



METAL WORKING GENERAL CATALOGUE

**FERRERO**





• SHOW ROOM



• SHOW ROOM



• WAREHOUSE

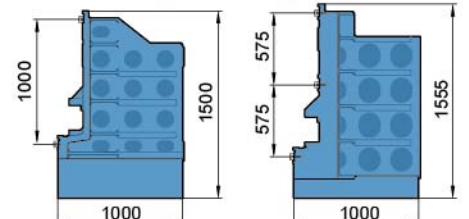
President	Joseph J.J. Huang
Established	November, 1973
Capital	NT \$50,000,000,00
Business Operation	Importer & Exporter
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# FREJOTH DOUBLE COLUMN VERTICAL MACHINING CENTER :

1. FIXED CROSS RAIL ( SD )
2. MOVING CROSS RAIL : ( SDW )



## Optimal Rigidity



SD - 24 / 28 / 32 with 2 guideways

SD - 36 / 42 / 48 / 54 & GM with 3 guideways

### MODEL INFO

SD - 42 90 - 5A  
 5 axis simultaneous head  
 X travel 9m  
 Between Columns 4250mm  
 Sliding Double Columns



Column & Slider one piece casting



X travel by rack pinion servo control (2 pcs)

### CROSS RAIL (BEAM)

- Box in box unity casting frame
- Optimum bending section modulus
- Optimum rigidity & damping design

### MODEL INFO

SDW-48220  
 Sliding Double Columns  
 W type Moving Cross-Rail  
 X travel 22m  
 Between Columns 4850 mm

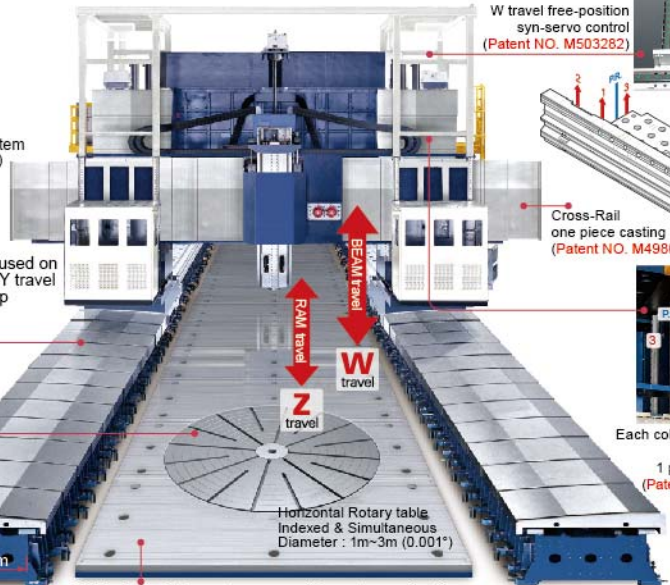


Free position ATC system (Patent NO. M503282)

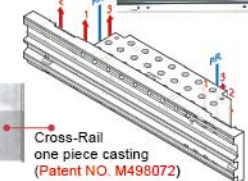


Rack-pinion used on X travel and Y travel SD-48 and up

Built-in or Removable rotary table with worm shaft-gear drive Diameter : 1m~3m (0.001°)



W travel free-position syn-servo control (Patent NO. M503282)



Cross-Rail one piece casting (Patent NO. M498072)



Each column with 3 linear guide-ways and 1 position rail (P.R.) (Patent NO. M511389)

Horizontal Rotary table Indexed & Simultaneous Diameter : 1m~3m (0.001°)

### SDW

Heavy-large-base 1000 mm

1270 mm

Table height based on specific customerization

## SPECIFICATIONS

		SD(W)-24	SD(W)-28	SD(W)-32	SD(W)-36	SD(W)-42	SD(W)-48	SD(W)-54	
Between columns	mm	2450	2850	3250	3650	4250	4850	5450	
Travel	X - travel	6 m ~ 36 m every 1 m add							
	Y - travel	2400	2800	3200	3600	4200	4800	5400	
	Z - travel	SD : 1100 (1400) SDW : 1100				SD : 1100 (1400/1500) SDW : 1100 (1400/1500)			
	W - travel	1500 / 2000 for SDW series							
Table	Table wide	1600	2000	2400	2800	3400	4000	4600	
	Table length	Table length = X travel							
Spindle nose to table	mm	SD : 1080 ~ 2180 (1020 ~ 2420) SDW : 800 ~ 800 + Z + W							
Power - speed	kw	22 / 26 - 6000 rpm							
X axis rack - pinion	-	O	O	O	O	O	O	O	
Y axis rack - pinion	-	X	X	X	X	X	O	O	
ATC capacity	pcs	32 pcs							
X / Y / Z / W feed rate G00	m/min	12 / 12 / 10 / 1				10 / 10 / 10 / 1			
Machine size	Length	13.5 m ~ 43.5 m every 1 m add							
	Width	6.5	6.9	7.3	7.7	8.1	8.5	8.9	
	Height	SD : 6.5 / SDW : 7.2							
Machine weight (app.)	ton	50 + 2/m	53 + 2.3/m	56 + 2.5/m	60 + 3/m	65 + 3.3/m	70 + 3.5/m	75 + 3.8/m	

### MODEL INFO

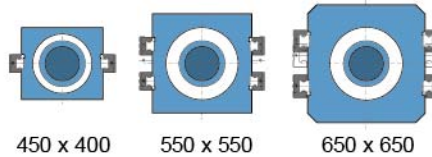
GM - 63 100 - 5A

5 axis simultaneous head

X travel 10m

Between Wail 6350mm

Gantry type



Y travel by rack pinion  
SD(W) - 48 and up & GM - 45 and up

### SPINDLE BOX ( RAM )

- Section size 450 x 400mm (550 x 550, 650 x 650)
- Roller guideway 2 ways (4 ways)
- High rigidity casting frame



GM



Y travel by rack pinion  
SD(W) - 48 and up & GM - 45 and up



### SPECIFICATIONS

		GM-33	GM-39	GM-45	GM-51	GM-57	GM-63	GM-70
Between columns	mm	3350	3950	4550	5150	5750	6350	7050
Travel	X - travel	6 m ~ 36 m every 1 m add						
	Y - travel	2600	3200	3800	4400	5000	5600	6300
	Z - travel	1100 (1400 / 1500)						
	W - travel	N / A						
Table	Table wide	2800	3400	4000	4600	5200	5800	6500
	Table length	Table length = X travel						
Spindle nose to table	mm	500 ~ 500 + Z						
Power - speed	kw	22 / 26 - 6000 rpm						
X axis rack - pinion	-	O	O	O	O	O	O	O
Y axis rack - pinion	-	X	X	O	O	O	O	O
ATC capacity	pcs	32 pcs						
X / Y / Z / W feed rate G00	m/min	15 / 10 / 10						
Machine size	Length	15 m ~ 45 m every 1 m add						
	Width	8.3	8.9	9.5	10.1	10.7	11.3	12
	Height	5.4						
Machine weight (app.)	ton	65 + 5/m	68 + 2/m	70 + 2.5/m	75 + 3/m	80 + 3.5/m	85 + 4/m	90 + 4.5/m

# FREJOTH DOUBLE COLUMN MACHINING CENTER ( MOVING CROSS TYPE )

## Special Milling Head (Exchange Type)

TYPE	Automatic	Semi-Automatic	Manual
Head exchanger	Auto (hydraulic)	Manual (8 bolts)	Manual (8 bolts)
Head indexed	Auto (5°)	Auto (5°)	Manual (5° / free)
Tool clamped	Booster	Booster	Bolt



90° head



Extension head



Extension 90° head



AC swiveling head

FDW

## Special Milling Head (Fixed Type)



Universal head



5 Face head  
(dual tool shank)



5 Axis simultaneous head

## Auto Head exChanger (AHC)



For Auto-Special Milling Head



## SPECIFICATIONS

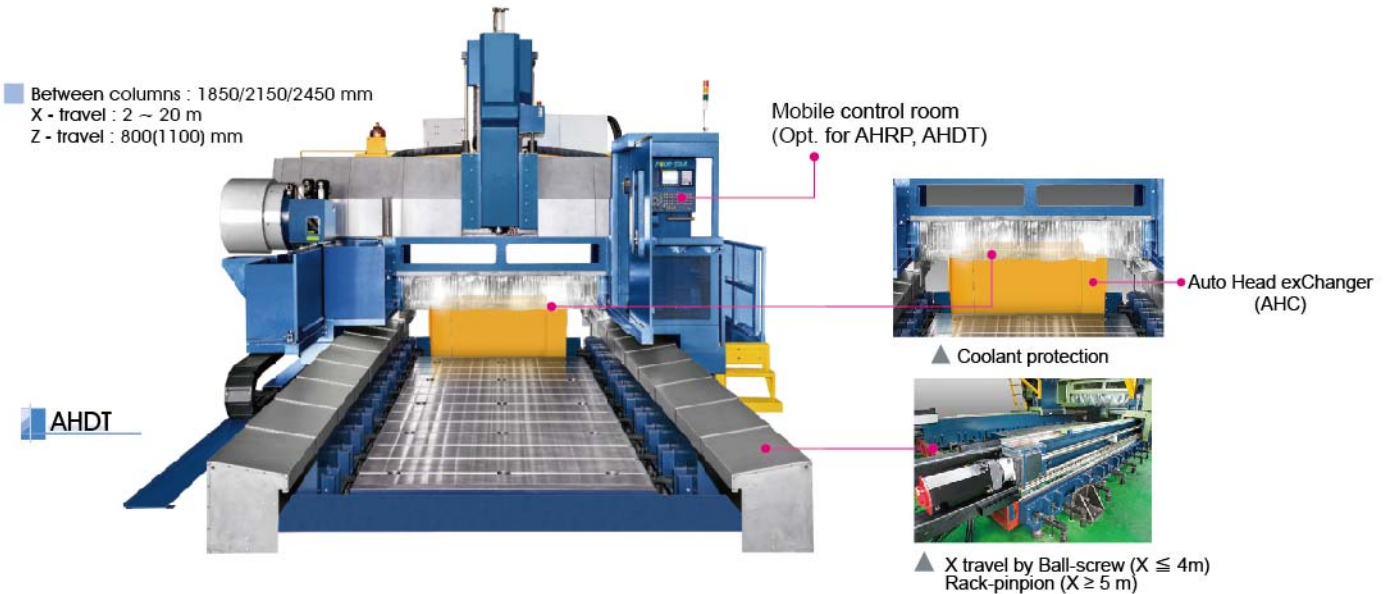
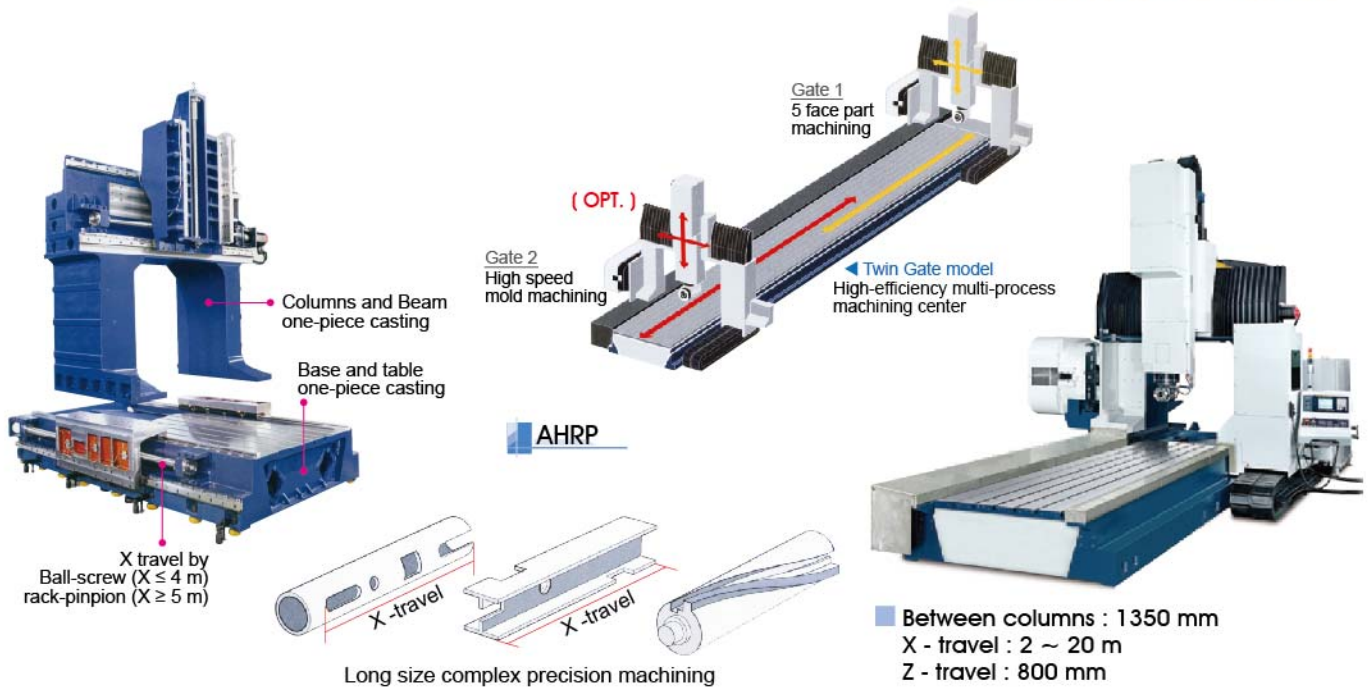
Item	FDW-18				FDW-21				FDW-24								
Model - FDW	1822	1832	1842	1852	2122	2132	2142	2152	2432	2442	2452						
Distance between columns (mm)	1850				2150				2450								
Table size	Length (mm)	2000	3000	4000	5000	2000	3000	4000	5000	3000	4000	6000					
	Width (mm)	1500				1800				2000							
Max. table load (ton)	12		15	18	20	12	15	18	20	15	18	20					
	22 x 150 x 9		22 x 150 x 9		22 x 150 x 11		22 x 150 x 13		22 x 150 x 13								
Travel	X - axis (mm)	2200	3200	4200	5200	2200	3200	4200	5200	3200	4200	6000					
	Y - axis (mm)	1800				2100				2400							
	Z - axis (mm)					800 (1100)											
	W - axis (mm)					1000 (opt.1500)											
Spindle	Nose to table (mm)					120 ~ 1920											
	Ram size (mm)					□ 450 x 400											
	Taper / Power / Speed (rpm/kw)	BBT 50 - 22 / 26 kw - 6000 rpm with + 2 stage gearbox															
Feedrate	Cutting (m/min)	12															
	X axis (m/min)	15	15	12	10	15	15	12	10	15	12	10					
	Y / Z / W axis (m/min)	15 / 15 / 5															
Accuracy (mm)	Positioning ± 0.015 / full travel ; Positioning ± 0.015 / full travel ± 0.003 ; Slope of cross-rail 0.01 / 1000																
	Capacity / dia (mm)	32 tools / max. dia Ø 125 (Full tool) ; Ø 220 (Adjacent empty)															
	Max. length / weight (mm/kg)	400 mm / 20 kg															
Machine size	Length (m)	7.2	9.2	11.2	13.2	7.2	9.2	11.2	13.2	9.2	11.2	13.2					
	Width (m)	5.1				5.4				5.7							
Machine weight (±10%) (ton)	40		44	48	52	42	46	50	54	48	53	58					
	Machine weight (±10%) (ton)																
Item	FDW-28				FDW-32				FDW-36				FDW-42				
Model - FDW	2832	2842	2852	2860	3232	3242	3252	3260	3642	3652	3660	4242	4252	4260			
Distance between columns (mm)	2850				3250				3650				4250				
Table size	Length (mm)	3000	4000	5000	6000	3000	4000	5000	6000	4000	5000	6000	4000	5000	6000		
	Width (mm)	2200				2600				3000				3000			
Max. table load (ton)	18		20	22	24	18	20	22	24	22	24	26	22	24	26		
	28 x 180 x 13		28 x 180 x 13		28 x 200 x 13		28 x 200 x 15		28 x 200 x 15				28 x 200 x 15				
Travel	X - axis (mm)	3200	4200	5200	6000	3200	4200	5200	6000	4200	5200	6000	4200	5200	6000		
	Y - axis (mm)	2800				3200				3600				4200			
	Z - axis (mm)					1100											
	W - axis (mm)					1000 (opt.1500 / 2000)											
Spindle	Nose to table (mm)					145 ~ 2245											
	Ram size (mm)					□ 450 x 400 (opt.550 x 550)											
	Taper / Power / Speed (rpm/kw)	BBT 50 - 22 / 26 kw - 6000 rpm with + 2 stage gearbox															
Feedrate	Cutting (m/min)	10															
	X axis (m/min)	15	12	10	10	15	12	10	10	12	10	10	12	10	10		
	Y / Z / W axis (m/min)	12 / 12 / 3															
Accuracy (mm)	Positioning ± 0.015 / full travel ; Positioning ± 0.015 / full travel ± 0.003 ; Slope of cross-rail 0.01 / 1000																
	Capacity / dia (mm)	32 tools / max. dia Ø 125 (Full tool) ; Ø 220 (Adjacent empty)															
	Max. length / weight (mm/kg)	400 mm / 20 kg															
Machine size	Length (m)	9.2	11.2	13.2	15.0	9.2	11.2	13.2	15.0	11.2	13.2	15.0	11.2	13.2	15.0		
	Width (m)	6.0				6.4				6.8				7.4			
Machine weight (±10%) (ton)	55		60	65	70	58	63	68	73	59	67	72	77	72	80		
	Machine weight (±10%) (ton)																

