



 **L&W MACHINE**
MA series

*High Rigid and Precise Lathe
-Conventional control type
-Inverter control type*



Features of Inverter Type



- Braking is controlled by inverter for quick stopping operation.
- Constant spindle speed in combination with the use of cross slide lever for feeding is similar to constant Surface Speed (C.S.S.) function. This function provides cutting accuracy and speed for side facing on a round plate.
- When performing step turning by using automatic cross feed, the automatic speed change combined with cross feed will greatly increase efficiency.



- 3 ranges of spindle speeds combined with variable speeds.
- Automatic speed change by electronic control.
- Turning process control is more convenient than that of conventional lathe.
- Spindle speed is displayed on the RPM meter.



MA-17 x 550mm~1000mm
MA-18 x 1000mm~2000mm
MA-21/25 x 1000mm~3000mm
MA-30/33 x 1600mm~6100mm
MA-42/50 x 1700mm~7200mm

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SPECIFICATIONS:

Description / Model	MA-1720	MA-1730	MA-1740	MA-1840	MA-1860	MA-1880	MA-2140	MA-2160	MA-2180	MA-21120	MA-2540	MA-2560	MA-2580	MA-25120	
WORKING CAPACITY															
Center height	215 mm			230 mm			270 mm			315 mm					
Swing over bed	460 mm			460 mm			540 mm			630 mm					
Swing over gap	630 mm (Opt.)			640 mm (Opt.)			720 mm (Opt.)			810 mm (Opt.)					
Swing over cross slide	250 mm			285 mm			360 mm			450 mm					
Distance between center	550 mm	750 mm	1000 mm	1000 mm	1500 mm	2000 mm	1000 mm	1500 mm	2000 mm	3000 mm	1000 mm	1500 mm	2000 mm	3000 mm	
Width of bed	300 mm			350 mm			350 mm			350 mm					
MAIN SPINDLE															
Spindle bore	Ø 58mm			Ø 56mm			Ø 85mm		Ø 105mm (opt.)		Ø 85mm	Ø 105mm (opt.)		Ø 155mm (opt.)	
Spindle nose	A1-6			D1-6			D1-8		A1-11		D1-8	A1-11		A2-11	
Conventional type spindle speeds (18 steps)	20~2000 (12 steps)			39~2800 (18 steps)			25~1545		23~1293		25~1545	23~1293		15~840	
Inverter type variable speed	H	215~2500 rpm			681~3100 rpm			491~2250 rpm		331~1500 rpm		491~2250 rpm	331~1500 rpm		176~800 rpm
	M				153~680 rpm			126~490 rpm		93~330 rpm		126~490 rpm	93~330 rpm		53~175 rpm
	L	22~214 rpm			33~152 rpm			27~125 rpm		20~92 rpm		27~125 rpm	20~92 rpm		10~52 rpm
CARRIAGE															
Cross slide travel	250 mm			280 mm			330 mm			330 mm					
Compound rest travel	120 mm			120 mm			150 mm			150 mm					
TAILSTOCK															
Tailstock spindle dia.	58 mm			75 mm			75 mm			75 mm					
Tailstock spindle travel	150 mm			170 mm			170 mm			170 mm					
Tailstock spindle taper	MT# 4			MT# 5			MT# 5			MT# 5					
THREADING															
Lead screw	4 TPI or 6 mm / pitch Ø 35			4 TPI or 6 mm / pitch Ø 35			4 TPI or 6 mm / pitch Ø 35			4 TPI or 6 mm / pitch Ø 35					
Metric pitch threads	0.5 - 7 mm / pitch (24 kinds)			0.5 - 7 mm / pitch (24 kinds)			0.5 - 7 mm / pitch (24 kinds)			0.5 - 7 mm / pitch (24 kinds)					
Inch pitch threads	4 - 56 TPI (36 kinds)			4 - 56 TPI (36 kinds)			4 - 56 TPI (36 kinds)			4 - 56 TPI (36 kinds)					
Module pitch threads	0.25 - 3.5 M (28 kinds)			0.25 - 3.5 M (16 kinds)			0.25 - 3.5 M (16 kinds)			0.25 - 3.5 M (16 kinds)					
DP threads	8 - 112 P (36 kinds)			8 - 112 P (36 kinds)			8 - 112 P (36 kinds)			8 - 112 P (36 kinds)					
FEEDING RANGE															
Range of longitudinal feeds	0.05 - 0.88 mm/rev.			0.06 - 0.88 mm/rev.			0.06 - 0.88 mm/rev.			0.06 - 0.88 mm/rev.					
Range of cross feeds	0.02 - 0.44 mm/rev.			0.03 - 0.44 mm/rev.			0.03 - 0.44 mm/rev.			0.03 - 0.44 mm/rev.					
MOTOR															
Main spindle motor	5 HP			7.5 HP			10 HP			10 HP					
Rapid feed motor	90 W (opt.)			90 W (opt.)			90 W (opt.)			90 W (opt.)					
Coolant pump motor	1/8 HP			1/8 HP			1/8 HP			1/8 HP					
MACHINE WEIGHT															
Net weight approx.	1550 kg	1650 kg	1800 kg	2000 kg	2250 kg	2500 kg	2200 kg	2350 kg	2600 kg	2800 kg	2300 kg	2550 kg	2700 kg	2800 kg	
Packing size (CM)	180 x 85 x 125	200 x 85 x 125	225 x 85 x 125	229 x 120 x 170	279 x 120 x 170	329 x 120 x 170	229 x 120 x 170	279 x 120 x 170	329 x 120 x 170	429 x 120 x 170	229 x 120 x 175	279 x 120 x 175	329 x 120 x 175	429 x 120 x 175	

