

# MANUAL LATHE

 Intelligent

 Technology



# MANUAL LATHE / CONTENTS /

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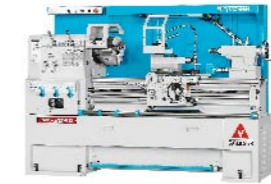
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# Features

- Nylon safety gears in end train.
- Shear pin in lead screw.
- Low voltage control in electrical cabinet.

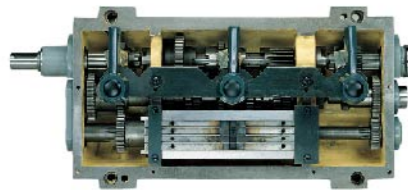
## RUGGED HEADSTOCK

- Head housing features outstanding vibration dampening and deformation free performance.
- Rugged head construction gives extra rigidity and heavy cutting.
- All gears and shafts are hardened and precision ground by MAAG or RESHAUER machines.

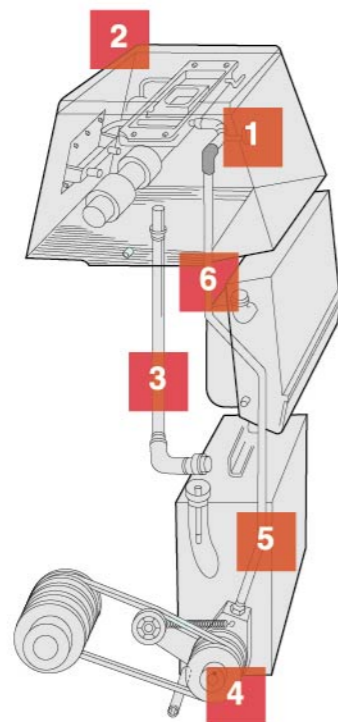


## GEAR BOX

- The universal type gear box provides a wide range of inch, metric, M.P. and D.P. threads without changing any gear for increased convenience.
- Gears are hardened.
- Oil bath lubrication in gear box.



## FORCED LUBRICATION IN HEADSTOCK



- Oil sight window for checking oil level
- Pressure lubrication system in headstock ensures better lubrication and cooling effect.
- Hot oil return
- Oil pump
- Oil reservoir
- Cooling oil inlet

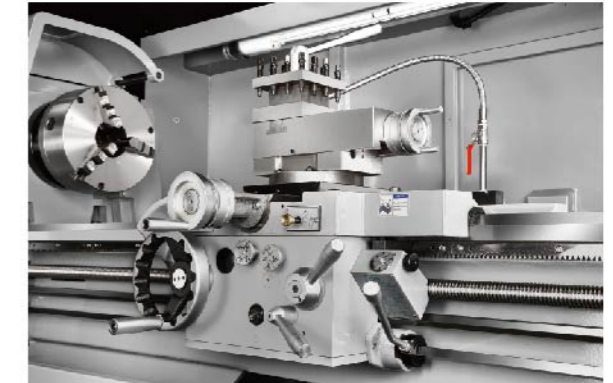


## HEAVY DUTY SPINDLE

- Camlock type spindle.
- Precision machined from forged alloy steel, hardened, precision ground and dynamically balanced.
- Three point support by high precision taper roller and ball bearings eliminates chatter when performing heavy cut.

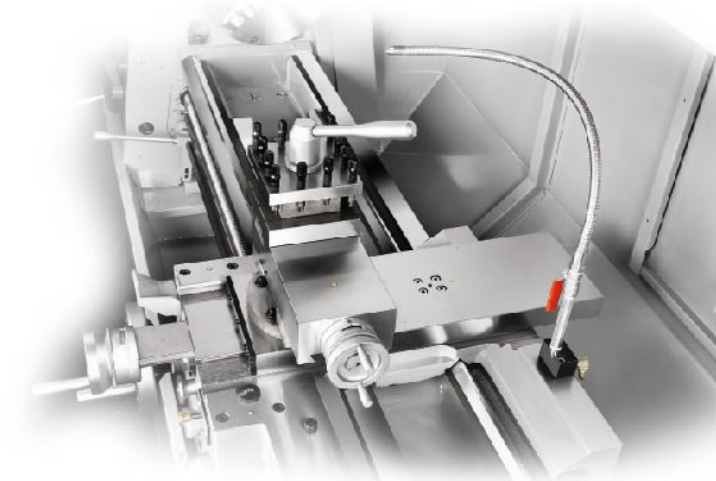
## APRON

- The apron is a double wall construction, providing a firm support for power feed shaft.
- Choice of right or left hand wheel.
- Integrated automatic control for longitudinal and cross feeds, forward and reverse feeds.
- An interlock design prevents simultaneous power feed and thread cutting.



## RUGGED TAILSTOCK

- Tailstock quill is graduated in inch/metric scales and has a tang slot for positive drive of tool.
- 2-step tailstock is available on request.



## CARRIAGE AND CROSS SLIDE

- Anti-float backlash eliminator is fitted in cross slide nut.
- Safety clutch is equipped to feed shaft.
- One shot lubrication for carriage and top slide.
- Designed with dual dials for inch system screw.
- Designed with metrical dial for metric system screw.



## COMPOUND REST

- The compound rest has T-slot for convenient mounting of tool holder.
- Both the cross slide and the compound rest screws are equipped with inch/metric graduated dials.
- The bottom of the compound slide is graduated in degrees for quick reference when swiveling.

## BED

- The ruggedly constructed bed is manufactured from Meehanite cast iron and stress relieved.
- Bed ways are hardened and precision ground.



# AHL Series

AHL-1840 / 1860 / 1880 / 18120 / 2240 / 2260 / 2280 / 22120

AHL-1840V / 1860V / 1880V / 18120V / 2240V / 2260V / 2280V / 22120V

All models with mechanical clutch. (excluded E.V.S. model)

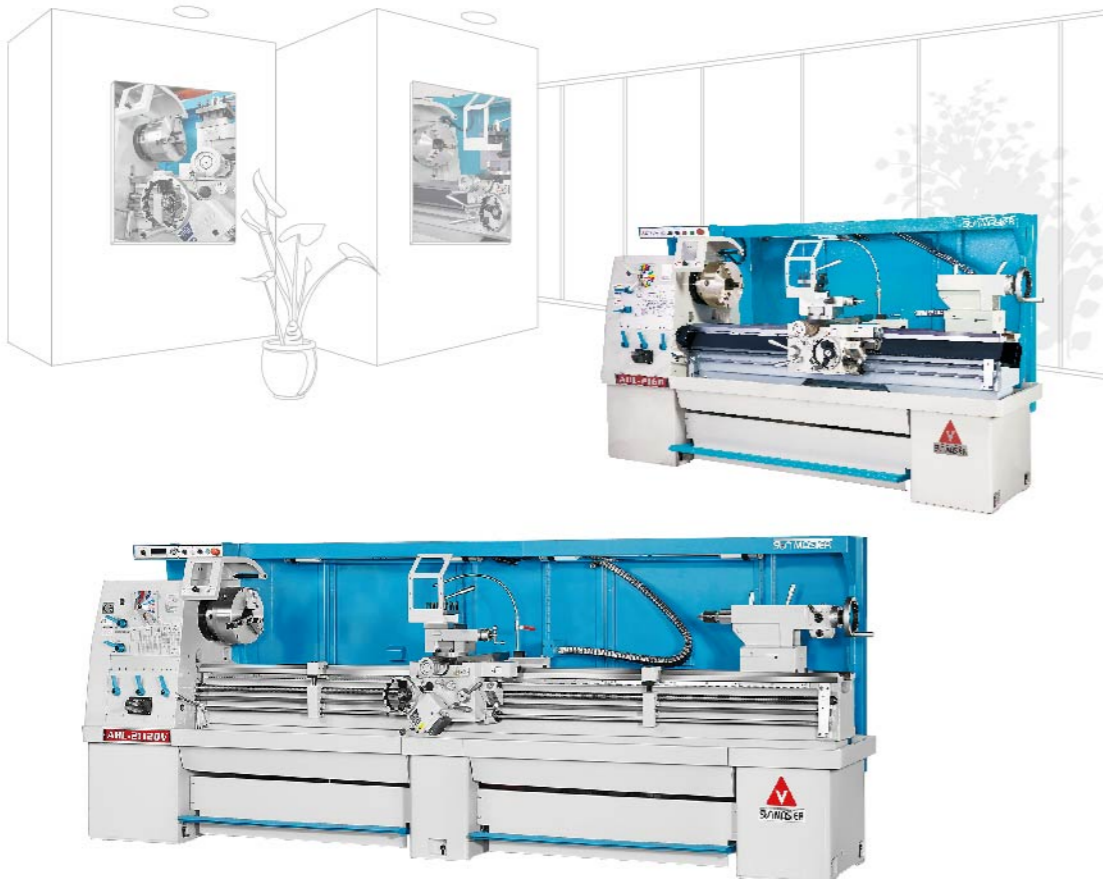
All models with auto lubrication system to headstock & external tank for cooling the oil