# FREJOTH DOUBLE COLUMN MACHINING CENTER FIXED CROSSRAIL TYPE



## SPECIFICATIONS

Item	FD-14				FD-18				FD-21				FD-24A							
Model - FD	1422	1427	1432	1822	1827	1832	1842	1852	2122	2127	2132	2142	2152	2427A	2432A	2442A	2452A			
Distance between columns (mm)	1400				1850				2150				2450							
Table size	Length (mm)		2000		2500		3000		2000		2500		3000		4000		5000			
	Width (mm)		1200		1500		1800		2000		2500		3000		4000		5000			
Max. table load (ton)	10	12	15	12	13	15	18	20	12	13	15	18	20	13	15	18	20			
T - slot	Width x Pitch x No. (mm)				22 x 150 x 7				22 x 150 x 11				22 x 150 x 13							
	X - axis (mm)		2200		2700		3200		2200		2700		3200		2700		3200		5200	
Travel	Y - axis (mm)		1300		1800		2100		2200		2700		3200		2700		3200		5200	
	Z - axis (mm)		800		800		800		800 (opt.1100)		800 (opt.1100)		800 (opt.1100)		2400		2400		2400	
	Nose to table (mm)		30 ~ 830		180 ~ 980		75 ~ 875		180 ~ 980		75 ~ 875		130 ~ 930		75 ~ 875		75 ~ 875		75 ~ 875	
Spindle	Center to column		430		430		430		430		430		430		430		430		430	
	Taper / Speed / Power		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox	
Feedrate	Cutting (m/min)		10		8		7		7		6		6		6		6		6	
	X axis (m/min)		22		20		20		22		18		15		20		18		15	
	Y / Z axis (m/min)		18 / 18		18 / 15		18 / 15		18 / 15		18 / 15		18 / 15		18 / 15		18 / 15		18 / 15	
ATC & tool magazine	Accuracy (mm)		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003	
	Capacity / dia (mm)		24 tools / max. dia Ø 110 (Full tool) ; Ø 200 (Adjacent empty)		24 tools / max. dia Ø 110 (Full tool) ; Ø 200 (Adjacent empty)		24 tools / max. dia Ø 110 (Full tool) ; Ø 200 (Adjacent empty)		24 tools / max. dia Ø 110 (Full tool) ; Ø 200 (Adjacent empty)		24 tools / max. dia Ø 110 (Full tool) ; Ø 200 (Adjacent empty)		24 tools / max. dia Ø 110 (Full tool) ; Ø 200 (Adjacent empty)		24 tools / max. dia Ø 110 (Full tool) ; Ø 200 (Adjacent empty)		24 tools / max. dia Ø 110 (Full tool) ; Ø 200 (Adjacent empty)		24 tools / max. dia Ø 110 (Full tool) ; Ø 200 (Adjacent empty)	
	Max. length / weight (kg/mm)		18 kg / 380 mm		18 kg / 380 mm		18 kg / 380 mm		18 kg / 380 mm		18 kg / 380 mm		18 kg / 380 mm		18 kg / 380 mm		18 kg / 380 mm		18 kg / 380 mm	
Machine size	Length (m)		6.4		7.4		8.4		6.4		7.4		8.4		11.1		13.1		7.4	
	Width (m)		4.00		4.55		4.85		4.57 (5.47)		4.57 (5.47)		4.57 (5.47)		5.15		5.15		5.15	
	Height (m)		4.10		4.10		4.10		4.10		4.10		4.10		4.10		4.10		4.10	
Machine weight (app.) (ton)	20	22	24	24	26	28	32	36	25	27	29	33	37	28	30	35	40			
Item	FD-28				FD-32				FD-36				FD-42							
Model - FD	2832	2842	2852	2860	3232	3242	3252	3260	3642	3652	3660	4242	4252	4260						
Distance between columns (mm)	2850				3250				3650				4250							
Table size	Length (mm)		3000		4000		5000		3000		4000		5000		6000					
	Width (mm)		2200		2600		3000		3000		3000		3000 (opt. 3400)		3000 (opt. 3400)					
Max. table load (ton)	18	20	22	24	18	20	22	24	20	22	24	22	24	26						
T - slot	Width x Pitch x No. (mm)				28 x 180 x 13				28 x 200 x 13				28 x 200 x 15							
	X - axis (mm)		3200		4200		5200		3200		4200		5200		6000					
	Y - axis (mm)		2800		1100 (opt.1400)		3200		3600		4200		4200		6000					
Travel	Z - axis (mm)		800		800		800		800 (opt.1100)		800 (opt.1100)		800 (opt.1100)		800 (opt.1100)					
	Nose to table (mm)		180 ~ 1280		150 ~ 1250		260 ~ 1360		260 ~ 1360		260 ~ 1360		260 ~ 1360		260 ~ 1360					
	Center to column		430		470		470		470		470		470		470					
Spindle	Taper / Speed / Power		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox		BBT 50 - 6000 rpm - 22 / 26 kw + 2 stage gearbox					
	Cutting (m/min)		6		6		6		6		6		6		6					
Feedrate	X axis (m/min)		15		12		10		10		10		10		10					
	Y / Z axis (m/min)		15 / 12		15 / 12		15 / 12		15 / 12		15 / 12		15 / 12		15 / 12					
	Accuracy (mm)		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003		Positioning ± 0.015 / full travel ; Repeatability ± 0.003					
ATC & tool magazine	Capacity / dia (mm)		32 tools / max. dia Ø 125 (Full tool) ; Ø 220 (Adjacent empty)		32 tools / max. dia Ø 125 (Full tool) ; Ø 220 (Adjacent empty)		32 tools / max. dia Ø 125 (Full tool) ; Ø 220 (Adjacent empty)		32 tools / max. dia Ø 125 (Full tool) ; Ø 220 (Adjacent empty)		32 tools / max. dia Ø 125 (Full tool) ; Ø 220 (Adjacent empty)		32 tools / max. dia Ø 125 (Full tool) ; Ø 220 (Adjacent empty)		32 tools / max. dia Ø 125 (Full tool) ; Ø 220 (Adjacent empty)					
	Max. length / weight (kg/mm)		20 kg / 400 mm		20 kg / 400 mm		20 kg / 400 mm		20 kg / 400 mm		20 kg / 400 mm		20 kg / 400 mm		20 kg / 400 mm					
	Tool selection		Random shortest direction / M24 P3.0 - 45°		Random shortest direction / M24 P3.0 - 45°		Random shortest direction / M24 P3.0 - 45°		Random shortest direction / M24 P3.0 - 45°		Random shortest direction / M24 P3.0 - 45°		Random shortest direction / M24 P3.0 - 45°		Random shortest direction / M24 P3.0 - 45°					
Machine size	Length (m)		9.4		11.4		13.4		9.4		11.4		13.4		15.4					
	Width (m)		6.00		6.40		6.80		6.80		6.80		7.40		7.40					
	Height (m)		5.2 (6.1)		5.5 (6.45)		5.5 (6.45)		5.5 (6.45)		5.5 (6.45)		5.5 (6.45)		5.5 (6.45)					
Machine weight (app.) (ton)	44	49	54	59	50	55	60	65	62	67	72	68	73	78						



### SPECIFICATIONS

		AHRP-13	AHDT-18	AHDT-21	AHDT-24
Between columns (mm)		1350	1850	2150	2450
Travel	X - Travel (m)	2 M ~ 20 M Every 1m add			
	Y - Travel (mm)	1300	1800	2100	2400
	Z - Travel (mm)	800	800 (1100)		
	W - Travel (mm)	N / A			
Table	Table wide (mm)	1000	1200	1500	1800
	Table length (m)	Table length = X Travel			
Spindle nose to table (mm)		220 ~ 1020	555 ~ 1355		
Power - speed (kw)		18.5 / 22 - 6000 rpm			
X axis rack-pinion		$x \geq 5$ m	$x \geq 5$ m	$x \geq 5$ m	$x \geq 5$ m
Y axis rack-pinion		x	x	x	x
ATC capacity (pcs)		24 pcs			
X / Y / Z / W Feed rate G00 (m/min)		15 / 15 / 12			
Machine size	Length (m)	6.5m ~ 23.5m Every 1m add			
	Width (m)	4.5	5.9	6.2	6.5
	Height (m)	4.6	4		
Machine weight (app.) (ton)		18 + 2/m	20 + 1.5/m	22 + 2/m	24 + 2.5/m



