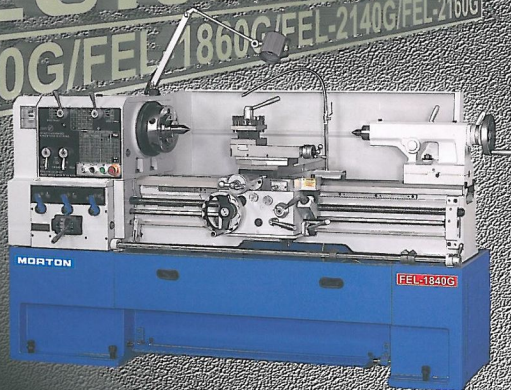




# HIGH SPEED PRECISION LATHES

FEL-1840G/FEL-1860G/FEL-2140G/FEL-2160G



# MORTON

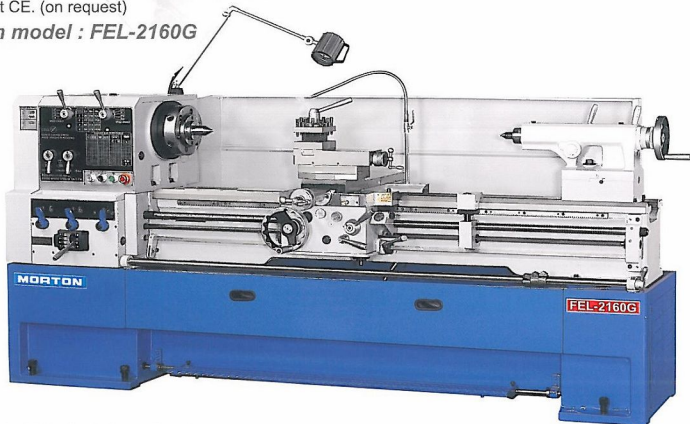
## HIGH SPEED PRECISION LATHES

### Model

**FEL-1840G / FEL-1860G / FEL-2140G / FEL-2160G**

- 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.

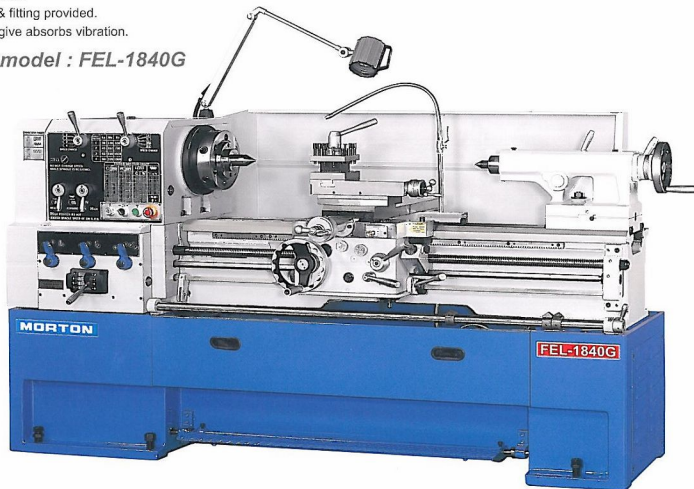
*Photo shown model : FEL-2160G*



### Features

- All casting are properly stabilized and stress relieved.
- Bed ways are hardened & ground to min. HS-70.
- 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.

*Photo shown model : FEL-1840G*





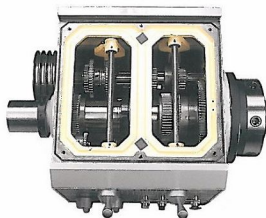
### HEAVY DUTY SPINDLE

- ◆ Machined from forged alloy steel, hardened ground & dynamically balanced.
- ◆ Three point support by high grade precision, machine tool taper roller & ball bearings.



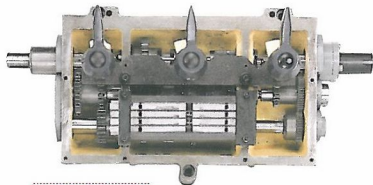
### BED

- ◆ Meehanite casting, vibration stress relieved.
- ◆ Induction hardened and precision ground bed ways.
- ◆ Precision hand scraped removable gap.



### HEADSTOCK

- ◆ Housing is vibration-absorbent, deflection-free.
- ◆ Gears are hardened & MAAG or REISHAUER ground.
- ◆ Spindle machined from forged alloy steel, hardened, ground & treated by dynamically balanced.
- ◆ The spindle is supported at three-point by high precision taper roller and ball bearings keeps rigid, high accuracy.



