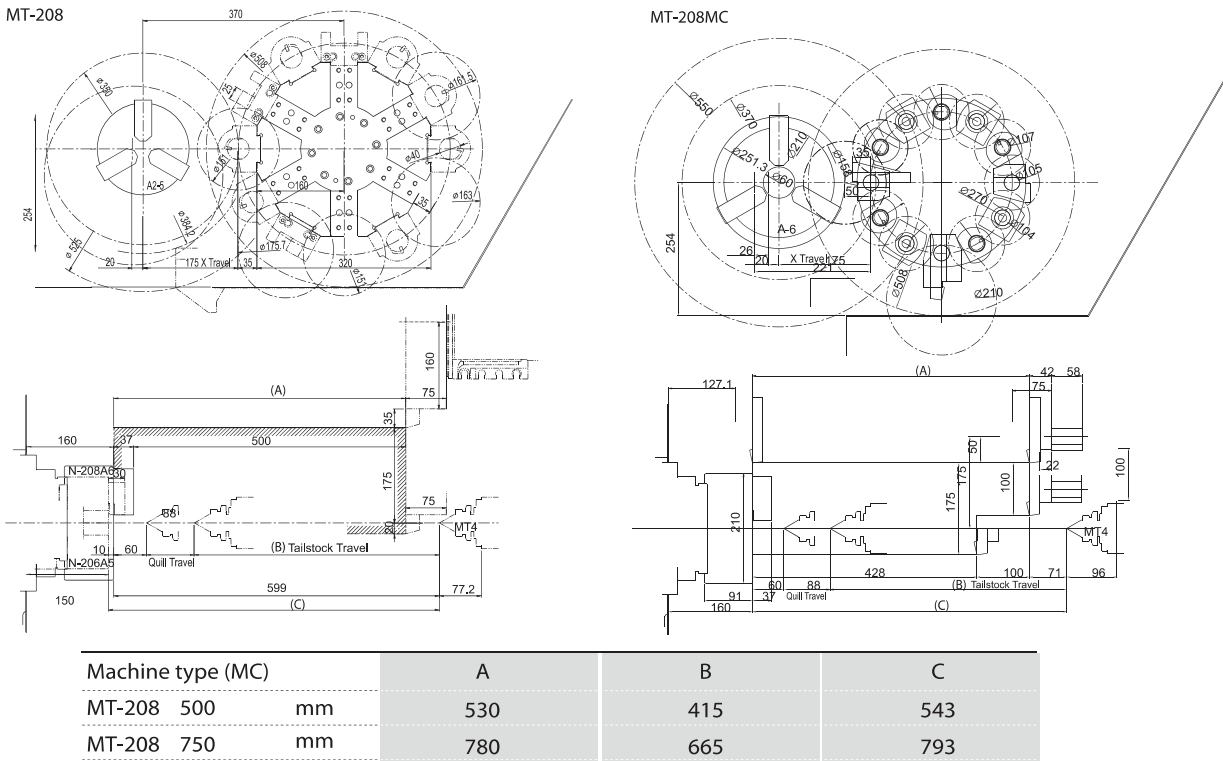
- Double supported ballscrews Direct-driven servo motors are used for axial movements.
 - Servo turret or hydraulic turret is offered for users as an alternative choice.
 - Large disc is equipped for easy tool set up.
 - Special spindle motor location design reduces machine floor space
 - One-piece structure on the machine structure to provide massive rigidity.

- Programmable tailstock available as an option.
 - When equipped with sub spindle, the main and sub spindles can be synchronized for work piece handover from main to sub spindle. (MT-308MCS)
 - Large coolant tank
 - Internal coolant supply through turret disc.
 - High pressure pump.
 - PLC controlled chip conveyor.