**UMC-1600**



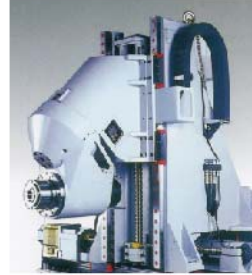
**SPECIFICATIONS**

		UMC-1600 (mill)	UMTC-1600 (mill turn)
<b>Travel</b>	X / Y / Z axis	1620 / 1260 / 1050 mm	
	Vertical to horizontal time	3 seconds	
<b>Swivel head (B axis)</b>	Transmission	DD torque motor	
	Rotary angle	0° / 180°	
<b>Motor spindle</b>	Maximum spindle speed	8,000 RPM	
	Spindle power S1 / S6	29.6 / 54.2 KW	42 / 53 KW
	Spindle torque S1 / S6	128 / 320 Nm	392 / 506 Nm
	Spindle taper	# 50 / HSK-A100	HSK-T100
	Front bearing diameter	100 mm	
<b>Distances</b>	V : spindle nose to table top	150 ~ 1200 mm	
	H : spindle center to table top	100 ~ 1150 mm	
	V : spindle nose to table center	-300 ~ 960 mm	
	H : spindle center to table center	-250 ~ 1010 mm	
	Spindle center to column	1105 mm	
<b>Rotary table (C axis)</b>	Table dimension	Ø 1320 mm	
	Table to floor	1085 mm	1110 mm
	Maximum loading	4000 KG	Mill / turn 4000 / 1500 KG
	Maximum rotation	30 RPM	300 RPM
	Transmission	DD torque motor	
	Indexing increment	0.001°	
	T slots	13 x 18H x P100	
<b>Ball screw</b>	X / Y / Z Diameter x pitch	Ø 55 / 55 / 63 mm x 16 / 12 / 12 mm	
<b>X / Y / Z axis Roller guide</b>	Number x width	4 / 2 / 2 slide ways x 55 mm	
	Runner blocks number	8 / 4 / 6	
	Rapid feed X / Y / Z	24 / 24 / 24 m / min	
<b>Feed rate</b>	Cutting feed	20 / 20 / 20 m / min	
	Tools number	60 pieces	
<b>ATC</b>	Maximum tool diameter	Ø 150 mm	
	Maximum tool length	350 mm	
	Maximum tool weight	20 kgs	
	Tools exchanging position	horizontal	
<b>06 Weight</b>	Before packing	32000 KG	33000 KG





**UMC-1000**



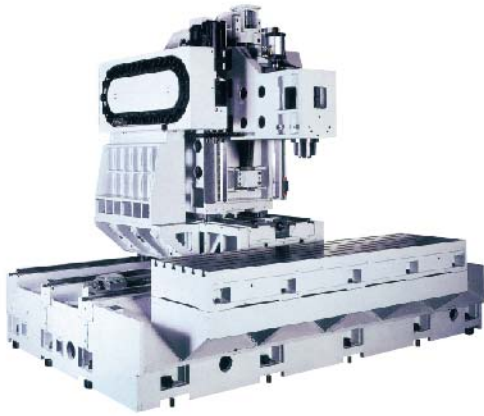
**UMC-1000 / UMTC-1000 mill-turn**

■ **OPTIONAL:**

1000 mm diameter torque motor drive rotary table with maximum rotation 60 RPM, 1820 Nm peak torque, 4000 Nm brake torque, 1200 kg load, +5" / +-2.5" positioning / repeatability accuracy, German made !

**SPECIFICATIONS**

		UMC-1000 Milling center	UMC-1000 Mill-turn center
Travel	Linear axis X / Y / Z	1000 / 800 / 700 mm	1000 / 800 / 610 mm
	Swivel head B axis	0° ~ 180°	
	Rotary table C axis	0.001 degree x 360,000	
Swivel head (B axis)	Maximum spindle speed	14000 (18000, 24000) RPM	12000 RPM
	Spindle power & torque	29.3 & 35 KW, 70 & 160 Nm (S1 & S6)	
	Spindle taper	BT (CAT/SK) 40, (HSK-A63)	KM 63
	Front bearings diameter	70 mm	
	Vertical spindle nose to table	100 mm ~ 800 mm,	29 mm ~ 729 mm,
	Hor. spindle center to table top	50 mm ~ 750 mm	9 mm ~ 709 mm
	Hor. spindle nose to table center	-230 mm ~ 570 mm	-262 mm ~ 538 mm
Rotary table (C axis)	Table dimension	800 x 1000 mm	Ø 800 mm
	Maximum loading	1500 kg	1000 kg
	Indexing increment	0.001 degree	
	T slots (size x No.x pitch)	18 mm x 7 x 100 mm	18 mm x 7 x 120 mm
	Table top to floor	1000 mm	1036 mm
Feed rate	Rapid linear axis X / Y / Z	24M / 24M / 24M	
	Rotary axis B / C	10 (60) RPM	500 RPM
	Cutting feed	20 m / min	
Transmission	Linear axis XYZ	Ø 50 mm C3 ball screw	
	Swivel head B axis	Torque motor	
	Rotary table C axis	Worm wheel (Torque motor)	Torque motor
Axis Accuracy (VDI3441)	Positioning linear axis XYZ / BC	12 microns / 10 "	
	Repeatability linear axis XYZ / BC	8 microns / 5 "	
ATC	Tools number	40 (52, 80) stations	
	Max. tool dia. / length / weight	120 mm / 300 mm / 7 kg	
	Tools exchanging	vertical position	
Weight	Net (before packing)	15 ton	16 ton

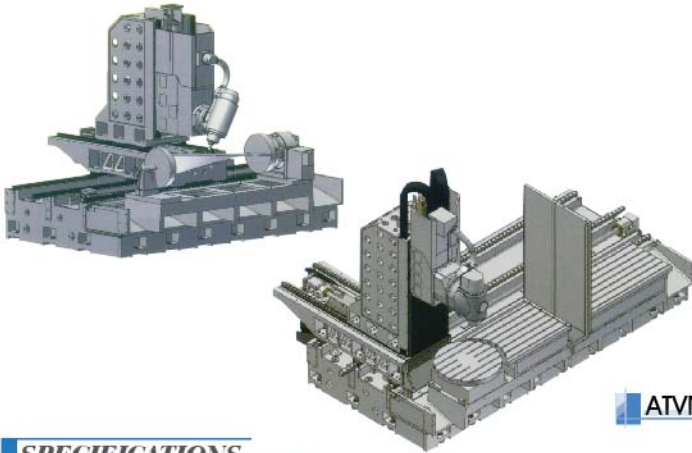


ATVMC-4000

## SPECIFICATIONS

		ATVMC-2000	ATVMC-3000	ATVMC-4000	ATVMC-5000
X / Y / Z axis	BT - 40 spindle	2320 / 710 / 610 mm	3320 / 710 / 610 mm	4320 / 710 / 610 mm	5320 / 710 / 610 mm
	BT - 50 spindle	2320 / 680 / 610 mm	3320 / 680 / 610 mm	4320 / 680 / 610 mm	5320 / 680 / 610 mm
Table size / max. loading		2400 x 700 mm / 3 ton	3400 x 700 mm / 4 ton	4400 x 700 mm / 5 ton	5400 x 700 mm / 5.5 ton
Spindle nose to table / column ways		150 ~ 760 mm / 750 mm			
Spindle taper / speed		BT / CAT / SK40 or 50 / 10000 Rpm up to 24000 rpm			
Spindle motor		7.5 / 11 kw (up to 34 kw)			
Cutting feed rate		10 M / min.			
Rapid feed rate		30 / 30 / 30 m	24 / 30 / 30 m	24 / 30 / 30 m	18 / 30 / 30 m
ATC -type / No.		Swing arm type 24 / 32 / 40 tools			
X / Y / Z Ballscrew dia.		63 / 50 / 50 mm	70 / 50 / 50 mm	80 / 50 / 50 mm	80 / 50 / 50 mm
Net weight		21000 kgs	23500 kgs	28680 kgs	32620 kgs

## FREJOTH TRAVELLING COLUMN & FIXED TABLE VMC - 5 Axis Base on above ATVMC models



ATVMC-5XC

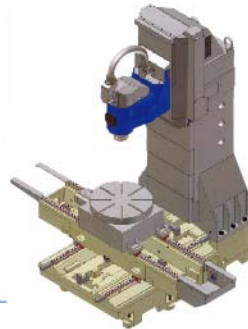
## SPECIFICATIONS

	ATVMC-5XA	ATVMC-5XC
Rotary table - type	Worm wheel or DD motor	DD motor only
Rotary table size	250 ~ 800 mm dia	700 mm (opt. 1000 mm)
Rotary table loading capacity	up to 600 kgs with tailstock	500 kgs (opt. 1000 kgs)
Rotation speed	11.1 ~ 16.6 rpm	30 rpm
X / Y / Z linear travel - axis	2320 / 3320 / 4320 / 5320 mm / 760 / 760 mm	
A / B / C rotary axis	A / B : 0.001° x 360,000 ± 120°	B / C : ± 120° / 0.001° x 360,000
Swivel milling head - B axis spindle		
Spindle taper / speed	14000 rpm - BT40 / CAT40 / SK40 / HSK - A63	
Spindle motor	29.3 / 35 Kw	
B axis swivel spindle driven system - by DD motor		
ATC type and tool number	Swing arm type - 24 tools.	
Spindle - V to column way	891 mm	
Spindle - V to table surface	115 ~ 875 mm	
Floor to table surface	860 mm	
Net weight	from 22000 kg to 40000 kgs	

## FREJOTH 5 AXES MACHINING CENTER - Swing milling head and rotary table design



FHSM-5XC



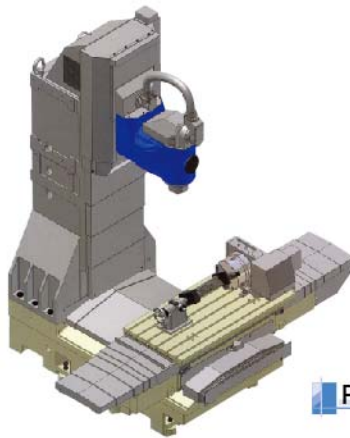
with optional  $\varnothing$  610 mm torque motor rotary table integrated into 1100 mm x 600 mm plain table

### SPECIFICATIONS

#### FHSM-5XC

X / Y / Z linear axis	1020 / 610 / 610 mm (opt. 1500 / 700 / 800 mm)
B-Rotary head axis	+30°-120°
C-rotary table	0.001° x 360,000
Rotary table type	integrated built in saddle
Rotary table-size / T slot / loading cap	$\varnothing$ 610 mm (opt. $\varnothing$ 700 mm) / 18H7 / 500 kgs
Rotary table speed / hydraulic pressure	10 rpm / 50 kg / cm <sup>2</sup>
Rotary table center height / bore	50 H7
Spindle to column cover	629 mm
Spindle motor power & Torque	29.3 / 35 kw or 70/160 Nm
Spindle taper / speed	BT40-14000 rpm ~ 24000 rpm (opt.)
Rapid feed-cutting feed	36 / 36 / 24 m / min - 1-20000 mm / min
ATC-Type/No.of tool	Swing arm with 430 mm travel-/32 tools (opt. 40 / 60 tools)
Machine net weight	9000 kgs

## FREJOTH 5 AXES MACHINING CENTER - Swing milling head and rotary table tailstock design



FHSM-5XA



### SPECIFICATIONS

#### FHSM-5XA

X / Y / Z linear axis	1020 / 610 / 810 mm
B-Rotary head axis	+30°-120°
A-rotary table	0.001° x 360,000
Rotary table type	add on main plain table
Rotary table-size / T slot / loading cap	250 ~ 320 mm Dia. / 12 H7 / 250 kgs with tailstock
Rotary table speed / hydraulic pressure	16.6 rpm / 50 kg / cm <sup>2</sup>
Rotary table center bore	40 H7
Spindle to column cover	629 mm
Spindle motor power & Torque	29.3 / 35 kw or 70/160 Nm
Spindle taper / speed	BT40-14000 rpm ~ 24000 rpm (opt.)
Rapid feed-cutting feed	36/36/24 m/min - 1-20000 mm/min
ATC-Type/No.of tool	Swing arm with 430mm travel-/32 tools (opt. 40 tools)
Machine net weight	9000 kgs

## FREJOOTH 5 AXES VERTICAL MACHINING CENTER ( 2 axis Trunnion table )



HSM-250U



HSM-400U



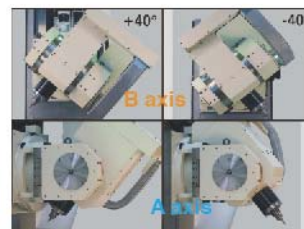
### SPECIFICATIONS

		HSM-250U	HSM-400U
X / Y / Z linear axis		610 / 400 / 510 mm	800 / 610 / 510 mm
B axis tilting table		-30 deg. ~ +120 deg.	-42 deg. ~ +120 deg.
C axis rotary table		360 degree	
Spindle motor / taper / front bearing diameter		7.5 / 11 (~22/26) kw / BT# 40 / 70 mm	
Max. spindle speeds		8000 ~ 30000 rpm	8000 ~ 30000 rpm
Spindle nose to table top		72 ~ 582 mm	130 ~ 640 mm
Tilting rotary table - Dimension / loading (0°/tilting)		255 mm / 100 / 50 kgs	600 x 365 mm / 200 / 100 kgs
Indexing increment		0.001 degree	
Feed rate	X / Y / Z rapid/cutting feed	30 / 30 / 24 M / min - 8 M / min	
	Rapid - B / C	25 / 25 rpm	
Transmission - X / Y / Z - B / C		40, 40, 50 mm dia. C3 - worm gear	
ATC		24 (32, 40) arm type	
Net weight		5500 kgs	7800 kgs