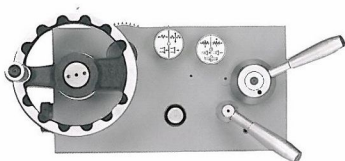
### GEAR BOX

- ◆ Universal type allowing a wide range of inch, metric, M.P., D.P. threads without change gears.



### CARRIAGE & SLIDE

- ◆ Anti-Float design backlash eliminator fitted in cross slide nut.
- ◆ Safety clutch at feed shaft.
- ◆ One shot lubrication in carriage & top slide.
- ◆ Dual dials supply inch system screw.
- ◆ Metric dial supply metric system only.



### APRON

- ◆ /H or L/H wheel can be available on request.
- ◆ Integrated automatic control for longitudinal & cross feeds, forward & reverse feeds.

### SAFETY FEATURES

- ◆ Nylon safety gears in end train.
- ◆ Shear pin in leadscrew.



MODEL		FEL-1840G	FEL-1860G	FEL-2140G	FEL-2160G	
Capacity	Height of centers	231mm (9.09")		271mm (10.67")		
	Swing over bed	ø460mm (18.11")		ø533mm (30.98")		
	Swing in gap	ø650mm (25.6")		ø730mm (28.74")		
	Swing over cross slide	ø307mm (12.1")		ø387mm (15.23")		
	Distance between centers	850mm(33.46")	1350mm(53.15")	850mm(33.46")	1350mm(53.15")	
	Width of bed	305mm (12")				
Headstock & Main spindle	Gap width in front of faceplate	175mm (6.9")				
	Spindle nose, Internal taper	D1-8 , ø85mm Taper 1/19.18				
	Spindle center sleeve	ø85mm Taper 1/19.18 x MT. No.5				
	Spindle bore	ø80mm (3.149")				
	Gear steps	12 steps / 30 ~ 1500 R.P.M.				
		Spindle speed:	Ls	30	45	60
	Ms		110	150	210	320
Range	Hs		530	750	1050	1500
Carriage	Length on bed / Width of carriage	440mm (17.32") / 477mm (18.77")				
	Cross slide travel	272mm (10.7")				
	Top slide travel	120mm (4.72")				
Threads & Feeds	Whitworth threads:Kinds / Range	45 Kinds / 2 ~ 72 T.P.I.				
	Metric threads:Kinds / Range	39 Kinds / 0.2 ~ 14mm				
	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 mm (0.0015" ~ 0.04")				
	Cross feeds	0.02 ~ 0.5 mm (0.00075" ~ 0.02")				
Tailstock	Quill diameter	ø68mm (2.677")				
	Quill travel	153mm (6")				
	Taper of center	MT. No.4				
Motor	Main spindle	7.5HP		10HP		
	Coolant pump	1/8HP				
Measurement	Weight (Net / Gross) Approx.		1700/2000 kgs	1850/2150 kgs	1750/2050 kgs	1900/2200 kgs
	Packing sizes	Length	2400mm(94.5")	2900mm(114.2")	2400mm(94.5")	2900mm(114.2")
		Width x Height	Width 1155mm (45.5") x Height 1745mm (68.7")			

### STANDARD ACCESSORIES

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

### OPTIONAL ACCESSORIES

- ◆3 jaws scroll chuck 250mm/315mm (10"/ 12").
- ◆4 jaws scroll chuck 250mm (10").
- ◆4 jaws independent chuck- 350mm/400mm (14"/ 16").
- ◆5C collet closer attachment.
- ◆5C collets (metric and inch).
- ◆Driving plate with dog.
- ◆Carbide tipped center MT No.4
- ◆Live center MT No.4
- ◆Inter-changeable insert live center MT No.4
- ◆Bull nose live center MT No.4
- ◆16mm (5/8") drill chuck with key and chuck arbor.
- ◆16mm (5/8") keyless drill chuck and chuck arbor.
- ◆Micro carriage stop.
- ◆Turret type carriage stopper.
- ◆Quick change tool post.
- ◆Taper turning attachment.
- ◆Tool post gridner.
- ◆Digital readout system.
- ◆Chuck safety guard.
- ◆CE norms.



**FREJOTH INTERNATIONAL LTD.**

8F #501, SEC.2, WU CHUAN W. RD.,TAICHUNG 408, TAIWAN, R.O.C.

TEL:886-4-23816977

FAX:886-4-23813584, 23813769

E-mail: mail@frejoth.com.tw

web-site <http://www.frejoth.com.tw>

[www.acra.com.tw](http://www.acra.com.tw)