All models meet CE. (on request)

All models with 80mm (3.149") spindle bore, ASA D1-8

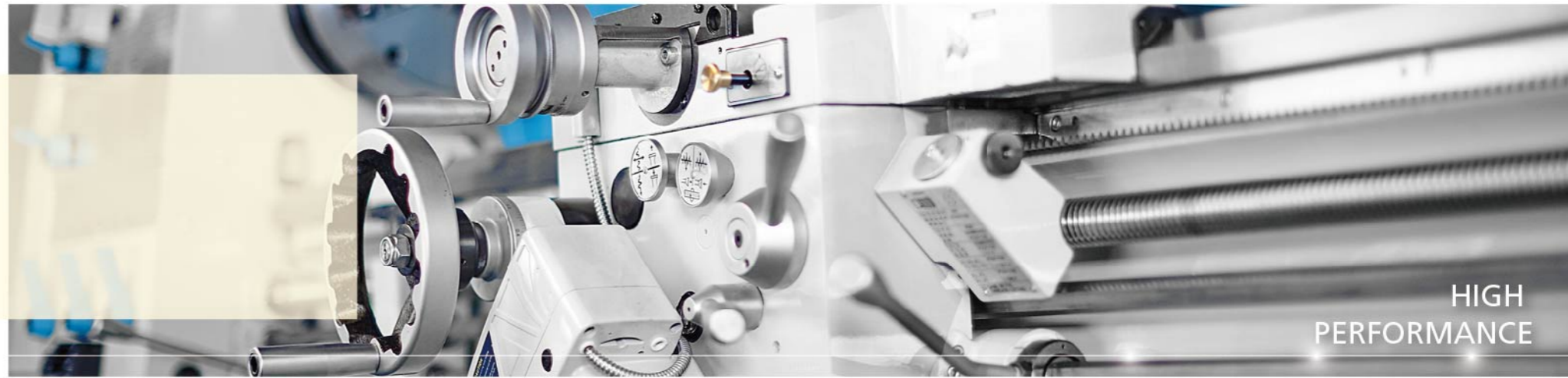
## FEATURES

- All castings are properly stabilized and stress relieved
- Bed ways are hardened & ground to min. HRC 48~55
- Turcite B coating between the bed and carriage
- Extremely low noise level
- Foot brake pedal provided
- Built-in coolant pump & fitting provided
- CSS (constant surface speed control) on request for E.V.S. model
- Wider bed way which give absorbs vibration



## STANDARD ACCESSORIES

1. Backplate for 12" chuck
2. Dead center MT.5
3. Dead center MT.5 with carbide tip
4. Spindle center sleeve MT.7
5. Level pads.....8 pcs
6. Tool set & Box
7. Operation manual & parts list



HIGH PERFORMANCE

	AHL-1840	AHL-1860	AHL-1880	AHL-18120	AHL-2240	AHL-2260	AHL-2280	AHL-22120	AHL-1840V	AHL-1860V	AHL-1880V	AHL-18120V	AHL-2240V	AHL-2260V	AHL-2280V	AHL-22120V
<b>Capacity</b>																
Height of centers	230mm (9.055")				280mm (11.02")				230mm (9.055")				280mm (11.02")			
Swing over bed	ø460mm (18.11")				ø560mm (22.04")				ø460mm (18.11")				ø560mm (22.04")			
Swing in gap	ø710mm (27.95")				ø808mm (31.81")				ø710mm (27.95")				ø808mm (31.81")			
Swing over cross slide	ø298mm (11.93")				ø390mm (15.35")				ø298mm (11.73")				ø390mm (15.35")			
Distance between centers	1000mm (40")	1500mm (60")	2000mm (80")	3000mm (120")	1000mm (40")	1500mm (60")	2000mm (80")	3000mm (120")	1000mm (40")	1500mm (60")	2000mm (80")	3000mm (120")	1000mm (40")	1500mm (60")	2000mm (80")	3000mm (120")
Width of bed	345mm (13.58")															
Gap width in front faceplate	250mm (9.84")															
<b>Headstock and Main Spindle</b>																
Spindle nose, internal taper									D1-8, MT. No.7							
Spindle center sleeve									MT. No.7 x MT. No.5							
Spindle bore									ø80mm (3.149")							
									16 steps / 20~1600 R.P.M.							
Spindle speed:									4 steps /							
Gear steps / Range									L 18~55 R.P.M.							
									M 55~180 R.P.M.							
									MH 180~600 R.P.M.							
									H 600~1800 R.P.M.							
									Infinitely variable							
<b>Carriage</b>																
Length on bed / Width of carriage									543mm (21.37") / 542mm (21.33")							
Cross slide travel									272mm (10.7")							
Top slide travel									135mm (5.31")							
<b>Threads and Feeds</b>																
Whitworth threads: Kinds / Range									38 kinds / 2~72 T.P.I.							
Metric threads: Kinds / Range									40 kinds / 0.4~14 mm							
D.P. threads: Kinds / Range									21 kinds / 8~44 D.P.							
M.P. threads: Kinds / Range									18 kinds / 0.3~3.5 M.P.							
Longitudinal feeds									0.04~1.0 (0.0015"~0.04")							
Cross feeds									0.02~0.5 (0.00075"~0.02")							
<b>Tailstock</b>																
Quill diameter									ø76mm (3")							
Quill travel									165 mm (6.5")							
Taper of center									MT. No.5							
<b>Motor</b>																
Main spindle	10HP				12.5HP				AC 7.5kW (10HP), Inverter				AC 9.4kW (12.5HP), Inverter			
Forced lubrication for HD.									1/4 HP							
Coolant pump									1/8 HP							
<b>Measurement</b>																
Weight (Net / Gross) Approx.	2000kgs 2140kgs	2200kgs 2360kgs	2500kgs 2700kgs	3000kgs 3260kgs	2150kgs 2290kgs	2350kgs 2510kgs	2650kgs 2850kgs	3150kgs 3410kgs	2000kgs 2140kgs	2200kgs 2360kgs	2500kgs 2700kgs	3000kgs 3260kgs	2150kgs 2290kgs	2350kgs 2510kgs	2650kgs 2850kgs	3150kgs 3410kgs
Packing size	Width 1120mm (44.1") x Height 1900mm (74.8")															

Specifications subject to change without notice.