## FREJOOTH 5 AXIS MACHINING CENTER : ±40° ultra High Speed Spindle (A,B axes)



CH5-3000



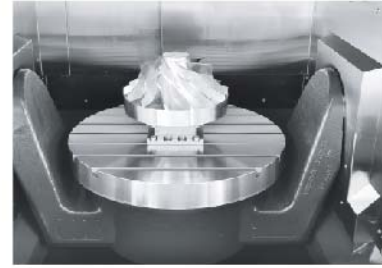
### SPECIFICATIONS

		CH5-3000
X / Y / Z / A / B axis travel		3000 / 1000 / 750 mm A, B AXIS : - 40 + 40 DEGREE
Table size / T slot (no. x width x distance)		3250 x 800 mm / 5 x 18 x 150 mm
Table loading		3000 kgs
Spindle motor / taper / spindle speeds		25 / 30 kw, 7 / 24 Taper, no.50, 12000 rpm
Spindle rotating feed rate		2000 degree / min
Spindle nose to table		100 ~ 850 mm
Feed rate	X / Y / Z rapid / cutting feed	20 / 20 / 10 M/min / 1-10000 mm/min
	Jog feed rate	1260 mm / min
Transmission - X / Y / Z		4 / 4 / 9 kw
ATC		arm 32 pcs
Net weight		28000 kgs

## FREJOTH 5 AXES MACHINING CENTER - Trunnion table



LU-1200



### SPECIFICATIONS

#### LU-1200

X / Y / Z axis	1100 / 1370 + 380 / 800 mm
Spindle nose to worktable	150 ~ 950 mm
Working table size / loading capacity	dia. 1150 x 900 W / 2000 kgs
Rapid feed rate - X / Y / Z	48 / 48 / 48 M / min
Cutting feed rate - X / Y / Z	0.001 - 20 M / min
Rapid feed rate - A / C axis	26 / 50 rpm
C axis rotating range	360 degree
A axis rotating range	±120 degree
Spindle drive method	Direct drive (opt. built-in)
Max spindle speed	8000 rpm
Spindle power	27 kw
Spindle taper / torque	BBT50 / 400 Nm
ATC system / number of tools	24 pcs Drum
Machine net weight	32000 kgs

## FREJOTH 5 AXES MACHINING CENTER GANTRY TYPE



GVM-800



### SPECIFICATIONS

		GVM-800 Milling	GVM-800 Milling turning
Travel	X / Y / Z axis	800 / 900+330 / 620 mm	
Rotary table tilt A axis	Maximum rotation	50 rpm	25 rpm
	Tilt angle	± 125°	± 135°
Rotary table tilt C axis	Table dimension	Ø800 mm	
	Maximum loading	1200 kg	
Motor spindle	Maximum spindle speed	18000 rpm	10000 rpm
	Spindle power S1 / S6	26 / 32 kw	27 / 31 kw
	Spindle taper	HSK - A63	HSK - T63
Ball screws	X / Y / Z diameter x pitch	Ø50 / 50 x 2 / 50 mm x 16 mm FDC, oil thru cooled	
X / Y / Z axis roller guide	Width	55 / 55 / 45 mm	
	Runner blocks number	4 / 4 / 4	
Feed rate	Rapid feed X / Y / Z	48 / 48 / 48 M / min.	
	Cutting feed	20 M / min.	
ATC	Tool holder type	HSK - A63	HSK - T63
	Tools number	32 (40, 64, 80, 120)	
Weight	Before packing	24 tons	25 tons

## FREJOTH 5 AXES MACHINING CENTER-rotary table ( B, C axis )



LU-800



### SPECIFICATIONS

	LU-800A	LU-800B
X / Y / Z axis	800 / 900 + 330 / 620 mm	760 / 900 + 330 / 620 mm
Spindle nose to worktable	100 ~ 720 mm	75 ~ 695 mm
Working table size / loading capacity		800 mm dia. / 1000 kgs
Rapid feed rate - X / Y / Z		48 / 48 / 48 M / min.
Cutting feed rate - X / Y / Z		0.001 ~ 20 M / min.
A Axis rotating range		+ / - 120 degree
C Axis rotating angle		360 degree
A / C Axis Max. speed		75 rpm / 100 rpm
Spindle drive method	Direct drive : (Opt. Built-in)	Two stage gear box (Opt. Built-in)
Max spindle speed	12000 rpm	8000 rpm
Spindle power (Cont. / 30 min.)	17 / 20.4 kw	18 / 21 kw
Spindle taper / max torque	#40 BBT	#50 BBT
ATC system / number of tools	arm 32	arm 24
Machine net weight	21000 kgs	21000 kgs

## FREJOTH 5 AXES MACHINING CENTER-rotary table ( B, C axis )



LU-620



LU-400



### SPECIFICATIONS

	LU-400	LU-620
X / Y / Z axis travel	400 / 350 / 350 mm	620 / 520 / 460 mm
Spindle nose to worktable	150 ~ 500 mm	150 ~ 610 mm
Working table size	450 mm dia.	650 mm dia.
Table loading capacity	150 / 200 kgs (90 degree / Horizontal)	200 / 300 kgs (90 degree / Horizontal)
Rapid feed rate - X / Y / Z	48 / 48 / 48 M / min.	36 / 36 / 36 M / min.
Cutting feed rate - X / Y / Z		1 ~ 20000 mm / min.
B Axis tilting range		-50° ~ +110°
C Axis rotating angle		360 degree
B / C Axis Max. speed		25 rpm / 25 rpm
Spindle drive method		Direct drive
Max spindle speed		12000 rpm
Spindle power (Cont. / 30 min.)	5.5 / 7.5 kw (Fanuc)	18 / 21 kw (Siemens)
Spindle taper	#40 BBT	#40 BBT
ATC system / number of tools	arm 30 T	arm 32 T
Machine net weight	6000 kgs	8800 kgs

## FREJOTH 5 AXES MACHINING CENTER - Mill / Turn function



TM-2500



1<sup>st</sup> Turning Spindle + W-Axis Tailstock



1<sup>st</sup> Turning Spindle + 2<sup>nd</sup> Turning Spindle

### SPECIFICATIONS

	TM-2500
Max rotating radius	ø 530 mm
Max machining dia / length	ø 500 / 500 mm
Max rod diameter	ø 65 mm
X / Y / Z / W axis travel	560 / ±125 / 560+93 / 910 mm
B / C axis rotating angle	-20° ~ 200° / 360°
X / Y / Z / W rapid feedrate	40 / 40 / 40 / 8 mm
B / C axis feed rate	25 / 250 rpm
Turning spindle speed / power	4500 rpm / 11 / 15 kw
Chuck / nose / hole diameter	8" / A2-6 / ø75 mm
Milling spindle speed / power	12000 rpm / 11 / 22 kw
B axis indexing angle	0.001°
Tool indexing angle / position	90° / 4 positions
Tool type / no.	HSK-63T / 36 pcs
Max. tool dia. / length / weight	ø 90 (125 mm no adjacent tool) / 250 mm / 8 kg
Quill type tailstock	MT 5
Machine height / occupancy / weight	2715 mm / 2947 x 2820 mm / 6500 kgs

## FREJOTH 5 AXIS HIGH SPEED DRILLING & TAPPING CENTER



ADT-A5X403



ADT-A5X404



### SPECIFICATIONS

	ADT-A5X403	ADT-A5X404
Travel - X / Y / Z axis	400 x 500 x 400 mm	400 x 500 x 450 mm
Spindle nose to table	30 ~ 430 mm	40 ~ 490 mm
Spindle speed	BT30 10000 rpm	BT40 8000 rpm
Min. indexing precision of C axis rotary	0.001 degree	0.001 degree
Cumulative indexing precision of C axis	15 sec	15 sec
C axis repeatability accuracy	4 sec	6 sec
Slope angle of A axis	±110 degree	+120 / -40 degree
Cumulative indexing precision of A axis	60 sec	45 sec
A axis repeatability accuracy	8 sec	8 sec
Max. Speed for A, C axis	33.3 rpm	13.3 / 22.2 rpm
3 axes rapid traverse	48 / 48 / 48 m / min	48 / 48 / 48 m / min
Spindle motor	5.5 / 3.7 kw	7.5 / 5.5 kw
X / Y / Z / A / C motor	1.6 / 1.6 / 3 / 1.6 / 1 kw	1.6 / 1.6 / 3 / 4 / 1.6 kw
ATC - taper / No / type	BT30 20+1 Arm type	BT40 24+1 Arm type
Table size / loading cap	Ø255 mm / 50 kgs	Ø250 / Ø320(OP) mm / 75 kgs
Net weight	3900 kgs	4300 kgs



ADVM-4025



VH-5F



VH-1 / VH-2.5



ORT-2.5



HT



M21



M21U

**SPECIFICATIONS**

	ADVM-2017	ADVM-3017	ADVM-2021	ADVM-3021	ADVM-3025	ADVM-4021	ADVM-4025	ADVM-4030	ADVM-4035
X axis	2200 mm	3200 mm	2150 mm	3200 mm	3200 mm	4200 mm	4200 mm	4200 mm	4200 mm
Y axis	1750 mm	1750 mm	2200 mm	2200 mm	2600 mm	2200 mm	2600 mm	3100 mm	3600 mm
Z axis	700mm (Opt. 900/1100/1300mm)								
Between two column	1750 mm	1750 mm	2130 mm	2130 mm	2530 mm	2130 mm	2530 mm	3030 mm	3530 mm
Spindle nose to table	Standard long nose-130~830 mm (Opt. 130~1030/130~1230/130~1430 mm) Opt. short nose-240~940 mm (Opt. 240~1140/240~1340/240~1540 mm)								
Table size-mm	2000 x 1600	3000 x 1600	2000 x 1700	3000 x 1700	3000 x 2100	4000 x 1700	4000 x 2100	4000 x 2600	4000 x 3100
Max. loading cap.-ton	6 Ton	8 Ton	8 Ton	11 Ton	14 Ton	13 Ton	16 Ton	20 Ton	24 Ton
Ram size	380 mm x 380 mm (Opt. 420 mm x 420 mm)								
Spindle taper and power	BT50(DIN69817)-(CAT50)								
Rapid feed	15 / 15 / 10 (15) M / min.					10 / 15 / 10 (15) M / min			
ATC-No. / dia. / length	Tools- 24 / 40 / 60 / 120 / 180-110 dia x 350 L								
Net weight	22 Ton	26 Ton	24 Ton	28 Ton	30 Ton	35 Ton	38 Ton	42 Ton	44 Ton
	<b>ADVM-5021</b>	<b>ADVM-5025</b>	<b>ADVM-5030</b>	<b>ADVM-5035</b>	<b>ADVM-6030</b>	<b>ADVM-6035</b>			
X axis	5200 mm	5200 mm	5200 mm	5200 mm	6200 mm	6200 mm			
Y axis	2200 mm	2600 mm	3100 mm	3600 mm	3100 mm	3600 mm			
Z axis	700 mm (Opt. 900/1100/1300 mm)								
Between two column	2130 mm	2530 mm	3030 mm	3530 mm	3030 mm	3530 mm			
Spindle nose to table	Standard long nose-130~830 mm (Opt. 130~1030/130~1230/130~1430 mm) Opt. short nose-240~940 mm (Opt. 240~1140/240~1340/240~1540 mm)								
Table size-mm	5000 x 1700	5000 x 2100	5000 x 2600	5000 x 3100	6000 x 2600	6000 x 3100			
Max. loading cap.-ton	15 Ton	18 Ton	21 Ton	25 Ton	23 Ton	28 Ton			
Ram size	380 mm x 380 mm (Opt. 420 mm x 420 mm)								
Spindle taper and power	BT50(DIN69817)-(CAT50)								
Rapid feed	10(12) / 10(12) / 10(12) M / min								
ATC-No. / dia. / length	Tools- 24 / 40 / 60 / 120 / 180-110 dia x 350 L								
Net weight	44 Ton	49 Ton	53 Ton	56 Ton	70 Ton	75 Ton			



# FREJOTH ADM CNC DOUBLE COLUMN MACHINING CENTER (3 LINEAR GUIDE WAYS)

ADM -  $\frac{XX}{A}$   $\frac{XX}{B}$  A ( x 100 mm ) : X Axis Travel  
B ( x 100 mm ) : Distance Between Columns



ADM-4228

( ) : As Option

\*Specifications are subject to change without prior notice.