Tool Interference Diagram

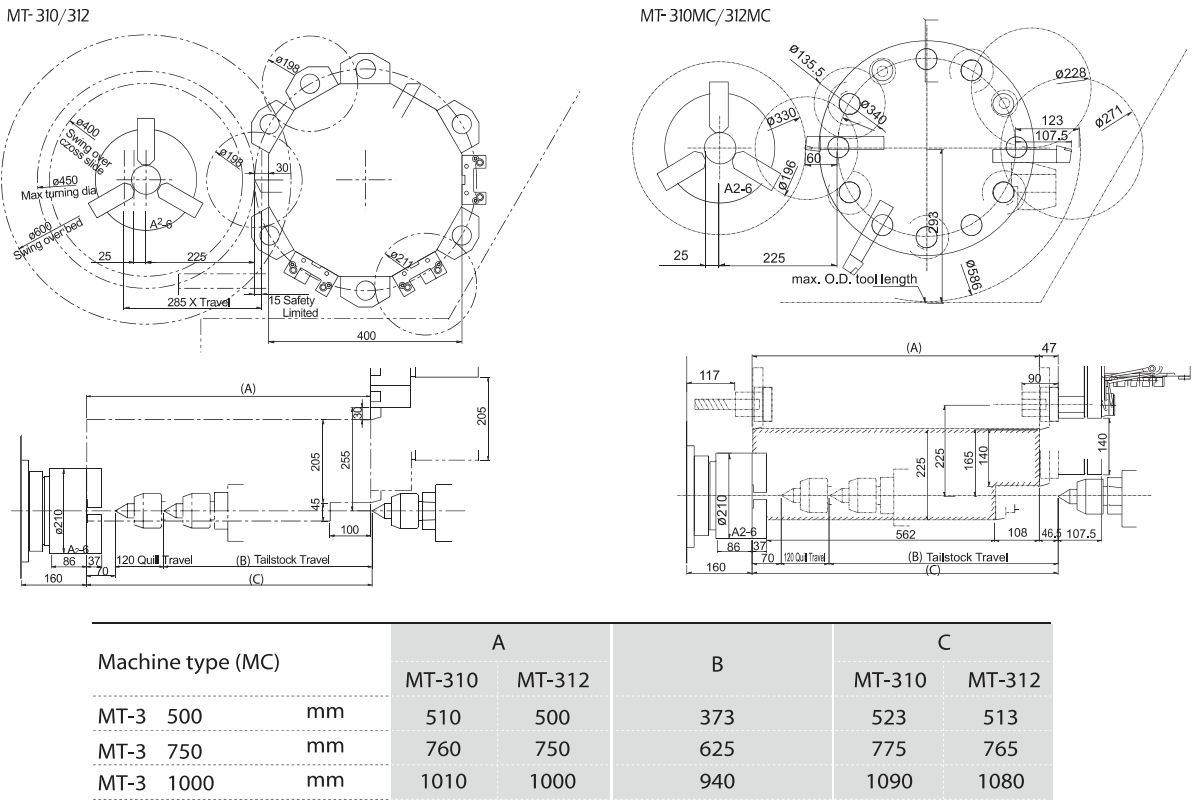
Tool Interference Diagram

unit:mm



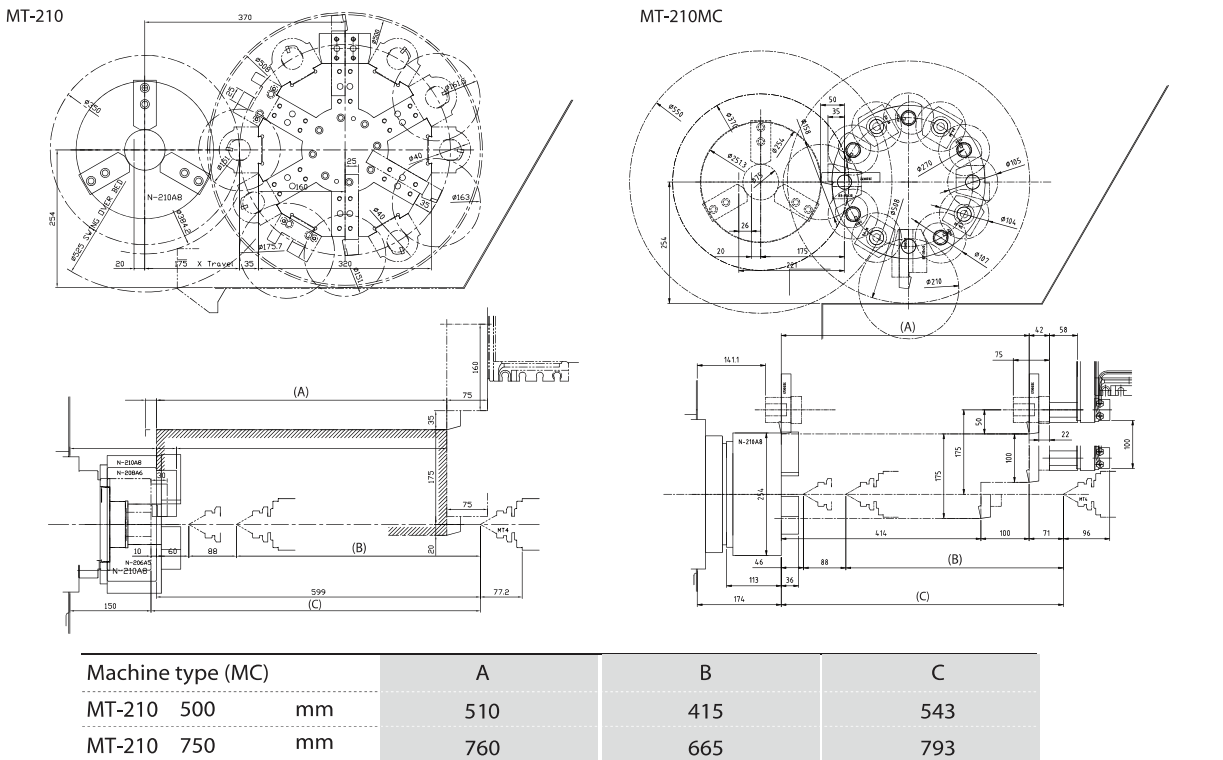
Tool Interference Diagram

unit:mm



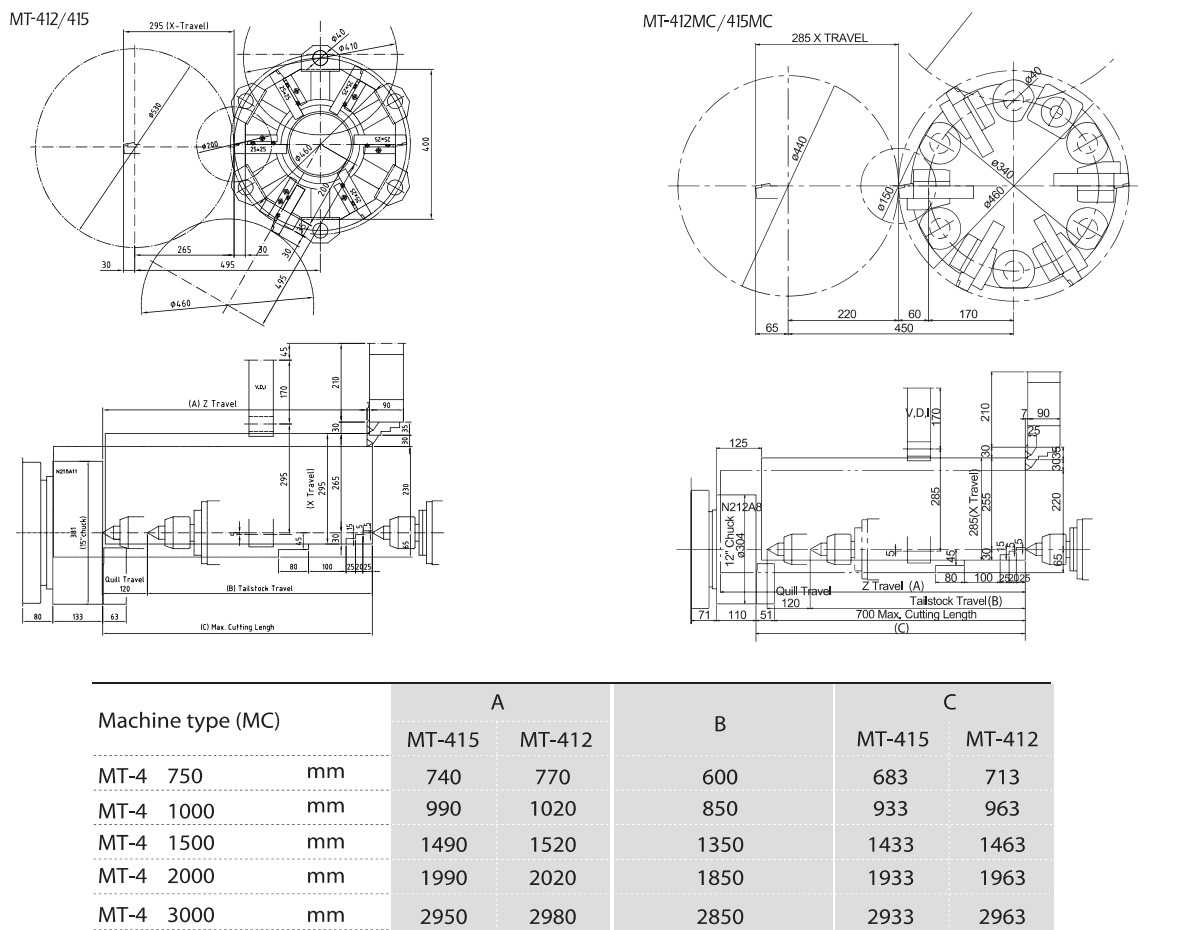
Tool Interference Diagram

unit:mm



Tool Interference Diagram

unit:mm



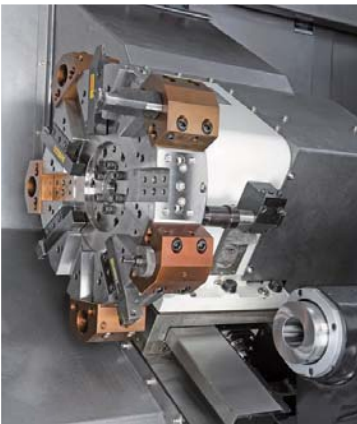
ECOCA

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

Offering the most solid base to process up to 3000mm turning length, bar capacity up to 117.5mm, and swing up to 700mm over bed, the 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.

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

The rigid mechanical configurations yield a very high level of reliability and easy access to the machine operation and maintenance. The Ecoca MT series is a very fine integration of high quality and affordable prices.



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