# BHL Series

BHL-1550  
BHL-1550V

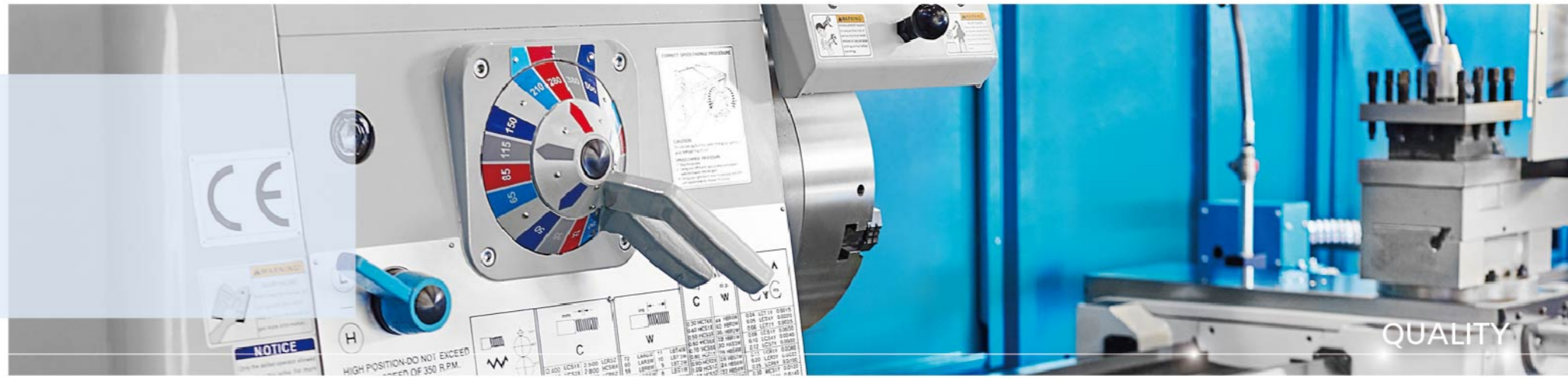
- All models with mechanical clutch. (excluded E.V.S. model)
- All models with auto lubrication system to headstock & external tank for cooling the oil
- All models meet CE. (on request)
- All models with 56mm (2.2") spindle bore, ASA D1-6

## FEATURES

- All castings are properly stabilized and stress relieved.
- Bed ways are hardened & ground to min. HRC 48~55
- Turcite B coating between the bed and carriage
- Extremely low noise level
- Foot brake pedal provided
- Built-in coolant pump & fitting provided
- CSS (constant surface speed control) on request for E.V.S. model
- Wider bed way which give absorbs vibration

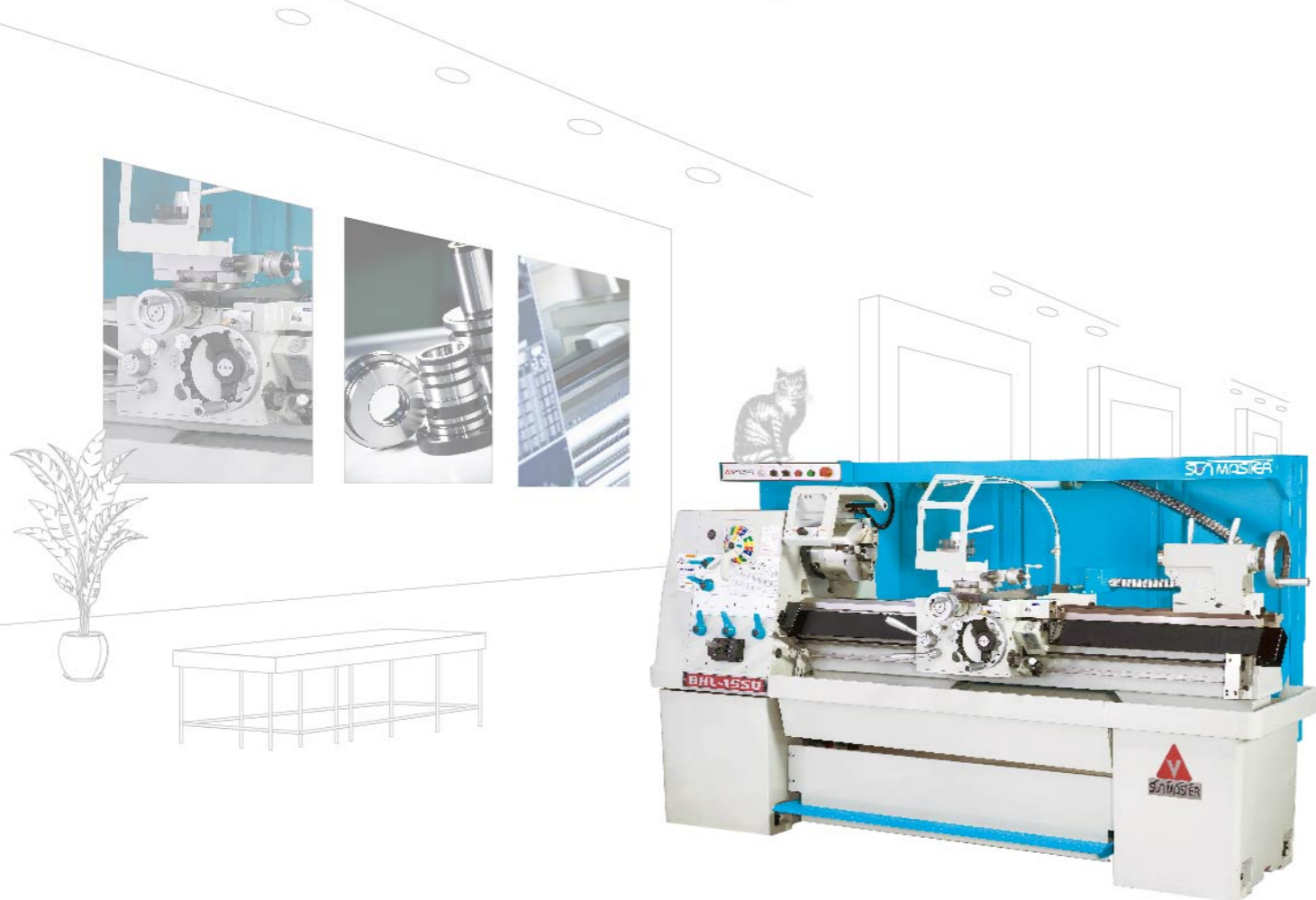
## STANDARD ACCESSORIES

1. Backplate for 9" chuck
2. Dead center MT.4
3. Center MT.4 with carbide tip
4. Spindle center sleeve MT.6
5. Level pads.....8 pcs
6. Tool set & Box
7. Operation manual & parts list



QUALITY

	BHL-1550	BHL-1550V
<b>Capacity</b>		
Height of centers	190mm (7.48")	
Swing over bed	ø380mm (14.96")	
Swing in gap	ø610mm (24")	
Swing over cross slide	ø238mm (9.37")	
Distance between centers	1250mm (50")	
Width of bed	280mm (11")	
Gap width in front faceplate	265mm (10.43")	
<b>Headstock and Main Spindle</b>		
Spindle nose, internal taper	D1-6, MT. No.6	
Spindle center sleeve	MT. No.6 x MT. No.4	
Spindle bore	ø56mm (2.2")	
	16 steps / 25~2000 R.P.M.	4 steps /
Spindle speed:	Green 25 80 260 840	L 22~72 R.P.M.
Gear steps / Range	Yellow 33 108 350 1120	M 70~235 R.P.M.
	Red 45 140 470 1500	MH 235~780 R.P.M.
	Blue 60 190 625 2000	H 753~2500 R.P.M.
	Disc clutch for Forward / Reverse	
		Infinitely variable
<b>Carriage</b>		
Length on bed / Width of carriage	484mm (19.05") / 450mm (17.71")	
Cross slide travel	235mm (9.25")	
Top slide travel	122mm (4.8")	
<b>Threads and Feeds</b>		
Whitworth threads: Kinds / Range	45 kinds / 2~72 T.P.I.	
Metric threads: Kinds / Range	39 kinds / 0.2~14 mm	
D.P. threads: Kinds / Range	21 kinds / 8~44 D.P.	
M.P. threads: Kinds / Range	18 kinds / 0.3~3.5 M.P.	
Longitudinal feeds	0.04~1.0 (0.0015"~0.04")	
Cross feeds	0.02~0.5 (0.00075"~0.02")	
<b>Tailstock</b>		
Quill diameter	ø59mm (2.322")	
Quill travel	127 mm (5")	
Taper of center	MT. No.4	
<b>Motor</b>		
Main spindle	7.5HP	AC 5.5kW (7.5HP), Inverter
Forced lubrication for HD.	.....	1/4 HP
Coolant pump	1/8 HP	
<b>Measurement</b>		
Weight (Net / Gross) Approx.	1450kgs / 1610kgs	
Packing size	Length	2580mm (101.58")
	Width x Height	Width 1120mm (44.1") x Height 1900mm (74.8")