## SPECIFICATIONS

		ADM-4228	ADM-5228	ADM-6228	ADM-4232	ADM-5232	ADM-6232	ADM-7232	ADM-4236	ADM-5236	ADM-6236	ADM-7236	
Table	Table size	4000 x 2500 mm	5000 x 2500 mm	6000 x 2500 mm	4000 x 2900 mm	5000 x 2900 mm	6000 x 2900 mm	7000 x 2900 mm	4000 x 3000 mm	5000 x 3000 mm	6000 x 3000 mm	7000 x 3000 mm	
	T-slots	22 mm											
	Maximum load	16 tons	20 tons	24 tons	16 tons	20 tons	24 tons	24 tons	16 tons	20 tons	24 tons	24 tons	
Travel	X axis	4200 mm	5200 mm	6200 mm	4200 mm	5200 mm	6200 mm	7200 mm	4200 mm	5200 mm	6200 mm	7200 mm	
	Y axis	3200 mm		3600 mm		4000 mm							
	Z axis	800 (1000, 1200) mm											
Spindle	Spindle servo motor ( Cont / 30 min ) speed	15 / 18.5 (22 / 26) kw											
	Taper	4000 (6000) mm											
		7/24 taper No.50, BT-50											
Distances	Between two Columns	2800 mm			3200 mm				3600 mm				
	Spindle nose to Table center	200 ~ 1000 (200 ~ 1200, 200 ~ 1400) mm											

# FREJOTH ADM CNC DOUBLE COLUMN MACHINING CENTER (2 LINEAR GUIDE WAYS)

ADM -  $\frac{XX}{A}$   $\frac{XX}{B}$  A ( x 100 mm ) : X Axis Travel  
B ( x 100 mm ) : Distance Between Columns



ADM-3221

( ) : As Option

\*Specifications are subject to change without prior notice.

## SPECIFICATIONS

		ADM-2216	ADM-3216	ADM-4216	ADM-2221	ADM-3221	ADM-4221	ADM-5221	ADM-3226	ADM-4226	ADM-5226		
Table	Table size	2000 x 1400 mm	3000 x 1400 mm	4000 x 1400 mm	2000 x 1800 mm	3000 x 1800 mm	4000 x 1800 mm	5000 x 1800 mm	3000 x 2200 mm	4000 x 2200 mm	5000 x 2200 mm		
	T-slots	22 mm											
	Maximum load	6 tons	9 tons	10 tons	8 tons	10 tons	12 tons	15 tons	12 tons	14 tons	18 tons		
Travel	X axis	2200 mm	3200 mm	4200 mm	2200 mm	3200 mm	4200 mm	5200 mm	3200 mm	4200 mm	5200 mm		
	Y axis	1600 mm		2100 mm		2600 mm							
	Z axis	800 (1000, 1200) mm											
Spindle	Spindle servo motor ( Cont / 30 min ) speed	15 / 18.5 (22 / 26) Kw											
	Taper	4000 (6000) rpm											
		7/24 taper No.50, BT-50											
Distances	Between two Columns	1600 mm			2100 mm				2600 mm				
	Spindle nose to Table center	200 ~ 1000 ( 200 ~ 1200, 200 ~ 1400) mm											

## FREJOTH ADM CNC DOUBLE COLUMN MACHINING CENTER



ADM-3212

### SPECIFICATIONS

( ): As Option  
\*Specifications are subject to change without prior notice.

		ADM-2212	ADM-3212
Travel	X axis	2200 mm	
	Y axis		1200 mm
	Z axis		760 mm
Distances	Spindle nose To table surface		200 ~ 960 mm
	Between two column		1300 mm
Table	Table size	2000 x 1100 mm	3000 x 1100 mm
	T - slots		22 mm
	Maximum load	3500 kgs	4500 kgs
Spindle	Spindle servo motor ( Cont / 30 min )		11 / 15 (22 / 26) kw
	speed (gear type )		6000 rpm
	taper		7 / 24 Taper ISO.50, BT-50

## FREJOTH ADM CNC DOUBLE COLUMN MACHINING CENTER



ADM-1422/1432

### SPECIFICATIONS

		ADM-1422	ADM-1432
Dis. Between column		1400 mm	
Table size - length		2000 mm	3000 mm
Table size - width		1200 mm	
Table loading capacity		8 Ton	10 Ton
Travels - X / Y / Z		2200 / 1300 / 800 mm	3200 / 1300 / 800 mm
Spindle taper		BT 40 (BT50)	
Spindle power / speed		20Kw - BT40 / 15000 rpm BT50 / 10000 rpm	
Spindle nose to table top		100 ~ 900 mm	
X / Y / Z rapid feed		25M / 25M / 25M / min	
X / Y / Z cutting feed		15 M / min	
ATC		Arm Type 24 Tools	
Machine weight		20 Ton	25 Ton



**CBFP-160CNC**



- Range :
- X – 4M ~ 20 M, every 2 M modular
- Y – 2M ~ 4M, every 0.5 M modular
- Z – 1.2 M
- A – ±180°
- B – up to 3M rotary table
- C – ±360°
- V – 1.5M ~ 3M, every 0.5 M modular
- W – 0.7M or 1M

## SPECIFICATIONS

		CBFP-160CNC
Axis Travel	X – column right & left	4M, 6M, 8M, 10M, 12M, 14M, 16M, 18M, 20M
	Y – spindle head up & down	2M, 2.5M, 3M, 3.5M, 4M
	Z – ram forward & backward	1.2M
	W – quill forward & backward	0.7M
Guide ways Dimension	X – column right & left	2 x 65 mm rails, total 10 runner blocks
	Y – spindle head up & down	2 x 65 mm + 2 x 45 mm rails, total 8 runner blocks
	Z – ram forward & backward	4 x 45mm rails, total 8 runner blocks
	W – quill forward & backward	2 x 20mm rails, total 4 runner blocks
Axis Transmission	X axis	Ball screw Rack pinion
	Y axis	Ball screw
	Z axis	Ball screw
	W axis	Ball screw
Feed rate	Rapid X / Y / Z / W axis	20M / 20M / 10M / 5M per minute
	Cutting X / Y / Z / W feed	10M / 10M / 8M / 5M per minute
	Minimum setting	0.001 MM
Castings Dimension L / W / H	X axis machine bed	X axis travel + 5300 mm / 1373 mm / 420 mm
	Y axis machine column	1200 mm / 1710 mm / Y axis travel + 3355 mm
	Z axis sliding ram	3500 / 460 / 520 mm
Boring Spindle (W axis)	Diameter	160 mm dia
	Taper & speed	BT#50 & 3000 RPM
	Power	37 & 45KW(Fanuc) / 37 & 51KW(Siemens)
	Torque (2 gearboxes)	3300 Nm maximum at 180 RPM
Automatic tool changer (optional)	Tools number	40, 60, 90, 120 stations
	Max. tool dia. / length / weight	Ø 150 mm / 300 mm / 25 kg
	Location	fixed on traveling column
CNC	Brands	Fanuc, Heidenhain, Siemens

### Optional milling heads :



EXT



EXT90



HF50



VAR3



VH2.5



ORT



M21U

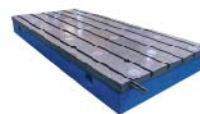


M21F



M21F with automatic head change

### Various optional tables available :



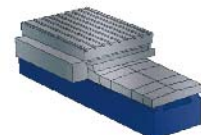
Floor plate



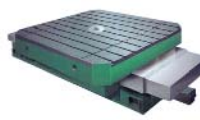
Angle plate



Rotary table



Sliding table



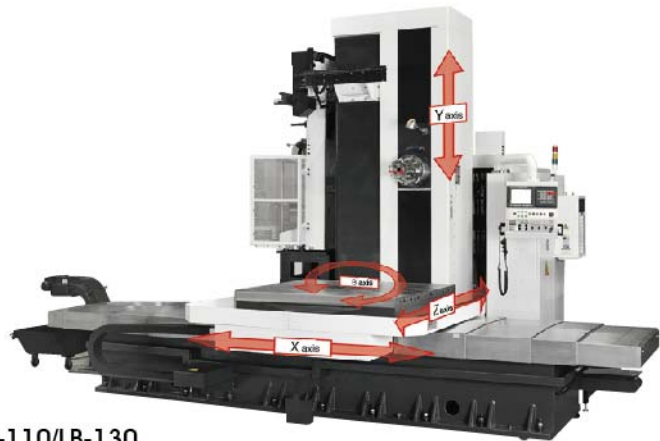
Rotary & sliding table



Rotary & sliding & tilting table



LB-110/LB-130



## SPECIFICATIONS

	LB-110	LB-130
Boring spindle diameter	110 mm	130 mm
X axis travel (table longitudinal travel)	3000 mm	4000 (3000) (5000) mm
Y axis travel (spindle head travel)	2100 mm	2500 (3000) mm
Z axis travel (table cross travel)	1500 mm	1800 mm
W axis travel (spindle stroke)	500 mm	800 mm
Table size	1440 x 1600 mm	1800 x 2000 mm
Table loading	8 ton	15 ton
Table indexing	0.001 degree	0.001 degree
X Y Z rapid traverse	10 m / min	21 m / min
W rapid traverse	4 m / min	4 m / min
Spindle motor	22 / 26 kw	30 / 37 kw

## FREJOTH CNC BED TYPE UNIVERSAL MILLING MACHINE



FBE-2600



Versatile various milling head :



## SPECIFICATIONS

	FBE-1500	FBE-2000	FBE-2600	FBE-3000	FBE-4000
X axis	1500 mm	2000 mm	2600 mm	3000 mm	4000 mm
Y / Z axis	1000 mm / 950 mm (opt 1500 mm)				
Table size	1600 x 1050 mm	2100 x 1050 mm	2700 x 1050 mm	3100 x 1050 mm	4100 x 1050 mm
Table loading capacity	3000 kgs	5000 kgs	6000 kgs	8000 kgs	9000 kgs
T slot	22 H8 x 7 slots				
<b>Horizontal spindle (W / O vertical heads VH - 5 / VH - 2.5 / VH - 1 heads)</b>					
Taper and speed	DIN 69871 #50 / 3500 (5000) rpm				
output 40% duty cycle / constant output	25 kw / 17 kw				
Max. torque	650 Nm				
<b>Universal milling head - standard manual head - B axis and C axis are manual</b>					
Taper / speed	DIN 69871 #50 / 3500 rpm				
output 40% duty cycle / constant output	25 kw / 17 kw				
Max. torque	650 Nm				
Feedrate rapid / cutting	10 m / min / 1 - 5000 mm / min				
<b>24 station swing arm type ATC as option</b>					
Net weight	11000 kgs	14000 kgs	15000 kgs	18000kgs	23600kgs

# FREJOTH HORIZONTAL BORING, MILLING & DRILLING MACHINE-Column Moveable type



CBFK-110CNC

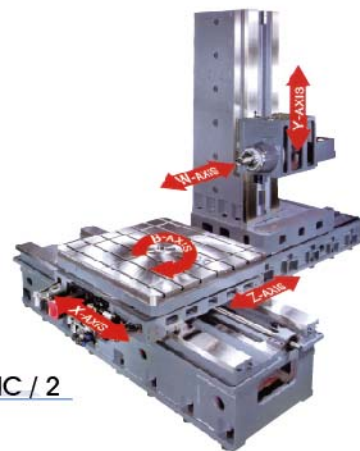
## SPECIFICATIONS

	CBFK - 110CNC
Spindle diameter	110 mm
X axis	2000 mm (Opt. 3000 mm)
Y / Z axis	1500 / 1400 mm
W axis	550 mm
Table size / loading capacity	1500 x 1200 mm / 5000 kgs
T - slot	22H8 x No.7 x 150 mm
B axis	0.001 deg. / Every 90 deg. With locating Pin.
B axis rapid feed	2 rpm
Spindel nose to table center	-30 ~ 1920 mm
Spindle center to table top	0 ~ 1500 mm
Spindle taper	BT50
Spindle motor / Max. torque	22 / 26 kw / 135 kg - m
Spindle speed	L : 5 ~ 625 rpm H : 626 ~ 2500 rpm
Rapid feed - X / Y / Z / W axis	10 / 10 / 10 / 5M / min.
Feed rate - X / Y / Z axis	1 ~ 6000 mm / min.
Feed rate - W axis	1 ~ 4000 mm / min.
ATC	60 tools
X / Y / Z / B / W axis motor	6 / 6 / 6 / 7 / 7 kw
Net weight	24000 kgs

# FREJOTH AHORIZONTAL BORING, MILLING & DRILLING MACHINE-Column Moveable type



CBFK-110CNC / 2



## SPECIFICATIONS

	CBFK-110CNC / 2	CBFK-130CNC
Boring spindle diameter	110 mm	130 mm
X axis travel (table longitudinal)	2000 Opt. - 2500 / 3200 mm	3200 / 4200 mm
Y axis travel (spindle vertical)	2000 Opt. 2500 mm	2500 Opt. - 3000 mm
Z axis travel ( table cross)	1700 mm	2000 mm
W axis travel (spindle axial)	550 mm	700 Opt. - 900 mm
Distance from table to spindle center	0 ~ 2000 Opt. - 2500 mm	0 ~ 2500 Opt. - 0 - 3000 mm
Table top profile	24 mm x 7 T - slot	28 mm x 9 T - slot
Table auto indexing	0.001 deg	0.001 deg
Rapid traverse-X-Y-Z	10 M / min	10 M / min
Rapid traverse-W	10 M / min	6 M / min
Cutting feedrate-X-Y-Z	1 ~ 5000 mm / min	
Spindle motor	15 / 18 kw Opt. 22 / 26 kw	

