



**HEAVY DUTY PRECISION &
AC VARI SPEED LATHE**

FHL-1730/1740/1760/1780/2040/2060

FHL-2400/2900/3400

FHL-1730/1740/1760/1780/2040/2060EVS

FHL-2400/2900/3400EVS



HEAVY DUTY LATHE

PRECISION HEAVY-DUTY LATHE

FHL-2400/2900/3400

FHL-2400/2900/3400EVS

FEATURE

- The high precision spindle is ground, hardened and supported by three bearings.
(Two taper roller bearings and one ball bearing)
- 104mm (4 1/11") spindle bore D1-11 nose.
- Magnetic multiple-disc clutches are used for efficient starting and reversing the spindle.
- Rapid and positive magnetic brake interconnected with main clutcher operated by emergency switch or foot control.
- All running parts are lubricated by a pressure pump in gear box.
- Sliding, surfacing and screw-cutting motions are fully interlocked in apron.
- A cone-clutch device in the apron to prevent overload.
- Induction hardened and precision ground bedway is made of high tension cast iron FC 30.
- A dual feed rate by means of a reduction gear system (ratio 1:1, 1:1/4) in the tailstock, provides easy operation for drilling.



Magnetic Clutches /
Magnetic Brake



Rapid Traverse Motor



**FHL-1730/1740/1760/
1780/2040/2060**

ENGLINE LATHE SERIES

FEATURE

- Ground and hardened gears and bed way.
- 3 precision bearings supported spindle driven by single speed motor delivers full power at all 12 speeds.
- Dual gear box for easy switch of inch and metric threads.
- Mechanical overload device in carriage.
- Auto spray and forced feed lube system in headstock and carriage.
- Low voltage controls for extra safety operation.



Headstock



Spindle



**FHL-1730/1740/1760/1780
2040/2060EVS**

ENGLINE LATHE SERIES

FEATURE

- Ground and hardened gears and bed way.
- 3 precision bearings supported spindle driven by single speed motor delivers full power at all 3 steps by INVERTER.
- Dual gear box for easy switch of inch and metric threads.
- Mechanical overload device in carriage.
- Auto spray and forced feed lube system in headstock and carriage.
- Low voltage controls for extra safety operation.



ITEMS		MODEL	FHL-1730 FHL-1730 EVS	FHL-1740 FHL-1740 EVS	FHL-1760 FHL-1760 EVS	FHL-2040 FHL-2040 EVS	FHL-20600 FHL-2060 EVS
GENERAL CAPACITY	Center height		215 mm (8-1/2")			250 mm (10")	
	Swing over bed		430 mm (17")			500 mm (20")	
	Swing over gap		660 mm (26")			730 mm (28")	
	Swing over cross slide		245 mm (9-5/8")			280 mm (11")	
	Distance between centers	695 mm (27.4")	1000 mm (39.37")	1500 mm (59.05")	1000 mm (39.37")	1500 mm (59.05")	
MAIN SPINDLE	Spindle nose		A 1-6 or D1-6				
	Spindle bore diameter		58 mm (2-1/4")				
	Taper of spindle bore		MT6				
	Taper of center		MT4				
	Spindle speeds		50 ~ 1800 ipm (12 steps)				
	Spindle speeds (inverter type)		H: 630 ~ 2200 rpm M: 215 ~ 675 rpm L: 25 ~ 225 rpm (3 steps)				
CARRIAGE	Cross slide travel		220 mm (8-5/8")			250 mm (10")	
	Compound rest travel		180 mm (7")				
	Max. size cutting tool		25 x 25 mm (1" x 1")				
TAILSTOCK	Spindle diameter		58 mm (2-1/4")				
	Spindle travel		150 mm (6")				
	Taper of center		MT4				
BED	Bed width		300 mm (11-7/8")				
	Bed length	1600 mm (63")	1860 mm (73")	2380 mm (93")	1860 mm (73")	2380 mm (93")	
THREADING & FEEDING	System		Metric system			Inch system	
	Pitch of leadscrew		35Ø .6 mm/pitch			4 TPI	
	Metric pitch threads		0.5 ~ 0.7 mm/pitch (22 kinds)				
	Inch pitch threads		4 ~ 56 TPI (36 kinds)				
	Module pitch threads		0.5~3.5 M.P. (12 kinds)				
	Diametral pitch threads		8~56 D.P. (21 kinds)				
	Range of longitudinal feeds		0.05 ~ 0.70 mm/rev. (0.002" ~ 0.028"/rev.)				
	Range of cross feeds		0.025 ~ 0.35 mm/rev. (0.001" ~ 0.014"/rev.)				
POWER	Main drive motor		5 HP (7.5 HP Inverter)			7.5 HP (10 HP Inverter)	
	Coolant pump motor		1/8 HP				
FLOOR DIMENSION		1900 x 720 mm	2150 x 720 mm	2650 x 720 mm	2150 x 720 mm	2650 x 720 mm	
NET WEIGHT		1400 kg	1500 kg	1700 kg	1700 kg	1900 kg	
GROSS WEIGHT		1600 kg	1700 kg	1900 kg	1900 kg	2100 kg	
PACKING SIZE APPROX. (L x W x H)		2100 / 2300 / 2800 / 3300 x 1000 x 1640 mm			2300 / 2800 x 1000 x 1720 mm		