# FC Series

FC-1640 / 1660 / 1840 / 1860 / 2140 / 2160

FC-1640V / 1660V / 1840V / 1860V / 2140V / 2160V

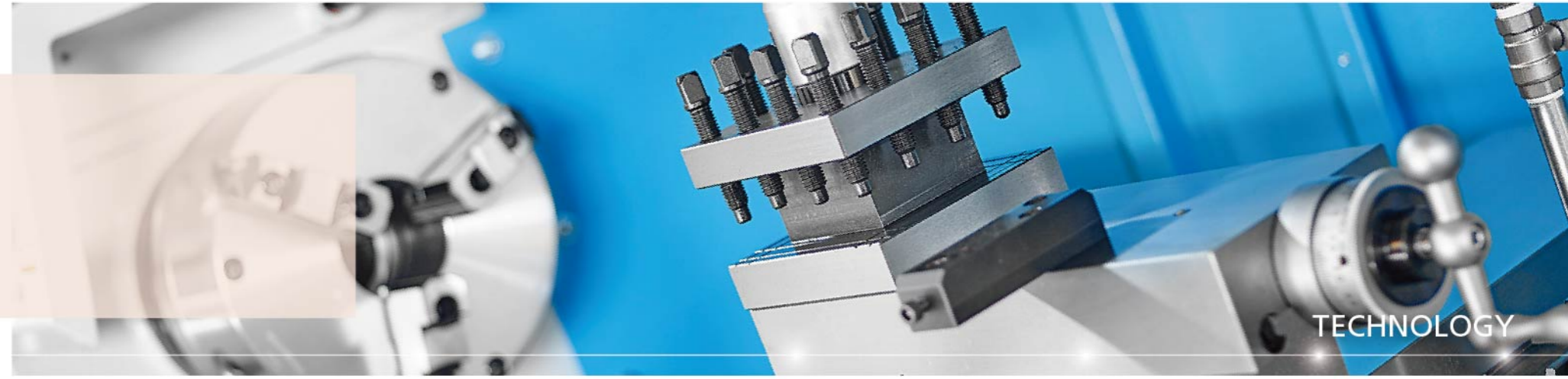
- All models with one piece solid stand
- All models with universal feed gearbox & reversable apron
- All models meet CE. (on request)
- All models with 80mm (3.149") spindle bore, ASA D1-8
- All models cross slide is hardened and ground to prolong operation life

## FEATURES

- All castings are properly stabilized and stress relieved.
- Bed ways are hardened & ground to min. HRC48-55.
- Turcite B coating between the bed and carriage.
- Extremely low noise level.
- Foot brake pedal provided.
- Built-in coolant pump & fitting provided.
- Wider bed way which give absorbs vibration.
- Y-Δ spindle motor equipped to make sure smooth start and operation.

## STANDARD ACCESSORIES

1. Backplate for 10" chuck
2. Dead center MT.5
3. Dead center MT.4 with carbide tip
4. Spindle center sleeve ø85  
Taper 1/19.18
5. Level pads.....6 pcs
6. Tool set & Box
7. Operation manual & parts list



TECHNOLOGY

	FC -1640	FC -1660	FC -1840	FC -1860	FC -1880	FC -2140	FC -2160	FC -2180	FC -1640V	FC -1660V	FC -1840V	FC -1860V	FC -1880V	FC -2140V	FC -2160V	FC -2180V	
<b>Capacity</b>																	
Height of centers	205 mm (8.07")		231 mm (9.05")			271 mm (10.67")			205 mm (8.07")		231 mm (9.05")			271 mm (10.67")			
Swing over bed	410 mm (16.14")		462 mm (18.11")			542 mm (21.34")			410 mm (16.14")		462 mm (18.11")			542 mm (21.34")			
Swing in gap	583 mm (22.95")		650 mm (25.59")			730 mm (28.74")			583 mm (22.95")		650 mm (25.59")			730 mm (28.74")			
Swing over cross slide	262 mm (10.3")		305 mm (12")			387 mm (15.23")			262 mm (10.3")		305 mm (12")			387 mm (15.23")			
Distance between centers	1000mm (40")	1500mm (60")	1000mm (40")	1500mm (60")	2000mm (80")	1000mm (40")	1500mm (60")	2000mm (80")	1000mm (40")	1500mm (60")	1000mm (40")	1500mm (60")	2000mm (80")	1000mm (40")	1500mm (60")	2000mm (80")	
Width of bed	320mm (12.5")																
<b>Headstock &amp; Main Spindle</b>																	
<b>Headstock and Main Spindle</b>																	
Spindle nose, internal taper	D1-8 / A1-8 (opt.), ø85mm Taper 1/19.18																
Spindle center sleeve	ø85mm Taper 1/19.18 x MT. No.5																
Spindle bore	ø80mm (3.149")																
Spindle speed:	12 steps / A 26 40 60 90								3 steps / L 25~100 rpm								
Gear steps / Range	B 105 145 205 305								M 75~370 rpm								
	C 510 715 1000 1500								H 360~1800 rpm								
<b>Carriage</b>																	
Cross slide travel	250 mm (9.84")		300 mm (11.81")			250 mm (9.84")			250 mm (9.84")		300 mm (11.81")			300 mm (11.81")			
Top slide travel	150 mm (5.9")																
<b>Threads and Feeds</b>																	
Whitworth threads: Kinds / Range	45 kinds / 2~72 T.P.I.																
Metric threads: Kinds / Range	39 kinds / 0.2~14 mm																
D.P. threads: Kinds / Range	21 kinds / 8~44 D.P.																
M.P. threads: Kinds / Range	18 kinds / 0.3~3.5 M.P.																
Longitudinal feeds	0.04~1.0 (0.0015"~0.04")																
Cross feeds	0.02~0.5 (0.00075"~0.02")																
<b>Tailstock</b>																	
Quill diameter		ø59 mm (2.322")		ø68 mm (2.677")		ø59 mm (2.322")		ø68 mm (2.677")		ø59 mm (2.322")		ø68 mm (2.677")		ø59 mm (2.322")		ø68 mm (2.677")	
Quill travel		127 mm (5")		153 mm (6")		127 mm (5")		153 mm (6")		127 mm (5")		153 mm (6")		127 mm (5")		153 mm (6")	
Taper of center	MT. No.4																
<b>Motor</b>																	
Main spindle	std. 10 HP (7.5 kW) opt. 12.5 HP (9.375 kW)								std. AC 7.5 kW (10 HP) opt. AC 9.375 kW (12.5 HP), Inverter (15 HP / 11.25 kW)								
Forced lubrication for headstock	N/A								1/4 HP								
Coolant pump	1/8 HP																
<b>Measurement</b>																	
Weight Approx	NET	1750kgs	1900kgs	1800kgs	2100kgs	2250kgs	1850kgs	2150kgs	2350kgs	1750kgs	1900kgs	1800kgs	2100kgs	2250kgs	1850kgs	2150kgs	2350kgs
	GROSS	1900kgs	2050kgs	1950kgs	2250kgs	2400kgs	2000kgs	2300kgs	2500kgs	1900kgs	2050kgs	1950kgs	2250kgs	2400kgs	2000kgs	2300kgs	2500kgs
Packing size	Length	2400mm	2900mm	2400mm	2900mm	3650mm	2400mm	2900mm	3650mm	2400mm	2900mm	2400mm	2900mm	3650mm	2400mm	2900mm	3650mm
	Width x Height	width 1155 mm (45.5") X height 1900 mm (74.8")															

Specifications subject to change without notice.