Fast and accurate servo-driven turrets. (Optional VDI turret)

ITEM		MT-308MCS	MT-310/310MC	MT-312/312MC
SWING OVER BED	mm	600	600	600
OVER CROSS SLIDE	mm	400	400	400
MAX. TURNING DIA	mm	345	450330	450330
MAX. WORK LENGTH	mm	750	490/740/990	480/730/980
DRAW TUBE DIA	mm	52	75	91
CHUCK SIZE	inch	8"	10"	12"
SPINDLE DRIVE MOTOR (cont./30min.)		9/11kW (main), 5.5/7.5 KW (sub)	15/18.5KW (18.5/22KW opt.)	15/18.5KW (18.5/22KW opt.)
SPINDLE SPEED RANGE	rpm	4800	4200	3200
SPINDLE NOSE	ASA	A2-6	A2-8	A2-8
THROUGH SPINDLE HOLE DIA	mm	62	90	102
FRONT BEARING DIA	mm	100	130	140
SPINDLE TAPER		1/20	1/20	1/20
MCS SUB SPINDLE SPEED	rpm	6000	-	-
MCS SUB SPINDLE NOSE	ASA	A2-5	-	-
MCS SUB SPINDLE TRAVEL	mm	700	-	-
MC MCS SUB MILLING SPEED	rpm	3800	3800	3800
X AXIS TRAVEL	mm	225	225	225
Z AXIS TRAVEL	mm	770	510/760/1010	500/750/1000
B AXIS TRAVEL	mm	670	-	-
X AXIS MOTOR		3.0KW (3.8HP)	3.0KW (3.8HP)	3.0KW (3.8HP)