* Specification Subject to change without notice.

Standard Accessories

- Main motor
- Centre sleeve (MT 4, 6)
- Coolant equipment
- Tool box with tool kits
- Square tool post with wrench

Optional Accessories

- 3 jaw universal chuck
- 4 jaw independent chuck
- Drive plate
- Face plate
- Work light/quartz work light
- Taper attachment
- Splash guard
- Transformer (10 HP) (for CH-V series)
- Steady rest
- Follow rest

ITEMS		MODEL "V"	FHL-2400 FHL-2400 EV8	FHL-2500 FHL-2500 EV8	FHL-3400 FHL-3400 EV8
GENERAL CAPACITY	Center height		300 mm (11-7/8")	370 mm (14-3/4")	435 mm (17")
	Swing over bed		600 mm (23-5/8")	740 mm (29-1/8")	870 mm (34")
	Swing over gap		820 mm (32-1/4")	960 mm (37-25/32")	1100 mm (43")
	Swing over cross slide		380 mm (15")	520 mm (20-1/2")	590 mm (23")
	Distance between centers		1.35 m (53.1"), 1.84 m (72.4"), 2.91 m (114.5"), 3.96 m (156")		
MAIN SPINDLE	Spindle nose		ASA A1-11 or D1-11		
	Spindle bore diameter		104 mm (4-1/11")		
	Taper of spindle bore		108 x 1:20		
	Taper of center		MT5		
	Spindle speeds		25 ~ 1200 rpm (12 steps)		
	Spindle speeds (INVERTER *V)		20 ~ 51 rpm / 52 ~ 145 rpm / 146 ~ 423 rpm / 424 ~ 1200 rpm (4 steps)		
CARRIAGE	Cross slide travel		330 mm (13")	465 mm (18-1/4")	550 mm (21-1/2")
	Compound rest travel		230 mm (9")		
	Max. size cutting tool		25 x 25 mm (1" x 1")		
TAILSTOCK	Spindle diameter		77 mm (3-1/32")		
	Spindle travel		178 mm (7")		
	Taper of center		MT5		
BED	Bed width		420 mm (16-1/2")		
	Bed length		2590 / 3090 / 4160 / 5210 mm (102" / 122" / 164" / 205")		
	Width of gap		515 mm (20-1/4")		
THREADING & FEEDING	Pitch of leadscrew		Ø38 mm (1-1/2") 4 TPI or 6 mm/pitch		
	Metric pitch threads		0.5 ~ 14 mm x 31 kinds		
	Inch pitch threads		2 ~ 56 TPI x 45 kinds		
	Module pitch threads		0.25 ~ 7 M.P. x 23 kinds		
	Diametral pitch threads		4 ~ 112 D.P. x 43 kinds		
	Range of longitudinal feeds		0.03 ~ 0.73 mm/rev. (0.0012" ~ 0.0287"/rev.)		
POWER	Range of cross feeds		0.01 ~ 0.3 mm/rev. (0.0004" ~ 0.0118"/rev.)		
	Main drive motor		15 HP (11.25 kw) [20 HP Inverter]		
	Rapid traverse motor		1/2 HP		
	Coolant pump motor		1/8 HP		
NET WEIGHT		(CH-600/740) (CH-870)	3550 / 3750 / 4350 / 4750 kg		3750 / 3950 / 4550 / 4950 kg
GROSS WEIGHT		(CH-600/740) (CH-870)	3750 / 3950 / 4550 / 5000 kg		3950 / 4150 / 4750 / 5150 kg
PACKING SIZE APPROX. (L x W x H)		(CH-600)	3035 / 3520 / 4600 / 5590 x 1270 x 1880 mm (119.5" / 138.5" / 181.3" / 220" x 50" x 74")		