# ML Series

ML-1740 / 1760 / 2040 / 2060

ML-1740V / 1760V / 2040V / 2060V

E.V.S models with auto lubrication system to headstock & external tank for cooling the oil

All models with one piece solid stand

All models with universal feed gearbox & reversable apron

All models meet CE. (on request)

All models with 80mm (3.149") spindle bore, ASA D1-6

All models cross slide is hardened and ground to prolong operation life

## FEATURES

All castings are properly stabilized and stress relieved

Bed ways are hardened & ground to min. HRC 48~55

Turcite B coating between the bed and carriage

Extremely low noise level

Foot brake pedal provided

Built-in coolant pump & fitting provided

CSS (constant surface speed control) on request for E.V.S. model

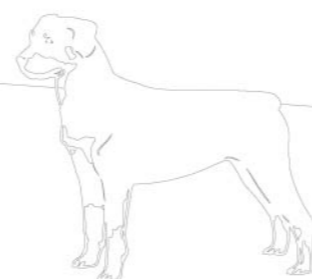
Wider bed way which give absorbs vibration

## STANDARD ACCESSORIES

1. Backplate for 10" chuck
2. Dead center MT.5
3. Dead center MT.4 with carbide tip
4. Spindle center sleeve.....ø85mm Taper 1/19.18
5. Level pads.....6 pcs
6. Tool set & Box
7. Operation manual & parts list



SMART



	ML-1740	ML-1760	ML-2040	ML-2060	ML-1740V	ML-1760V	ML-2040V	ML-2060V
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Capacity								
Height of centers	216mm (8.5")		254mm (10")		216mm (8.5")		254mm (10")	
Swing over bed	ø432mm (17")		ø508mm (20")		ø432mm (17")		ø508mm (20")	
Swing in gap	ø622mm (24.48")		ø698mm (27.48")		ø622mm (24.48")		ø698mm (27.48")	
Swing over cross slide	ø277mm (10.9")		ø353mm (13.89")		ø277mm (10.9")		ø353mm (13.89")	
Distance between centers	1000mm (40")	1500mm (60")	1000mm (40")	1500mm (60")	1000mm (40")	1500mm (60")	1000mm (40")	1500mm (60")
Width of bed					305mm (12")			
Gap width in front faceplate					195mm (7.67")			
Headstock and Main Spindle								
Spindle nose, internal taper					D1-6 / A1-6 (opt.), ø85mm Taper 1/19.18			
Spindle center sleeve					ø85mm Taper 1/19.18 x MT. No.5			
Spindle bore					ø80mm (3.149")			
	12 steps / 36~1800 R.P.M.				3 steps /			
	A	36	50	70	105	L	30~125 R.P.M.	
Spindle speed:	B	130	180	250	380	M	125~450 R.P.M.	
Gear steps / Range	C	620	900	1200	1800	H	450~2200 R.P.M.	
					Infinitely variable			

Carriage								
Length on bed / Width of carriage					440mm (17.32") / 477mm (18.77")			
Cross slide travel	235mm (9.25")		272mm (10.7")		235mm (9.25")		272mm (10.7")	
Top slide travel					155mm (6.1")			

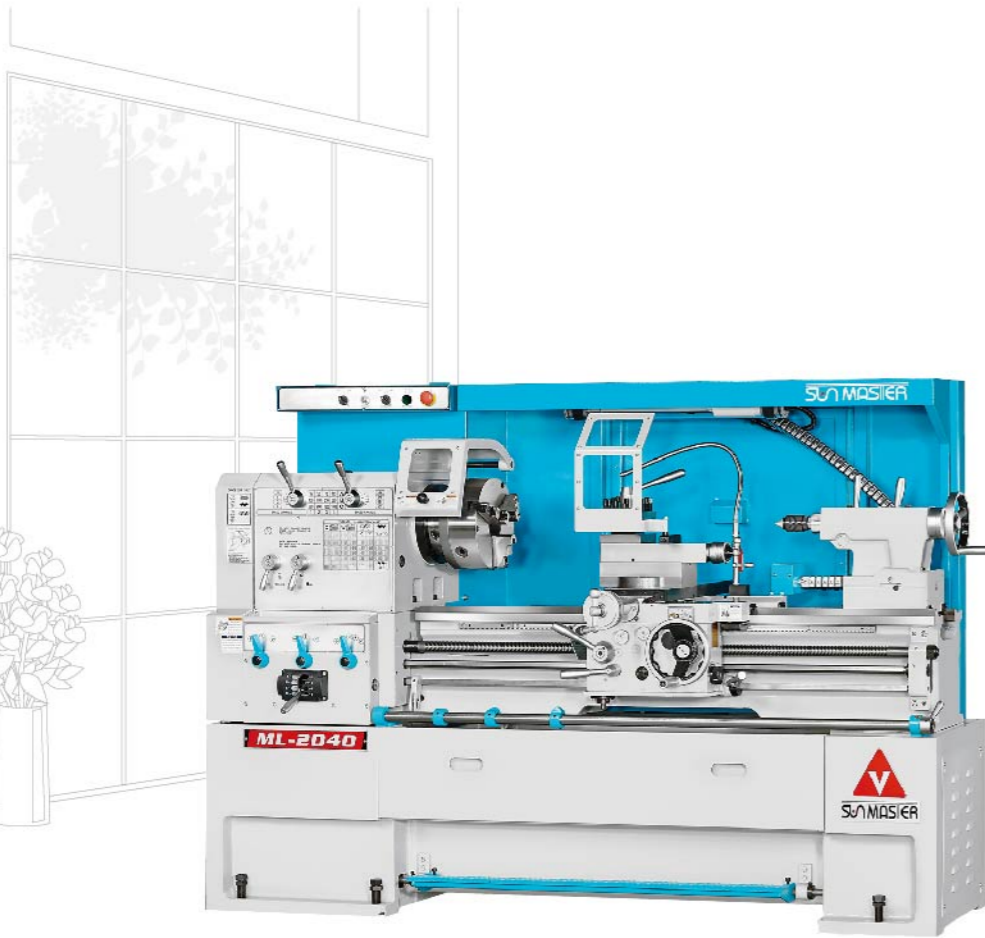
Threads and Feeds								
Whitworth threads: Kinds / Range					45 kinds / 2~72 T.P.I.			
Metric threads: Kinds / Range					39 kinds / 0.2~14 mm			
D.P. threads: Kinds / Range					21 kinds / 8~44 D.P.			
M.P. threads: Kinds / Range					18 kinds / 0.3~3.5 M.P.			
Longitudinal feeds					0.04~1.0 (0.0015"~0.04")			
Cross feeds					0.02~0.5 (0.00075"~0.02")			

Tailstock								
Quill diameter					ø59mm (2.322")			
Quill travel					127 mm (5")			
Taper of center					MT. No.4			

Motor								
Main spindle	7.5HP				AC 5.5kW (7.5HP), Inverter			
Forced lubrication for HD.	.....				1/4 HP			
Coolant pump					1/8 HP			

Measurement								
Weight (Net / Gross) Approx.	1700kgs	1850kgs	1750kgs	1900kgs	1700kgs	1850kgs	1750kgs	1900kgs
	1840kgs	2010kgs	1890kgs	2060kgs	1840kgs	2010kgs	1890kgs	2060kgs
Packing size	Length	2400mm	2900mm	2400mm	2900mm	2400mm	2900mm	2400mm
		(94.5")	(114.2")	(94.5")	(114.2")	(94.5")	(114.2")	(94.5")
	Width x Height	Width 1155mm (45.5") x Height 1900mm (74.8")						

Specifications subject to change without notice.



# CL Series

CL-1740 / 1760

CL-1740V / 1760V

E.V.S models with auto lubrication system to headstock & external tank for cooling the oil

All models with one piece solid stand

All models with universal feed gearbox & reversable apron

All models meet CE. (on request)