# FREJOTH HORIZONTAL BORING, MILLING & DRILLING MACHINE - Table Type



CBFT-110CNC/1

## SPECIFICATIONS

	CBFT-110CNC/1
X / Y / Z axis	2000 / 1400 / 1150 mm
W axis	500 mm
Table size / loading capacity	1000 x 1000 mm / 3000 kgs
T - Slot	22 mm x No.9 x 100 mm
Table indexing	1 deg. x 360
Spindle nose to table center	-175 ~ 1475 mm
Spindle center to table top	0 ~ 1400 mm
Spindle diameter	110 mm
Spindle taper	BT50
Spindle motor / Max. torque	22 / 26 kw / 135 kg-m
Spindle speed	2 range - (auto) - L - 5 ~ 625 rpm / H - 626 ~ 2500 rpm
Rapid feed - X / Y / Z / W axis	15 / 12 / 15 / 5 M / min
Feed rate - X / Y / Z axis	1 - 6000 mm / min
Feed rate - W axis	1 - 4000 mm / min
ATC	60 tools
X / Y / Z / B / W axis motor	7 / 6 / 7 / 4 / 7 kw
Net weight	21000kgs

# FREJOTH HORIZONTAL BORING, MILLING & DRILLING MACHINE - Table Type



CBFT-110CNC



## SPECIFICATIONS

	CBFT-110CNC/2	CBFT-110CNC
X / Y / Z axis travel	2000 / 1800 / 1400 mm	2000 / 1800 / 1400 mm
W axis travel	400 mm (500 mm)	400 mm (500 mm)
Table size / loading capacity	1250 x 1250 mm / 5000 kgs	
T - Slot	22 x 7 mm	
Table indexing	360 deg	0.001 deg
Spindle center to table	0 ~ 1800 mm	
Spindle nose to table center	90 ~ 1890 mm	90 ~ 1890 mm
Spindle diameter	110 mm	110 mm
Spindle taper	7 / 24 taper ISO50 , BT50	
Spindle motor	15 / 18.5 kw (22 / 26 kw)	
Spindle speed	10 ~ 2500 rpm (3000 rpm)	
Rapid feed - X / Y / Z / W axis	12 / 12 / 12 / 10 M / min	
Cutting feedrate - X / Y / Z axis	1 - 5000 mm / min	
ATC	40 tools (60 tools)	
X / Y / Z / B / W axis motor	4 / 4 / 4 / 4 / 4 kw	4 / 4 / 4 / 7 / 4 kw

# FREJOOTH CNC HORIZONTAL MACHINING CENTER



EBM-2150



## SPECIFICATIONS

	EBM-1000	EBM-2150	EBM-2600	EBM-3200
X / Z axis	1400 / 1000 mm	2150 / 1100 mm	2600 / 1100 mm	3250 / 1100 mm
Y axis	1200 (1400) mm	1400 mm	1400 mm	1400 mm
Table size	1500 x 710 mm	2200 x 1220 mm	2650 x 1220 mm	3250 x 1220 mm
Table Max. loading cap	1500 kgs	4000 kgs	4500 kgs	5000 kgs
T - slot	18 x 6 x 125 mm	22 x 7 x 125 mm	22 x 7 x 125 mm	22 x 7 x 125 mm
Spindle nose to table edge	246.5 ~ 1246.5 mm		- 249 ~ 930 mm	
Spindle nose to column surface	250 mm		249 mm	
Spindle center to table top	250 ~ 1450 mm		190 ~ 1590 mm	
Spindle taper and speed	BT50 - 4000 rpm (opt 6000 rpm)			
Spindle motor	15 kw			
X / Z axis motor - Nm	22 / 22 Nm	27 / 27 Nm	27 / 50 Nm	70 / 70 Nm
Y axis motor - Nm	22 Nm with brake	27 Nm with brake		
ATC type / number	swing arm type 32 tools (opt 40 / 60 tools)			
Net weight	15000 kgs	21000 kgs	23000 kgs	25000 kgs

# FREJOOTH HORIZONTAL MACHINING CENTER - without "W" axis



AHM-630



AHM-800



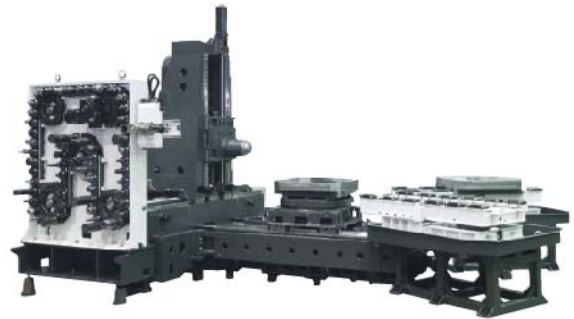
## SPECIFICATIONS

	AHM-630	AHM-800
X / Y / Z axis	1500 (1600) / 1200 / 1000 (1100) mm	2000 / 1500 (1800) / 1400 (1600) mm
Spindle nose to table center	225 ~ 1225 mm (175 ~ 1175 mm)	220 ~ 1620 mm (220 ~ 1820 mm)
Spindle center to table surface	0 ~ 1200 mm	0 ~ 1500 mm (1800 mm)
Table size / loading capacity	630 x 630 mm / 2000 (2500) kgs	800 x 800 mm / 4000 kgs
Table indexing unit	1 deg. / 360	1 deg. / 360
Spindle taper / speeds	BT 50 / 4000 rpm (6000 rpm)	
Spindle motor	11 / 15 kw (15 / 18.5 kw)	15 / 18.5 kw
Rapid feed rate	15 / 12 / 15 M / min.	
Cutting rate	1 ~ 5000 mm / min.	
ATC	40 tools (60 tools)	
Net weight	11000 kgs	14500 kgs

## FREJOTH HORIZONTAL MACHINING CENTER W / PALLET CHANGE



MH-1250B/1250P



### SPECIFICATIONS

	MH-1250B	MH-1250P
Travel - X / Y / Z	2100 / 1235 / 1235 mm	
Spindle center to pallet surface / center	100 - 1335 / 280 - 1480 mm	
Rotary pallet size / number / loading	1250 x 1250 / 2 / 3500 kgs / 5000 kgs (for P)	
Pallet indexing / surface configuration	1 degree / 80 - M 20 tapped	
Max. work piece size - dia / height	dia 2000 / 1500 mm	
Spindle taper / speed	BT50 / 6000 rpm	
Max. torque with 2 speed gearbox	660 N/m	
ATC number	60 / opt 90 - 120	
Spindle bearing I.D	100 mm	
X / Y / Z rapid / cutting feed rate	24 m/min / 10 m/min	
Spindle motor	22 / 26 kw	
X / Y / Z / B axis motor	7 / 6 / 7 / 3 kw	
Net weight	32 ton	35 ton

## FREJOTH HORIZONTAL MACHINING CENTER W / PALLET CHANGE



MH-800A



### SPECIFICATIONS

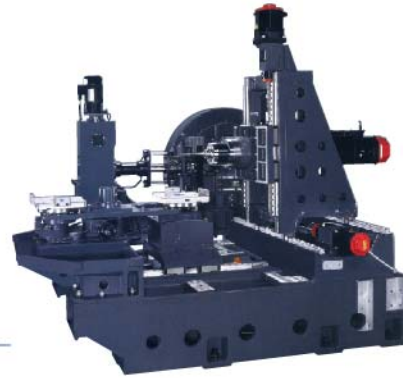
	MH-550A	MH-550B	MH-800A	MH-800B	MH-1000B
Travel - X / Y / Z	700 / 650 / 650 mm		1000 / 850 / 950 mm		1300 / 1200 / 1200 mm
Spindle center to pallet surface / center	50 - 700 / 150 - 800 mm		60 - 910 / 150 - 1100 mm		80 - 1280 / 200 - 1400 mm
Rotary pallet size / number / loading	550 x 550 / 2 / 700 kgs		800 x 800 / 2 / 1000 kgs		1000 x 1000 / 2 / 2000 kgs
Pallet indexing / surface configuration	1 degree (opt 0.001 deg) 24 - M16 tapped				48 - M20 tapped
Max. work piece size / height	dia. 700 / 800 mm		dia. 1000 / 1000 mm		dia. 1300 / 1300 mm
Spindle taper / speed	BT40 - 10000 rpm BT50 - 6000 rpm		BT40 - 10000 rpm BT50 - 6000 rpm		BT50 - 6000 rpm
Max. torque with 2 speed gearbox	660 N/m (opt)				
ATC number	60 tools	40 (opt 60)	60 tools	40 (opt 60)	60 (opt 90 / 120)
Spindle bearing I.D	70 mm	100 mm	70 mm	100 mm	100 mm
X / Y / Z rapid / cutting feed rate	36 m/min / 10 m/min		32 m/min / 10 m/min		32 m/min / 10 m/min
Spindle motor	15 / 18.5 kw		22 / 26 kw		22 / 26 kw
X / Y / Z / B axis motor	7 / 7 / 4 / 1.6 kw		7 / 7 / 7 / 1.6 kw		7 / 6 / 7 / 3 kw
Net weight	15 ton	15 ton	18.5 ton	18.5 ton	28.5 ton



# FREJOTH HORIZONTAL MACHINING CENTER



LH-300/300A



## SPECIFICATIONS

	LH-300	LH-300A
Travel - X / Y / Z	460 / 460 / 350 mm	
Spindle center to worktable surface	60 ~ 520 mm	
Spindle nose to worktable center	60 ~ 410 mm	
Table size / loading cap. / number	300 x 300 mm / 250 kgs / 2 piece	
Workpiece height / worktable layout	475 mm / 8 - M12 Pitch 100	
Working table indexing	0.001 deg.	
Spindle taper / speed	BT30 - 15000 rpm	BT40 - 12000 rpm
Spindle transmission / torque	direct drive - 70 Nm	
Spindle motor	7.5 / 11 kw	
Rapid feed X / Y / Z	48 / 48 / 48 M / min	
Cutting feed	1 - 12000 mm / min.	
ATC	30 tools	30 tools
Net weight	6000 kgs	6300 kgs

# FREJOTH VERTICAL MACHINING CENTERS - HEAVY CUTTING CAPACITY

- 4 box ways & gear head



FMV-1590



## SPECIFICATIONS

	FMV-1170	FMV-1370	FMV-1470	FMV-1590	FMV-1790	FMV-2090
X / Y / Z axis	mm 1100 / 710 / 600	1300 / 710 / 600	1400 / 710 / 600	1500 / 900 / 850	1700 / 900 / 850	2000 / 900 / 850
Table size	mm 1300 x 700	1500 x 700	1600 x 700	1700 x 850	2000 x 850	2200 x 850
Table loading capacity	kgs 1000	1200	1500	2000	2500	3000
Spindle nose to table surface	mm 100 ~ 710	100 ~ 710	100 ~ 710	150 ~ 1000	150 ~ 1000	150 ~ 1000
Spindle taper / speeds	rpm	ISO 50 (40) / 6000 (8000) Low Speed 40 ~ 1750, High Speed 1751 ~ 8000				
Spindle motor	kw	7.5 / 11 (11 / 15)			11 / 15 (15 / 18.5)	
Spindle transmission method		Gear (Belt)				
ATC	tools	Random 20 (24, 32)				
Rapid feed X / Y / Z	m/min	20 / 20 / 16			16 / 16 / 12	
Cutting feed	mm/min	10000			80000	
Net weight	kgs	9000	10000	11000	14000	15000
				16000		

# FREJOTH HIGH SPEED BRIDGE TYPE VERTICAL MACHINING CENTER



ABM-1500



## SPECIFICATIONS

		ABM-1000	ABM-1500	ABM-2000
Table	Overall size	1220 x 600 mm	1600 x 1000 mm	2100 x 1600 mm
	T - slot	18 x 5 x 100 mm	18 x 7 x 125 mm	22 x 9 x 180 mm
	Maximum loading	1500 kgs	3000 kgs	6000 kgs
Travel	X axis	1100 mm table in & out	1750 mm head left & right	2200 mm table in & out
	Y axis	600 mm head left & right	1000 mm table in & out	1750 mm head left & right
	Z axis	500 mm head up & down	750 mm head up & down	650 mm head up & down
Distance	Between 2 columns	700 mm	1750 mm	
	Spindle to table top	45 ~ 545 mm	107 ~ 857 mm	254 ~ 904 mm
Spindle (built - in motor spindle)	Motor	18 / 25 KW	26 / 32 KW	35 KW
	Taper	HSK-A63 (BT#40)		
	Speed	24000 RPM	18000 RPM UP TO 24000 RPM	18000 RPM
Feed rate	Cutting	UP TO 10 M / min	UP TO 20 M / min	
	Rapid X / Y / Z	36 / 36 / 36 M / min	30 / 30 / 30 M / min	24 / 30 / 30 M / min
	Minimum setting	0.001 mm		
Accuracy	Machine net weight	11000 kgs	15000 kgs	20000 kgs

# FREJOTH UNIVERSAL MACHINING CENTER ROTARY TABLE TYPE

Options :



- VH-2.5 Head with automatic 2.5 degree index 2 axis milling head, total 144 x 144 positions.