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Standard Accessories

- Main drive motor
- Coolant equipment
- Center sleeve & Dead center
- Tool box & tools

Optional Accessories

- CE conformity
- Electromagnetic brake
- Gap bed
- Z-axis rapid travel
- Digital readout system
- 3-jaw / 4-jaw chuck
- Double chuck system (for spindle bore over 105mm)
- Quick change tool post
- Steady / follow rest
- Micrometer bed stopper
- Turret type 5 position bed stopper
- Rotating center
- Grinding attachment

SPECIFICATIONS:

Description / Model	MA-3060	MA-3080	MA-30120	MA-30160	MA-30200	MA-30240	MA-3360	MA-3380	MA-33120	MA-33160	MA-33200	MA-33240
WORKING CAPACITY												
Center height	385 mm						420 mm					
Swing over bed	770 mm						840 mm					
Swing over gap	1010 mm (Opt.)						1080 mm (Opt.)					
Swing over cross slide	520 mm						590 mm					
Distance between center	1600 mm	2100 mm	3100 mm	4100 mm	5100 mm	6100 mm	1600 mm	2100 mm	3100 mm	4100 mm	5100 mm	6100 mm
Width of bed	450 mm						450 mm					
MAIN SPINDLE												
Spindle bore	Ø 105mm			Ø 155mm (opt.)			Ø 105mm	Ø 155mm (opt.)	Ø 230mm (opt.)	Ø 255mm (opt.)	Ø 305mm (opt.)	
Spindle nose	A1-11			A2-11			A1-11	A2-11	A2-15	A2-15	A2-20	
Conventional type spindle speeds (18 steps)	23~1293			13~690			23~1293	13~690	5~440	5~440	-	
Inverter type variable speed	H	331~1500 rpm			176~800 rpm			331~1500 rpm	176~800 rpm	108~450 rpm	108~450 rpm	80~350 rpm
	M	93~330 rpm			53~175 rpm			93~330 rpm	53~175 rpm	31~107 rpm	31~107 rpm	18~79 rpm
	L	20~92 rpm			10~52 rpm			20~92 rpm	10~52 rpm	6~30 rpm	6~30 rpm	5~17 rpm
CARRIAGE												
Cross slide travel	450 mm						450 mm					
Compound rest travel	250 mm						250 mm					
TAILSTOCK												
Tailstock spindle dia.	105 mm						105 mm					
Tailstock spindle travel	220 mm						220 mm					
Tailstock spindle taper	MT# 5						MT# 5					
THREADING												
Lead screw	2 TPI or 12 mm / pitch Ø 45						2 TPI or 12 mm / pitch Ø 45					
Metric pitch threads	0.08 - 14 mm / pitch (65 kinds)						0.08 - 14 mm / pitch (65 kinds)					
Inch pitch threads	2 - 28 TPI (36 kinds)						2 - 28 TPI (36 kinds)					
Module pitch threads	0.5 - 7 M (22 kinds)						0.5 - 7 M (22 kinds)					
DP threads	4 - 56 TPI (36 kinds)						4 - 56 TPI (36 kinds)					
FEEDING RANGE												
Range of longitudinal feeds	0.05 - 0.7 mm/rev.						0.05 - 0.7 mm/rev.					
Range of cross feeds	0.025 - 0.35 mm/rev.						0.025 - 0.35 mm/rev.					
MOTOR												
Main spindle motor	15 HP						15 HP					
Rapid feed motor	1/4 HP						1/4 HP					
Coolant pump motor	1/8 HP						1/8 HP					
MACHINE WEIGHT												
Net weight approx.	3350 kg	3600 kg	4100 kg	4600 kg	5100 kg	5700 kg	3450 kg	3700 kg	4200 kg	4700 kg	5200 kg	5800 kg
Packing size (CM)	365 x 170 x 180	415 x 170 x 180	515 x 170 x 180	615 x 170 x 180	715 x 170 x 180	815 x 170 x 180	365 x 170 x 190	415 x 170 x 190	515 x 170 x 190	615 x 170 x 190	715 x 170 x 190	815 x 170 x 190