All models with 52.5mm (2.066") spindle bore, ASA D1-6

All models cross slide is hardened and ground to prolong operation life

## FEATURES

All castings are properly stabilized and stress relieved

Bed ways are hardened & ground to min. HRC 48~55

Turcite B coating between the bed and carriage

Extremely low noise level

Foot brake pedal provided

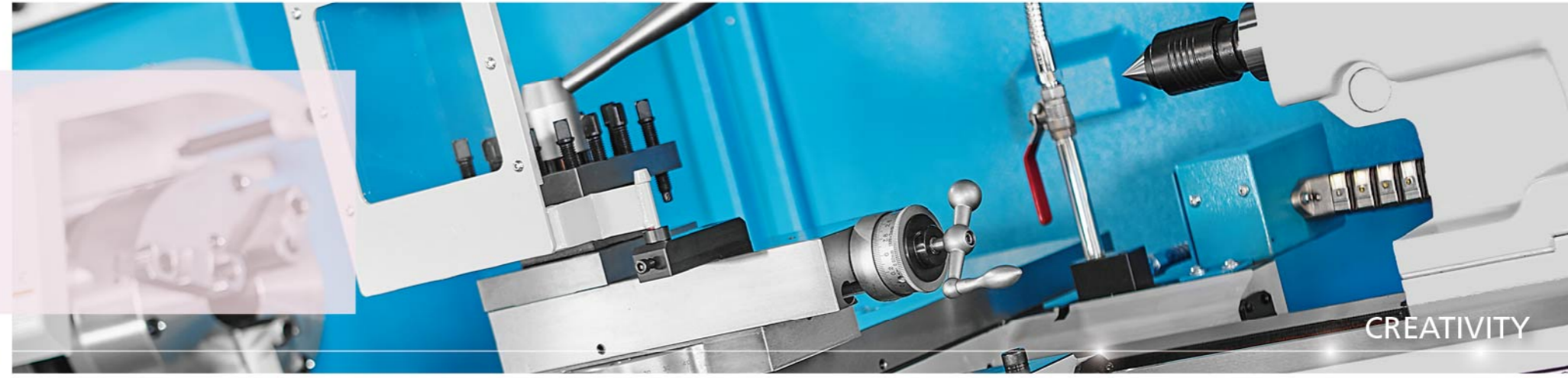
Built-in coolant pump & fitting provided

CSS (constant surface speed control) on request for E.V.S. model

Wider bed way which give absorbs vibration

## STANDARD ACCESSORIES

1. Backplate for 9" chuck
2. Dead center MT.4
3. Dead center MT.4 with carbide tip
4. Spindle center sleeve MT.6
5. Level pads.....6 pcs
6. Tool set & Box
7. Operation manual & parts list



CREATIVITY



	CL-1740	CL-1760	CL-1740V	CL-1760V	
<b>Capacity</b>					
Height of centers	216mm (8.5")				
Swing over bed	ø432mm (17")				
Swing in gap	ø622mm (24.48")				
Swing over cross slide	ø277mm (10.9")				
Distance between centers	1000mm (40")	1500mm (60")	1000mm (40")	1500mm (60")	
Width of bed	305mm (12")				
Gap width in front faceplate	120mm (4.72")				
<b>Headstock and Main Spindle</b>					
Spindle nose, internal taper	D1-6 / A1-6 (opt.), MT. No.6				
Spindle center sleeve	MT. No.6 x MT. No.4				
Spindle bore	ø52.5mm (2.066")				
Spindle speed:	8 steps / 80~2000 R.P.M.		2 steps / L 20~400 R.P.M. H 400~2500 R.P.M.		
Gear steps / Range	OPT. 16 steps / 8P 40~1000 R.P.M. 4P 80~2000 R.P.M.		Infinitely variable		
<b>Carriage</b>					
Length on bed / Width of carriage	440mm (17.32") / 477mm (18.77")				
Cross slide travel	235mm (9.25")				
Top slide travel	155mm (6.1")				
<b>Threads and Feeds</b>					
Whitworth threads: Kinds / Range	45 kinds / 2~72 T.P.I.				
Metric threads: Kinds / Range	39 kinds / 0.2~14 mm				
D.P. threads: Kinds / Range	21 kinds / 8~44 D.P.				
M.P. threads: Kinds / Range	18 kinds / 0.3~3.5 M.P.				
Longitudinal feeds	0.04~1.0 (0.0015"~0.04")				
Cross feeds	0.02~0.5 (0.00075"~0.02")				
<b>Tailstock</b>					
Quill diameter	ø59mm (2.322")				
Quill travel	127 mm (5")				
Taper of center	MT. No.4				
<b>Motor</b>					
Main spindle	5HP 4P OPT. 7.5HP 4P / 3.75HP 8P		AC 3.7kW (5HP), Inverter		
Forced lubrication for HD.	.....		1/4 HP		
Coolant pump	1/8 HP				
<b>Measurement</b>					
Weight (Net / Gross) Approx.	1600kgs / 1740kgs	1750kgs / 1910kgs	1600kgs / 1740kgs	1750kgs / 1910kgs	
Packing size	Length	2400mm (94.5")	2900mm (114.2")	2400mm (94.5")	2900mm (114.2")
	Width x Height	Width 1120mm (44.1") x Height 1900mm (74.8")			

Specifications subject to change without notice.



# TML Series

TML-1640

TML-1660

- All models with one piece solid stand
- All models with universal feed gearbox & reversible apron
- All models meet CE. (on request)
- All models with 52.5mm (2.066") spindle bore, ASA D1-6

## FEATURES

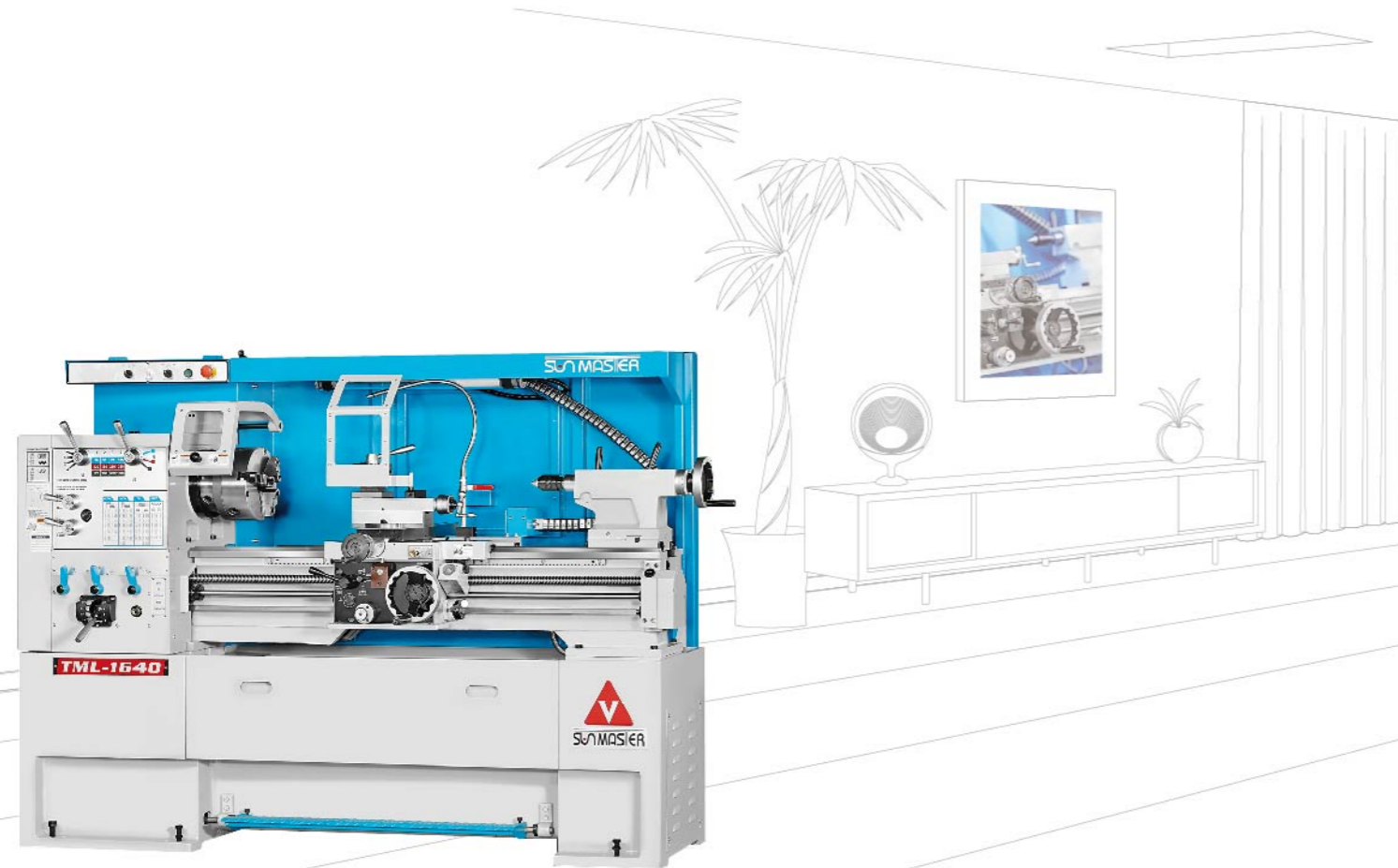
- All castings are properly stabilized and stress relieved
- Bed ways are hardened & ground to min. HRC 48~55
- Turcite B coating between the bed and carriage
- Extremely low noise level
- Foot brake pedal provided
- Built-in coolant pump & fitting provided
- Wider bed way which give absorbs vibration