- Ø2000 / 2500 / 3000mm rotary tables, with 3 jaw manual chuck & 3 extra loading tracks etc.



YZC-1650



## SPECIFICATIONS

		YZC-1650
Y axis	milling head forward & backward by sliding ram	1000 mm
Z axis	milling head up & down by sliding saddle	952 mm
C axis	rotary table size / loading capacity	1650 mm dia / 8000 kgs
	indexing increment	0.001° x 360000 positions
	table T - slot	radial type 12 slots 22 mm H7
V / H milling head	Max. speed	3500 rpm
	spindle power S1 / S6	17 kw / 22 kw
	spindle taper	BT50
	front bearing diameter	90 mm
	V to H position time	12 seconds
Distance	vertical spindle nose to table top	0 ~ 952 mm
	vertical spindle nose to table center	1149 mm
	horizontal spindle center to table top	0 ~ 1002 mm
	horizontal spindle nose to table center	1099 mm
Y / Z / C rapid feed / cutting rate	type / number	10 / 10 m/min 4.16 rpm / 5 m/min
	tool dia / length / weight	BT50 / 24 tools
ATC - number of tools	tools exchange method	Ø120 / 300 mm / 15 kgs
		swing arm at vertical position
Net weight		16000 kgs

## FREJOTH HEAVY DUTY VERTICAL MACHINING CENTER



AVMC-3200



### SPECIFICATIONS

	AVMC-2150	AVMC-2600	AVMC-3200
X / Y / Z axis	2150 / 1100 / 900 mm	2600 / 1100 / 900 mm	3200 / 1100 / 900 mm
Table size / loading Cap	2200 x 1220 mm / 2500 kgs	2650 x 1220 mm / 3000 kgs	3250 x 1220 mm / 3500 kgs
Y Box way numbers	4	6	6
Spindle nose to table top		151~1051 mm (opt.186~1086 mm)	
Spindle taper and speed		BT#50-6000 rpm (BT40-10,000 rpm)	
Spindle motor		15 / 18.5 kw (opt. 30 / 37 kw)	
Feed rate-rapid / cutting		15 m / 15 m / 15 m per min. 8000 mm / min	
ATC		Arm Type 24 (Opt.32 / 40)	
X / Y / Z ball screw-grade/dia./pitch		63 / 63 / 63 mm dia. -C3 / 10 Pitch	
Net weight	21000 kgs	22000 kgs	24000 kgs

## FREJOTH VERTICAL MACHINING CENTER



AVMC-1600



### SPECIFICATIONS

	AVMC-1600
X / Y / Z axis	1600 / 815 / 700 mm
Table size / loading Cap	1700 x 815 mm / 2000 kgs
Y Box way numbers	4
Spindle nose to table top	200 ~ 900 mm
Spindle taper and speed	BT#50/6000 rpm (BT40/10,000 rpm)
Spindle motor	11 / 15 kw
Feed rate-rapid / cutting	10 m / 10 m / 10 m per min. 8000 mm / min
ATC	ARM 20 (OPT. 32 or 40)
X / Y / Z ball screw-grade/dia./pitch	50 / 50 / 50 mm.-C3/10 Pitch
Net weight	15000 kgs

## FREJOTH VERTICAL MACHINING CENTER



AVMC-1200



AVMC-1400

### SPECIFICATIONS

	AVMC-1200	AVMC-1400
X / Y / Z axis	1200 / 700 / 760 mm	1400 / 700 / 760 mm
Table size / loading Cap	1400 x 710 mm / 1500 kgs	1500 x 710 mm / 1500 kgs
Y Box way numbers		4
Spindle nose to table top		125 ~ 885 mm
Spindle taper and speed		BT#50-6000 rpm (BT40-10000 rpm)
Spindle motor		11 / 15 kw
Feed rate-rapid / cutting		15 m / 15 m / 12 m per min. / 8000 mm / min
ATC		Carrousel 20 or Arm type 32 or 40
X / Y / Z ball screw-grade/dia./pitch		45 / 45 / 50 mm dia. -C3-10 Pitch
Net weight	12000 kgs	13000 kgs

## FREJOTH HIGH SPEED VERTICAL MACHINING CENTER



AVMC-1100H



### SPECIFICATIONS

	AVMC-1100H
X / Y / Z axis	1100 / 610 / 610 mm
Table size / loading Cap	1270 x 640 mm / 1200 kgs
Spindle nose to table top	BT40/100 ~ 710 mm BT50/110 ~ 720 mm
Spindle taper and speed	BT40/8000 ~ 15000 rpm : BT50/6000 ~ 10000 rpm
Spindle motor	7.5 / 11 kw (opt.11/15 kw)
Feed rate-rapid / cutting	24 / 24 / 24 m / min.(opt. 36 / 36 / 30 m / min.) / 5000 mm / min.(opt. 10000 mm / min.)
ATC	#40 carrousel 20 / #50 arm 24
X / Y / Z ball screw-grade/dia./pitch	40 / 40 / 40 mm dia. X C3 x 12 pitch
Net weight	7300 kgs / 8500 kgs

## FREJOTH HIGH SPEED VERTICAL MACHINING CENTER



HSM-600



HSM-800



### SPECIFICATIONS

	HSM-600	HSM-800	HSM-1000
X / Y / Z axis	600 / 430 / 460 mm	800 / 510 / 610 mm	1000 / 510 / 610 mm
Table size / loading Cap.	850 x 400 mm / 350 kg	870 x 500 mm / 500 kg	1070 x 500 mm / 500 kg
Spindle nose to table top	120 ~ 580 mm	110 ~ 720 mm	110 ~ 720 mm
Spindle taper and speed	BT40 / 8000 rpm	BT40 / 8000 rpm	BT40 / 8000 rpm
Spindle motor	5.5 / 7.5 kw	7.5 / 11 kw	7.5 / 11 kw
Feed rate - rapid / cutting	30 M / 30 M / 24 M per min. 1-8000 mm / min.		
Arm Tpe ATC	20 Tools	24 Tools	24 Tools
X / Y / Z Linear way width	30 / 30 / 35 mm	35 / 35 / 45 mm	
Ballscrew-X / Y / Z	32 / 32 / 32 mm x 16 pitch	40 / 40 / 50 mm x 12 pitch	40 / 40 / 50 mm x 12 pitch
Net weight	3400 kgs	5000 kgs	5500 kgs

## FREJOTH HIGH SPEED VERTICAL MACHINING CENTER



HSM-1000L



HSM-1350



HSM-1500L



( Y axis 700 mm )

### SPECIFICATIONS

	HSM-1000L	HSM-1350	HSM-1500L
X / Y / Z axis	1020 / 610 / 610 mm	1350 / 620 / 810 mm	1500 / 700 / 610 (800) mm
Table size / loading Cap.	1200 x 610 mm / 850 kgs	1560 x 620 mm / 1200 kgs	1600 x 700 mm / 2000 kgs
Spindle nose to table top	77 ~ 887 mm	80 ~ 890 mm	140 ~ 750 (150 ~ 950 mm)
Spindle taper and speed	BT40 - 8000 rpm	BT40 - 8000 rpm	BT#40 - 8000 ~ 30000 rpm
Spindle motor	7.5 / 11 kw	7.5 / 11 kw	7.5 / 11 kw (~26 / 32)
Feed rate-rapid / cutting	30 M / 30 M / 24 M per min. 1-8000 mm / min.		
Arm Tpe ATC	24 Tools	24 Tools	24 (32 / 40 / 60) Tools
X / Y / Z Linear way width	35 / 35 / 45 mm	35 / 35 / 45 mm	45 / 55 / 55 mm
Ballscrew-X / Y / Z	40 / 40 / 50 mm x 12 pitch	40 / 40 / 50 mm x 12 pitch	55 / 50 / 50 mm x 16 pitch
Net weight	7000 kgs	9000 kgs	10500 kgs

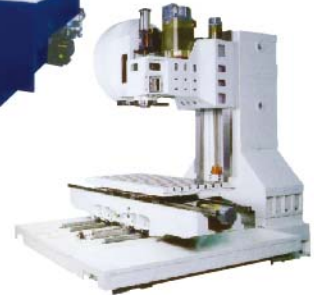
## FREJOTH VERTICAL MACHINING CENTER - BELT DRIVE SPINDLE / LINEAR GUIDEWAYS



FCV-1600B



FCV-2000B



### SPECIFICATIONS

	FCV-1600B	FCV-2000B
X / Y / Z axis travel	1600 / 900 / 800 mm	2000 / 900 / 800 mm
Table size / loading Cap.	1700 x 850 mm / 2000 kgs	2100 x 850 mm / 3000 kgs
T - slot	18 mm x No.7 / 100 mm	18 mm x No.7 x 100 mm
Spindle nose to table top	100 ~ 900 mm	100 ~ 900 mm
Spindle taper and speed	BT / CAT - 50 / 6000 rpm	BT / CAT - 50 / 6000 rpm
Spindle motor	15 / 18.5 kw	15 / 18.5 kw
Feed rate - rapid / cutting	20 / 20 / 15 M / min / 8000 mm per min.	20 / 20 / 15 M / min / 8000 mm per min.
ATC	Arm type / 24 tools	Arm type / 24 tools
Tool - size / Dia. x L x weight	240 / 305 mm / 15 kgs	240 / 305 mm / 15 kgs
Net weight	19000 kgs	21000 kgs

## FREJOTH VERTICAL MACHINING CENTER - BELT DRIVE SPINDLE / LINEAR GUIDEWAYS



FCV-1200B



FCV-1400

### SPECIFICATIONS

	FCV-1200B	FCV-1400(NB)
X / Y / Z axis travel	1200 / 600 / 675 mm	1400 / 800 / 740 mm
Table size / loading Cap.	1200 x 620 mm / 1000 kgs	1500 x 850 mm / 1600 kgs
T - slot	18 mm x No.5 x 100 mm	18 mm x No.7 x 100 mm
Spindle nose to table top	100 ~ 775 mm	100 ~ 840 mm
Spindle taper and speed	BT / CAT - 50 / 6000 rpm	BT / CAT - 50 / 6000 rpm
Spindle motor	11 / 15 (opt.15 / 18.5) kw	15 / 18.5 kw
Feed rate - rapid / cutting	24 / 24 / 18 M / min / 10000 mm per min.	20 / 20 / 18 M / min / 8000 mm per min.
ATC	Arm type / 24 tools	Arm type / 24 tools
Tool - size / Dia. x L x weight	240 / 305 mm / 15 kgs	240 / 305 mm / 15 kgs
Net weight	8000 kgs	13000 kgs

## FREJOTH VERTICAL MACHINING CENTER - BELT DRIVE SPINDLE / LINEAR GUIDEWAYS



FCV-600



FCV-800



### SPECIFICATIONS

	FCV-600	FCV-800
X / Y / Z axis travel	600 / 410 / 540 mm	800 / 500 / 540 mm
Table size / loading Cap.	700 x 400 mm / 350 kgs	910 x 500 mm / 500 kgs
T - slot	14 mm x No.5 x 63 mm	18 mm x No.5 x 100 mm
Spindle nose to table top	100 ~ 640 mm	80 ~ 620 mm
Spindle taper and speed	BT / CAT - 40 / 10000 rpm	BT / CAT - 40 / 10000 rpm
Spindle motor	5.5 / 7.5 kw	7.5 / 11 kw
Feed rate - rapid / cutting	36 / 36 / 24 M / min / 10000 mm per min	36 / 36 / 24 M / min / 10000 mm per min
ATC	Armless type / 16 tools	Drum type / 24 tools
Tool - size / Dia. x L x weight	80 / 200 mm / 6 kgs	(77 / 115) / 260 mm / 7 kgs
Net weight	4200 kgs	5300 kgs

## FREJOTH VERTICAL MACHINING CENTER - BELT DRIVE SPINDLE / LINEAR GUIDEWAYS



FCV-1000



### SPECIFICATIONS

	FCV-1000	FCV-1200A
X / Y / Z axis travel	1020 / 560 / 600 mm	1200 / 600 / 675 mm
Table size / loading Cap.	1000 x 560 mm / 750 kgs	1200 x 620 mm / 1000 kgs
T - slot	18 mm x No.5 x 100 mm	18 mm x No.5 x 100 mm
Spindle nose to table top	80 ~ 620 mm	100 ~ 775 mm
Spindle taper and speed	BT / CAT - 40 / 10000 rpm	BT / CAT - 40 / 10000 rpm
Spindle motor	7.5 / 11 kw	11 / 15 kw
Feed rate - rapid / cutting	36 / 36 / 24 M / min / 10000 mm per min	24 / 24 / 18 M / min / 10000 mm per min
ATC	Drum type / 24 tools	Drum type / 24 pcs
Tool - size / Dia. x L x weight	(77 / 115) / 305 mm / 7 kgs	(77 / 115) / 305 mm / 7 kgs
Net weight	7000 kgs	8000 kgs