Z AXIS MOTOR		3.0KW (3.8HP)	3.0KW (3.8HP)	3.0KW (3.8HP)
B AXIS MOTOR		3.0KW (3.8HP)	-	-
X AXIS RAPID TRAVERSE	m/min	20	20	20
Z AXIS RAPID TRAVERSE	m/min	20	20	20
B AXIS RAPID TRAVERSE	m/min	20	-	-
GUIDEWAYS		Hard Rail	Hard Rail	Hard Rail
NO. OF TOOL STATIONS		12	12	12
SIZE OF EXTERNAL TURNING TOOL	mm	25	25	25
BORING BAR DIA	mm	40	40	40
QUILL DIA	mm	90	90	90
QUILL TRAVEL	mm	120	120	120
TAILSTOCK TRAVEL	mm	810	560/810/1060	560/810/1060
QUILL TAPER		MT #5	MT #5	MT #5
ELECTRICAL POWER SUPPLY	kva	30	30	40
COOLANT TANK CAPACITY	Liter	150	150	150
COOLANT FLOW	L/min	20	20	20
TOTAL HEIGHT	mm	1905	1905	1905
FLOOR SPACE	LENGTH	mm	4300	2900/3300/3700
	WIDTH	mm	2100	2100
NET WEIGHT	kg	5300	4800/5300/5800	4900/5400/5900

All specifications, designs and characteristics shown in this catalogue are subject to change without prior notice. Motor specifications are based on machines with FANUC.