## STANDARD ACCESSORIES

1. Backplate for 9" chuck
2. Dead center MT.4
3. Dead center MT.4 with carbide tip
4. Spindle center sleeve MT.6
5. Level pads.....6 pcs
6. Tool set & Box
7. Operation manual & parts list



HIGH SPEED



	TML-1640	TML-1660
<b>Capacity</b>		
Height of centers	205mm (8.07")	
Swing over bed	ø410mm (16.14")	
Swing in gap	ø583mm (22.95")	
Swing over cross slide	ø262mm (10.3")	
Distance between centers	1000mm (40")	1500mm (60")
Width of bed	260mm (10.236")	
Gap width in front faceplate	135mm (5.31")	225mm (8.85")
<b>Headstock and Main Spindle</b>		
Spindle nose, internal taper	D1-6 / A1-6 (opt.), MT. No.6	
Spindle center sleeve	MT. No.6 x MT. No.4	
Spindle bore	ø52.5mm (2.066")	
	12 steps / 36~1800 R.P.M.	
	L	36 50 70 105
	M	130 180 250 380
	H	620 900 1200 1800
Spindle speed:		
Gear steps / Range		
<b>Carriage</b>		
Length on bed / Width of carriage	513mm (20.19") / 412mm (16.22")	
Cross slide travel	220mm (8.6")	
Top slide travel	125mm (4.92")	
<b>Threads and Feeds</b>		
Whitworth threads: Kinds / Range	45 kinds / 2~72 T.P.I.	
Metric threads: Kinds / Range	39 kinds / 0.2~14 mm	
D.P. threads: Kinds / Range	21 kinds / 8~44 D.P.	
M.P. threads: Kinds / Range	18 kinds / 0.3~3.5 M.P.	
Longitudinal feeds	0.05~1.7 (0.002"~0.067")	
Cross feeds	0.025~0.85 (0.001"~0.034")	
<b>Tailstock</b>		
Quill diameter	ø52mm (2.47")	
Quill travel	152 mm (6")	
Taper of center	MT. No.4	
<b>Motor</b>		
Main spindle	5 HP	
Coolant pump	1/8 HP	
<b>Measurement</b>		
Weight (Net / Gross) Approx.	1500kgs / 1620kgs	1600kgs / 1760kgs
Packing size	Length	2270mm (89.4")
	Width x Height	Width 1120mm (44.1") x Height 1900mm (74.8")

Specifications subject to change without notice.

# RML Series

RML-1430 / 1440 / 1460 / 1630 / 1640 / 1660

RML-1430V / 1440V / 1460V / 1630V / 1640V / 1660V

- E.V.S models with auto lubrication system to headstock & external tank for cooling the oil
- All models with one piece solid stand
- All models with universal feed gearbox & reversable apron
- All models meet CE. (on request)
- All models with 52.5mm (2.066") spindle bore, ASA D1-6

## FEATURES

- All castings are properly stabilized and stress relieved
- Bed ways are hardened & ground to min. HRC 48~55
- Turcite B coating between the bed and carriage
- Extremely low noise level
- Foot brake pedal provided
- Built-in coolant pump & fitting provided
- CSS (constant surface speed control) on request for E.V.S. model
- Wider bed way which give absorbs vibration

## STANDARD ACCESSORIES

1. Backplate for 9" chuck
2. Dead center MT.4
3. Center MT.4 with carbide tip
4. Spindle center sleeve MT.6
5. Level pads.....6 pcs
6. Tool set & Box
7. Operation manual & parts list



	RML-1430	RML-1440	RML-1460	RML-1630	RML-1640	RML-1660	RML-1430V	RML-1440V	RML-1460V	RML-1630V	RML-1640V	RML-1660V
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## Capacity

Height of centers	180mm (7.08")			205mm (8.07")			180mm (7.08")			205mm (8.07")		
Swing over bed	ø360mm (14.17")			ø410mm (16.14")			ø360mm (14.17")			ø410mm (16.14")		
Swing in gap	ø533mm (20.98")			ø583mm (22.95")			ø533mm (20.98")			ø583mm (22.95")		
Swing over cross slide	ø212mm (8.35")			ø262mm (10.3")			ø212mm (8.35")			ø262mm (10.3")		
Distance between centers	800mm (31.5")	1000mm (40")	1500mm (60")	800mm (31.5")	1000mm (40")	1500mm (60")	800mm (31.5")	1000mm (40")	1500mm (60")	800mm (31.5")	1000mm (40")	1500mm (60")
Width of bed	260mm (10.236")											
Gap width in front faceplate	135mm (5.31")		225mm (8.85")		135mm (5.31")		225mm (8.85")		135mm (5.31")		225mm (8.85")	

## Headstock and Main Spindle

Spindle nose, internal taper	D1-6 / A1-6 (opt.), MT. No.6		
Spindle center sleeve	MT. No.6 x MT. No.4		
Spindle bore	ø52.5mm (2.066")		
Spindle speed:	8 steps / 70~1800 R.P.M.		2 steps / L 20~400 R.P.M. H 400~2500 R.P.M.
Gear steps / Range	OPT. 16 steps / 8P 40~1000 R.P.M. 4P 80~2000 R.P.M.		25~3000 R.P.M. (Opt.)
	Infinitely variable		

## Carriage

Length on bed / Width of carriage	513mm (20.19") / 412mm (16.22")		
Cross slide travel	220mm (8.6")		
Top slide travel	125mm (4.92")		

## Threads and Feeds

Whitworth threads: Kinds / Range	45 kinds / 2~72 T.P.I.		
Metric threads: Kinds / Range	39 kinds / 0.2~14 mm		
D.P. threads: Kinds / Range	21 kinds / 8~44 D.P.		
M.P. threads: Kinds / Range	18 kinds / 0.3~3.5 M.P.		
Longitudinal feeds	0.05~1.7 (0.002"~0.067")		
Cross feeds	0.025~0.85 (0.001"~0.034")		

## Tailstock

Quill diameter	ø52mm (2.047")		
Quill travel	152 mm (6")		
Taper of center	MT. No.4		

## Motor

Main spindle	5HP 4P	OPT. 5HP 4P/ 2.5HP 8P	AC 3.7kW (5HP), Inverter
Forced lubrication for HD.			1/4 HP
Coolant pump	1/8 HP		

## Measurement

Weight (Net / Gross) Approx.	1300kgs	1350kgs	1450kgs	1350kgs	1400kgs	1500kgs	1300kgs	1350kgs	1450kgs	1350kgs	1400kgs	1500kgs
	1400kgs	1470kgs	1610kgs	1450kgs	1520kgs	1660kgs	1400kgs	1470kgs	1610kgs	1450kgs	1520kgs	1660kgs
Packing size	Length	2070mm (81.5")	2270mm (89.4")	2785mm (109.7")	2070mm (81.5")	2270mm (89.4")	2785mm (109.7")	2070mm (81.5")	2270mm (89.4")	2785mm (109.7")	2070mm (81.5")	2785mm (109.7")
	Width x Height	Width 1120mm (44.1") x Height 1900mm (74.8")										

Specifications subject to change without notice.