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Standard Accessories

- Main drive motor 15HP
- M.T.NO.5 dead center
- Coolant system
- Change gears for module & D.P cutting
- Tool box with tool kits

Optional Accessories

- 3 jaw scroll chuck
- 4 jaw scroll chuck
- Drive plate
- Face plate
- Work light/quartz work light
- Taper attachment
- Splash guard
- Transformer (for CH-V series)
- Steady rest
- Follow rest

HEAVY DUTY LATHE

FHL-2600 2600EVS

FEATURE

- 12 speeds (25 ~ 1200 rpm), suitable for a variety of light and heavy cutting.
- Spindle bore 104mm and applies TIMKEM bearings, precision and durability, suitable for heavy cutting.
- Front of the clutch device, saving, easy to operate.
- The electromagnetic brake system is quickly and safely.
- Forced lubrication system is good, long life, low noise and low temperature rise.
- The saddle has stuck wear-resistant film, moving smooth, long life and a quick installation, effort quickly without fatigue.
- Two steps tailstock feed, suitable for drilling work.
- Bed structure is durable and non-deformation.
- 15 HP powerful motor has high efficiency.



Magnetic Clutches /
Magnetic Brake



Rapid Traverse Motor



MODEL		FHL-2600/2600EVS
GENERAL CAPACITY	Center height	330 mm (13")
	Swing over bed	660 mm (26")
	Swing over gap	880 mm (34-5/8")
	Swing over cross slide	440 mm (17-3/8")
	Distance between centers	1.35 m (53.1") / 1.84 m (72.4") / 2.91 m (114.5") / 3.96 m (156")
MAIN SPINDLE	Spindle nose	ASA A1-11 or D1-11
	Spindle bore diameter	104 mm (4-1/16")
	Taper of spindle bore	108 x 1:20
	Taper of center	MT5
	Spindle speeds	25 ~ 1200 rpm (12 steps)
CARRIAGE	Spindle speeds (INVERTER *V)	20 ~ 51 rpm / 52 ~ 145 rpm / 146 ~ 423 rpm / 424 ~ 1200 rpm (4 steps)
	Cross slide travel	400 mm (15-3/4")
	Compound rest travel	230 mm (9")
	Max. size cutting tool	25 x 25 mm (1" x 1")
	Spindle diameter	77 mm (3-1/32")
TAILSTOCK	Spindle travel	178 mm (7")
	Taper of center	MT5
	Bed width	420 mm (16-1/2")
BED	Bed length	2590 / 3090 / 4160 / 5120 mm (102" / 122" / 164" / 205")
	Width of gap	515 mm (20-1/4")
	Pitch of leadscrew	Ø38 mm (1-1/2") 4 TPI or 6 mm/pitch
	Metric pitch threads	0.5 ~ 14 mm x 31 kinds
	Inch pitch threads	2 ~ 56 TPI x 45 kinds
THREADING & FEEDING	Module pitch threads	0.25 ~ 7 M.P. x 23 kinds
	Diametral pitch threads	4 ~ 112 D.P. x 43 kinds
	Range of longitudinal feeds	0.03 ~ 0.73 mm/rev. (0.0012" ~ 0.0287"/rev.)
	Range of cross feeds	0.01 ~ 0.3 mm/rev. (0.0004" ~ 0.0118"/rev.)
	Main drive motor	15 HP (11.25 kw) (20 HP Inverter)
POWER	Rapid traverse motor	1/2 HP
	Coolant pump motor	1/8 HP
NET WEIGHT		3550 / 3750 / 4350 / 4750 kg
GROSS WEIGHT		3750 / 3950 / 4550 / 5000 kg
PACKING SIZE APPROX. (L x W x H)		3035 / 3520 / 4600 / 5590 x 1270 x 1880 mm (119.5" / 138.5" / 181.3" / 220" x 50" x 74")

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Standard Accessories

- Main drive motor 15HP
- M.T.NO.5 dead center
- Coolant system
- Change gears for module & D.P cutting
- Tool box with tool kits

Optional Accessories

- Steady rest
- Follow rest
- 3-jaw scroll chuck
- 4-jaw scroll chuck
- Face plate
- Drive plate



Elaboration / Pinpoint / Excellence

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