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

ITEM		MT-412					MT-412MC					MT-415					MT-415MC															
SWING OVER BED		mm	680					680					680					680														
OVER CROSS SLIDE		mm	480					480					480					480														
MAX. TURNING DIA		mm	530					440					530					440														
MAX. WORK LENGTH		mm	750	1000	1500	2000	2980	730	980	1480	1980	2960	720	970	1470	1970	2950	700	950	1450	1950	2930										
DRAW TUBE DIA		mm	91					91					117.5					117.5														
CHUCK SIZE		inch	12"					12"					15"					15"														
SPINDLE DRIVE MOTOR (cont./30min)			18.5/22KW (22/30KW opt.)					18.5/22KW (22/30KW opt.)					18.5/22KW (22/30KW opt.)					18.5/22KW (22/30KW opt.)														
SPINDLE SPEED RANGE		rpm	3200					3200					2500					2500														
MILLING SPEED RANGE		rpm	-					3200					-					3200														
SPINDLE NOSE		ASA	A2-8					A2-8					A2-11					A2-11														
THROUGH SPINDLE HOLE DIA		mm	102					102					131					131														
FRONT BEARING DIA		mm	140					140					170					170														
SPINDLE TAPER			1/20					1/20					1/20					1/20														
X AXIS TRAVEL		mm	295					295					295					295														
Z AXIS TRAVEL		mm	770	1020	1520	2020	3000	770	1020	1520	2020	3000	770	1020	1520	2020	3000	770	1020	1520	2020	3000										
X AXIS MOTOR		KW	4.0(5.3HP)					4.0(5.3HP)					4.0(5.3HP)					4.0(5.3HP)														
Z AXIS MOTOR		KW	4.0(5.3HP)		6(8HP)				4.0(5.3HP)		6(8HP)				4.0(5.3HP)		6(8HP)				4.0(5.3HP)		6(8HP)									
X AXIS RAPID TRAVERSE		m/min	20					20					20					20														
Z AXIS RAPID TRAVERSE		m/min	20 (16m/min for Z axis travel ≥1500 mm) (10m/min for Z axis travel ≥3000 mm)					20 (16m/min for Z axis travel ≥1500 mm) (10m/min for Z axis travel ≥3000 mm)					20 (16m/min for Z axis travel ≥1500 mm) (10m/min for Z axis travel ≥3000 mm)					20 (16m/min for Z axis travel ≥1500 mm) (10m/min for Z axis travel ≥3000 mm)														
GUIDEWAYS			HARD RAIL					HARD RAIL					HARD RAIL					HARD RAIL														
NO. OF TOOL STATIONS			12					12					12					12														
SIZE OF EXTERNAL TURNING TOOL			mm		25				mm		25				mm		25				mm		25									
BORING BAR DIA			mm		40 (50 opt.)				mm		40 (50 opt.)				mm		40 (50 opt.)				mm		40 (50 opt.)									
QUILL DIA			mm		100				mm		100				mm		100				mm		100									
QUILL TRAVEL			mm		120				mm		120				mm		120				mm		120									
TAILSTOCK TRAVEL			mm		600	850	1350	1850	2850	mm		600	850	1350	1850	2850	mm		600	850	1350	1850	2850									
QUILL TAPER			MT #5					MT #5					MT #5					MT #5														
ELECTRICAL POWER SUPPLY			kva		40	50				kva		40	50				kva		40	50				kva		40	50					
COOLANT TANK CAPACITY			Liter		150	200				Liter		150	200				Liter		150	200				Liter		150	200					
COOLANT FLOW			L/min		20				L/min		20				L/min		20				L/min		20									
TOTAL HEIGHT			mm		2000				2350				mm		2000				2350				mm		2000				2350			
FLOOR SPACE		LENGTH	mm		3300	3900	4400	4900	6250	mm		3300	3900	4400	4900	6250	mm		3300	3900	4400	4900	6250	mm		3300	3900	4400	4900	6250		
		WIDTH	mm		2248				mm		2248				mm		2248				mm		2248									
NET WEIGHT			kg		6400	7300	8100	9300	11800	kg		6400	7300	8100	9300	11800	kg		6400	7300	8100	9300	11800	kg		6400	7300	8100	9300	11800		

All specifications, designs and characteristics shown in this catalogue are subject to change without prior notice.
Motor specifications are based on machines with FANUC.



ECOCA INDUSTRIAL CO., LTD.

401, 28TH ROAD, TAICHUNG INDUSTRIAL PARK, TAICHUNG, TAIWAN.
TEL : +886-4-23597666 FAX : +886-4-23597669
http : //www.ecoca.com E-mail : biz@ecoca.com