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Standard Accessories

- Electromagnetic brake
- X & Z axis rapid travel
- Main drive motor
- Coolant equipment
- Center sleeve & Dead center
- Tool box & tools

Optional Accessories

- CE conformity
- Full length splash guard (for dist. between center less than 3100mm)
- Moving rear splash guard
- Gap bed
- Digital readout system
- 3-jaw / 4-jaw chuck
- Double chuck system
- Quick change tool post
- Steady / follow rest
- Micrometer bed stopper
- Turret type 5 position bed stopper
- Rotating center
- Tailstock build in type quill
- Grinding attachment

SPECIFICATIONS:

Description / Model	MA-4260	MA-4280	MA-42120	MA-42160	MA-42200	MA-42240	MA-42280	MA-5060	MA-5080	MA-50120	MA-50160	MA-50200	MA-50240	MA-50280			
WORKING CAPACITY																	
Center height	565 mm							665 mm									
Swing over bed	1070 mm							1270 mm									
Swing over gap	1520 mm (Opt.)							1720 mm (Opt.)									
Swing over cross slide	744 mm							944 mm									
Distance between center	1700 mm	2200 mm	3200 mm	4200 mm	5200 mm	6200 mm	7200 mm	1700 mm	2200 mm	3200 mm	4200 mm	5200 mm	6200 mm	7200 mm			
Width of bed	610 mm							610 mm									
MAIN SPINDLE																	
Spindle bore	Ø 155mm	Ø 230mm (opt.)		Large spindle bore are available.				Ø 155mm	Ø 230mm (opt.)		Ø 305mm (opt.)						
Spindle nose	A2-11	A2-15						A2-11	A2-15		A2-20						
Conventional type spindle speeds (18 steps)	5~615		4~430					5~615		4~430		2~390					
Inverter type variable speed	H	188~710 rpm						116~500 rpm		188~710 rpm		116~500 rpm		87~350 rpm			
	M	40~187 rpm						31~115 rpm		40~187 rpm		31~115 rpm		26~86 rpm			
	L	7~39 rpm						6~30 rpm		7~39 rpm		6~30 rpm		5~25 rpm			
CARRIAGE																	
Cross slide travel	700 mm							700 mm									
Compound rest travel	380 mm							380 mm									
TAILSTOCK																	
Tailstock spindle dia.	165 mm							165 mm									
Tailstock spindle travel	300 mm							300 mm									
Tailstock spindle taper	MT# 6							MT# 6									
THREADING																	
Lead screw	2 TPI or 12 mm / pitch Ø 55							2 TPI or 12 mm / pitch Ø 55									
Metric pitch threads	1 - 30 mm							1 - 30 mm									
Inch pitch threads	30 - 1 TPI							30 - 1 TPI									
Module pitch threads	0.5 - 15 M							0.5 - 15 M									
DP threads	2 - 60 TPI							2 - 60 TPI									
FEEDING RANGE																	
Range of longitudinal feeds	0.07 - 2.03 mm/rev.							0.07 - 2.03 mm/rev.									
Range of cross feeds	0.028 - 0.81 mm/rev.							0.028 - 0.81 mm/rev.									
MOTOR																	
Main spindle motor	20 HP							20 HP									
Rapid feed motor	3/4 HP							3/4 HP									
Coolant pump motor	1/6 HP							1/6 HP									
MACHINE WEIGHT																	
Net weight approx.	6600 kg	7000 kg	7800 kg	8600 kg	9200 kg	10000 kg	10800 kg	6900 kg	7300 kg	8100 kg	8900 kg	9700 kg	10500 kg	11300 kg			
Packing size (CM)	424 x 184 x 176	474 x 184 x 176	574 x 184 x 176	674 x 184 x 176	774 x 184 x 176	874 x 184 x 176	974 x 184 x 176	424 x 184 x 186	474 x 184 x 186	574 x 184 x 186	674 x 184 x 186	774 x 184 x 186	874 x 184 x 186	974 x 184 x 186			

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Standard Accessories

- Magnetic brake for spindle motor
- Six way rapid travel (Including compound tool post)
- Main drive motor
- Coolant equipment
- Center sleeve & Dead center
- Tool box & tools

Optional Accessories

- CE conformity
- Moving rear splash guard
- Gap bed
- Digital readout system
- 3-jaw / 4-jaw chuck
- Double chuck system
- Quick change tool post
- Steady / follow rest
- Micrometer bed stopper
- Turret type 5 position bed stopper
- Rotating center
- Tailstock build in type quill
- Grinding attachment