# ERL Series

ERL-1330 / 1340

ERL-1330V / 1340V

All models with oil bathed lubrication system to headstock  
 All models meet CE. (on request)  
 All models with 40mm (1.57") spindle bore, ASA D1-4

## FEATURES

All castings are properly stabilized and stress relieved  
 Bed ways are hardened & ground to min. HRC 48-55  
 Extremely low noise level  
 Foot brake pedal provided  
 Built-in coolant pump & fitting provided  
 CSS (constant surface speed control) on request for E.V.S. model  
 Wider bed way which give absorbs vibration

## STANDARD ACCESSORIES

1. Backplate for 7" chuck
2. Dead center MT.3
3. Center MT.3 with carbide tip
4. Spindle center sleeve MT.5
5. Level pads.....6 pcs
6. Tool set & Box
7. Operation manual & parts list



	ERL-1330	ERL-1340	ERL-1330V	ERL-1340V
<b>Capacity</b>				
Height of centers			171mm (6.73")	
Swing over bed			ø342mm (13.46")	
Swing in gap	.....	ø512mm (20")	.....	ø512mm (20")
Swing over cross slide			ø205mm (8.07")	
Distance between centers	760mm (30")	1000mm (40")	760mm (30")	1000mm (40")
Width of bed			230mm (9")	
Gap width in front faceplate			150mm (5")	
<b>Headstock and Main Spindle</b>				
Spindle nose, internal taper			D1-4, MT. No.5	
Spindle center sleeve			MT. No.5 x MT. No.3	
Spindle bore			ø40mm (1.57")	
	8 steps /	80~2000 R.P.M.	2 steps /	L 100~500 R.P.M. H 500~3000 R.P.M.
Spindle speed:	OPT.			
Gear steps / Range	16 steps /	4P 50~1350 R.P.M. 2P 100~2570 R.P.M.		Infinitely variable
<b>Carriage</b>				
Length on bed / Width of carriage	400mm (15.748") / 384mm (15.118")			
Cross slide travel	180mm (7")			
Top slide travel	95mm (3.74")			
<b>Threads and Feeds</b>				
Whitworth threads: Kinds / Range	45 kinds / 2~72 T.P.I.			
Metric threads: Kinds / Range	39 kinds / 0.2~14 mm			
D.P. threads: Kinds / Range	21 kinds / 8~44 D.P.			
M.P. threads: Kinds / Range	18 kinds / 0.3~3.5 M.P.			
Longitudinal feeds	0.05~1.7 (0.002"~0.067")			
Cross feeds	0.025~0.85 (0.001"~0.034")			
<b>Tailstock</b>				
Quill diameter	ø50mm (1.968")			
Quill travel	112 mm (4.5")			
Taper of center	MT. No.3			
<b>Motor</b>				
Main spindle	3HP 4P	OPT. 5HP 2P/ 2.5HP 4P	AC 2.2kW (3HP), Inverter	
Coolant pump	1/8 HP			
<b>Measurement</b>				
Weight (Net / Gross) Approx.	850 / 950kgs	1000 / 1120kgs	850 / 950kgs	1000 / 1120kgs
Packing size	Length	2000mm (78.8")	2270mm (89.4")	2000mm (78.8") 2270mm (89.4")
	Width x Height	Width 965mm (38") x Height 1900mm (74.8")		

Specifications subject to change without notice.

# OPTIONAL ACCESSORIES



**5C LEVER TYPE COLLET CLOSER**



**WORKING LIGHT**



**DIGITAL READOUT SYSTEM (DRO'S)**

Operator friendly readout systems reduce setup time and increase productivity.

Features available:

- Tool offsets for easy compensation of different tool sizes.
- Instant radius / diameter conversion reduces math errors and allows you to machine to print dimensions.
- 2 or 3 axes display.
- Preset and zero rest.
- Near-zero warning.
- Instant inch/mm conversion.
- Most popular brands.



**FOLLOW REST**

For all models.  
With bronze or roller tips.



**STEADY REST**

For all models with roller tips.

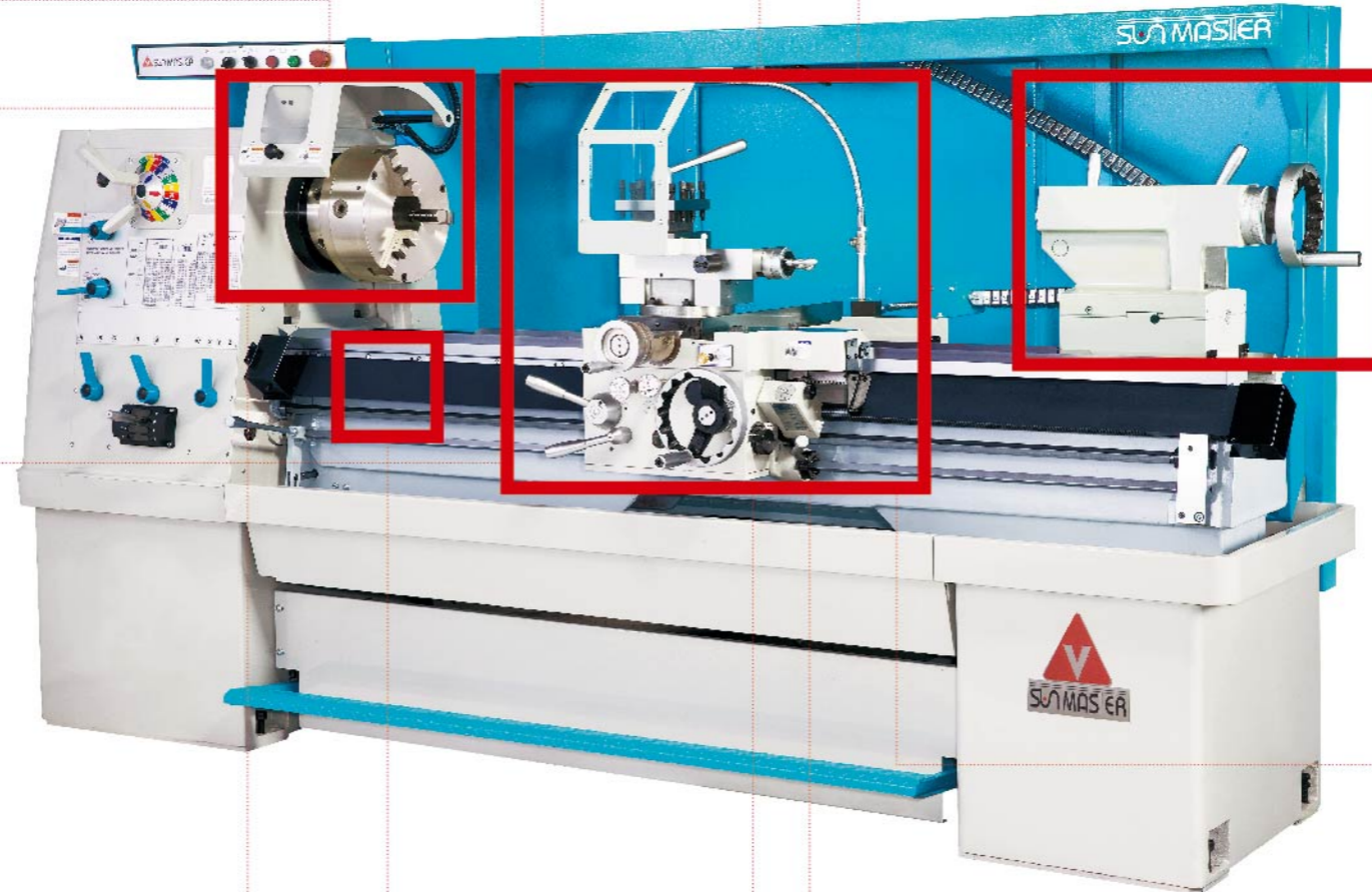


**CHUCK SAFETY GUARDS**

Solid and clear acrylic material for safety.



**TOOL POST SAFETY GUARD**

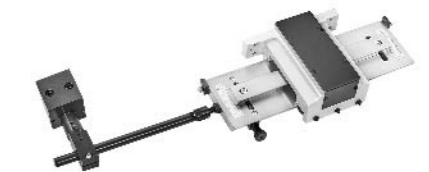


**DELUXE TYPE REAR GUARD**

**DRILL CHUCKS**

Keyless and key type.  
All sizes available.

**LIVE CENTERS**



**TELESCOPIC TAPER ATTACHMENT**

Available for all models.

**ALORIS QUICKCHANGE TOOL POST SET**



**POWER FEED**



**4 & 3 JAW CHUCK**



**FACEPLATES**

Slotted. For all models.



**MICROMETER CARRIAGE STOP**



**5-STEP CARRIAGE STOP**



**HAND WHEEL COVER**