## FREJOTH VERTICAL MACHINING CENTER - Built - in spindle



DM-600



### SPECIFICATIONS

	DM-600	DM-800	DM-1000	DM-1200A
X / Y / Z travel	610 / 410 / 540 mm	800 / 500 / 540 mm	1020 / 560 / 600 mm	1200 / 600 / 675 mm
Rapid speed	36 / 36 / 24 M / min.	36 / 36 / 24 M / min.	36 / 36 / 24 M / min.	30 / 30 / 24 M / min.
Spindle speed	24000 rpm		18000 rpm	
Spindle motor	3.7 / 4.6 kw		7.5 / 11 kw	
Spindle taper	BT / CAT - 30		BT / CAT - 40	
Table size / loading Cap.	700 x 400 mm / 350 kgs	910 x 500 mm / 500 kgs	1000 x 560 mm / 750 kgs	1220 x 620 mm / 1000 kgs
ATC	Armless - 16 tools	Armless - 16 tools	Armless - 20 tools	
Machine net weight	4200 kgs	5300 kgs	7000 kgs	8500 kgs

## FREJOTH VERTICAL MACHINING CENTER - Direct Drive Spindle



DV-800



### SPECIFICATIONS

	DV-600	DV-800	DV-1000	DV-1200A	DV-1200B
X / Y / Z travel	600 / 410 / 540 mm	800 / 500 / 540 mm	1020 / 560 / 600 mm	1200 / 600 / 675 mm	
Rapid speed	36 / 36 / 24 M / min.			24 / 24 / 20 M / min.	
Spindle speed				10000 rpm	
Spindle motor	5.5 / 7.5 kw				7.5 / 11 kw
Spindle taper	BT / CAT - 40			BT / CAT - 50	
Table size / loading Cap.	700 x 400 mm / 350 kgs	910 x 500 mm / 500 kgs	1120 x 560 mm / 750 kgs	1220 x 620 mm / 1000 kgs	
ATC	Drum - 16 tools			Drum - 20 tools	
Machine net weight	4200 kgs	5300 kgs	7000 kgs	8500 kgs	



## FREJOTH VERTICAL MACHING CENTERS - HEAVY CUTTING CAPACITY

X / Y / Z axes use heavy loading 55 mm - 6 x 8 x 6 slide blocks & cross roller linear guide



FMV-2000



### SPECIFICATIONS

	FMV-1600	FMV-1800	FMV-2000
X / Y / Z axis	1600 / 1000 / 800 mm	1800 / 1000 / 800 mm	2000 / 1000 / 800 mm
Table size / loading capacity	1700 x 1000 mm / 2200 kgs	1900 x 1000 mm / 2500 kgs	2100 x 1000 mm / 3000 kgs
Spindle nose to table surface	200 ~ 1000 mm	200 ~ 1000 mm	200 ~ 1000 mm
Spindle taper / speeds	ISO 50 - 6000 rpm (8000 / 10000 rpm)		
Spindle motor	15 / 18.5 kw (18.5 / 22 kw)		
Spindle transmission method	Belt (Gear, direct, ZF gear box.)		
ATC	Random - 24 Tools (32, 40 tools)		
Rapid feed X / Y / Z	20 / 20 / 15 M / min.		
Cutting feed	10000 mm / min		
Net weight	17000 kgs	18000 kgs	20000 kgs

## FREJOTH VERTICAL MACHING CENTERS - HEAVY DUTY CUTTING CAPACITY

Y axes - 4 Tracks & roller type linear guide



FMV



### SPECIFICATIONS

	FMV-1160	FMV-1350	FMV-1500
X / Y / Z axis	1100 / 600 / 600 mm	1350 / 700 / 640 mm	1500 / 700 / 640 mm
Table size / loading capacity	1160 x 600 mm / 1000 kgs	1350 x 600 mm / 1200 kgs	1500 x 600 mm / 1500 kgs
Spindle nose to table surface	120 ~ 720 mm	120 ~ 760 mm	120 ~ 760 mm
Spindle taper / speeds	BT40 - 8000 rpm	BT40 - 8000 rpm	BT40 - 8000 rpm
Spindle motor	7.5 / 11 kw (11 / 15 Kw, or 15 / 18 Kw)		
Spindle transmission method	Belt drive (or direct or ZF gear box.)		
ATC	Random - 24 Tools (30, 40 tools)		
Rapid feed X / Y / Z	30 / 30 / 24 M / min	24 (30 / 30 / 24) M / min	
Cutting feed	12000 mm / min		
Net weight	7300 kgs	7400 kgs	8100 kgs

# FREJOTH VERTICAL MACHINING CENTERS - HEAVY DUTY CUTTING CAPACITY

X / Y / Z axes roller type linear guideways



FMV



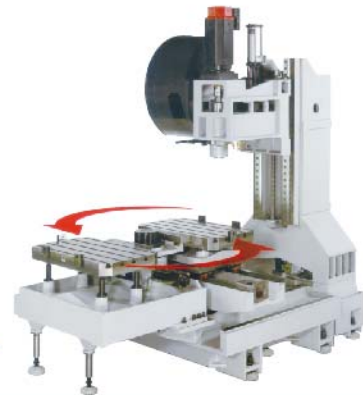
## SPECIFICATIONS

	FMV-600	FMV-860	FMV-1100
X / Y / Z axis	610 / 500 / 500 mm	860 / 600 / 600 mm	1100 / 600 / 600 mm
Table size / loading capacity	650 x 500 mm / 300 kgs	910 x 560 mm / 800 kgs	1100 x 560 mm / 900 kgs
Spindle nose to table surface	90 ~ 590 mm	120 ~ 720 mm	
Spindle taper / speeds	BT40 - 10000 rpm	BT40 - 8000 rpm	
Spindle motor	5.5 / 7.5 kw	7.5 / 11 kw (11 / 15 Kw, or 15 / 18 Kw)	
Spindle transmission method	Belt drive	Belt drive (or direct, or ZF gear box.)	
ATC	Random - arm - 24 Tools	Random - 24 Tools (30 , 36 tools)	
Rapid feed X / Y / Z	36 / 36 / 36 M / min	30 / 30 / 24 M / min. (36 / 36 / 30 M / min)	
Cutting feed	10000 mm / min	12000 mm / min	
Net weight	4300 kgs	6000 kgs	6400 kgs

# FREJOTH VERTICAL MACHINING CENTER - TWIN APC



FMV-1100APC



## SPECIFICATIONS

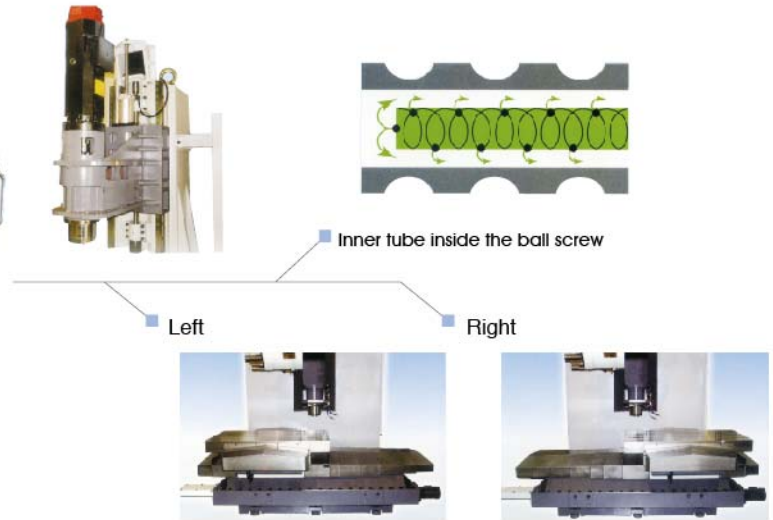
	FMV-600APC	FMV-860APC	FMV-1100APC
Table size / loading capacity	600 x 400 mm / 200 kgs	850 x 500 mm / 250 kgs	1000 x 500 mm / 300 kgs
Working area / T - slot	600 x 500 mm / 14 x 3 x 100	860 x 560 mm / 18 x 5 x 100	1100 x 560 mm / 18 x 5 x 100
X / Y / Z axis	610 / 500 / 500 mm	860 / 560 / 600 mm	1100 / 560 / 600 mm
Spindle nose to table surface	65 ~ 565 mm	110 ~ 710 mm (70 ~ 670 mm)	110 ~ 710 mm (70 ~ 670 mm)
Spindle taper and speed		ISO - #40 - 8000 rpm (opt 10000 / 12000 / 15000 rpm)	
optional		ISO - #50 - 6000 rpm (opt 8000 / 10000 rpm)	
Spindle transmission method		belt (opt direct / ZF gear box)	
Spindle motor	5.5 / 7.5 kw (7.5 / 11 kw)	7.5 / 11 kw (opt 11 / 15 kw or 15 / 18.5 kw)	
ATC random method		ISO#40 - 24 tools (opt 30) (opt ISO#50 - 20 - 30 tools	
T - T / C - C		2.3 / 4.5 (OPT 1.8 / 3.8 second)	
X / Y / Z cutting feedrate	10 m / min		12 m / min
X / Y / Z rapid traverse	36 / 36 / 36 m/min	36 / 36 / 30 (48 / 48 / 36) m/min	30 / 30 / 24 (36 / 36 / 30) m/min
Auto pallet changer	clamping force	hydraulic 50 liter - 50 kgs / cm <sup>2</sup>	
	clamping method	4 taper cone / pull stud	
	change cycle time	7 (±1) second	
	lift force	3600 kgs	
Net weight	6000 / 6500 kgs	8100 / 8500 kgs	8700 / 9100 kgs

## FREJOTH VERTICAL MACHINING CENTER LINEAR GUIDE WAYS

FULL SUPPORT TABLE AND SADDLE AND AIR CYLINDER FOR COUNTER BALANCE



FEV-1886L



### SPECIFICATIONS

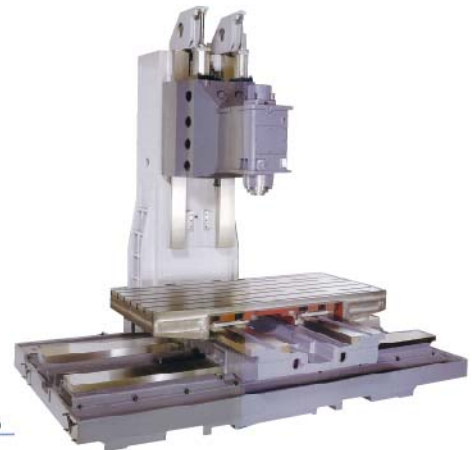
	FEV-2210L	FEV-1886L	FEV-1680L	FEV-1363L
X / Y / Z axis travel	2200 / 1000 / 900 mm	1800 / 860 / 700 mm	1600 / 800 / 700 mm	1300 / 630 / 600 mm
Table size / loading cap	2200 x 1000 mm / 3000 kgs	1800 x 860 mm / 2000 kgs	1600 x 800 mm / 2000 kgs	1450 x 600 mm / 1200 kgs
Distance between spindle nose to table top	125 ~ 1025 mm	170 ~ 870 mm	155 ~ 855 mm	140 ~ 740 mm
Distance between spindle center to column	1045 mm	950 mm	950 mm	710 mm
Spindle taper / speed	BT50 - belt driven - 8000 rpm. direct - 10000 rpm.			
Spindle motor	15 / 18.5 kw	15 / 18.5 kw	15 / 18.5 kw	11 / 15 kw
ATC	random- arm type BT50 - 24 tools (opt 32 tools)			
Feed rate rapid	16 / 16 / 12 m/min	20 / 20 / 20 m/min	20 / 20 / 20 m/min	30 / 30 / 30 m/min
Net weight	16500 kgs	13500 kgs	13200 kgs	9500 kgs

## FREJOTH VERTICAL MACHINING CENTER BOX WAYS

FULL SUPPORT TABLE AND SADDLE AND AIR CYLINDER FOR COUNTER BALANCE



FEV-2210B



### SPECIFICATIONS

	FEV-2210B	FEV-1886B	FEV-1680B	FEV-1363AB
X / Y / Z axis travel	2200 / 1000 / 900 mm	1800 / 860 / 700 mm	1600 / 800 / 700 mm	1300 / 630 / 635 mm
Table size / loading cap	2200 x 1000 mm / 3000 kgs	1800 x 860 mm / 2000 kgs	1600 x 800 mm / 2000 kgs	1450 x 600 mm / 1200 kgs
Distance between spindle nose to table top	155 ~ 1055 mm	190 ~ 890 mm	150 ~ 850 mm	150 ~ 785 mm
Distance between spindle center to column	1060 mm	930 mm	930 mm	690 mm
Spindle taper / speed	BT50 - gear box - 4000 / 6000 rpm			
Spindle motor	15 / 18.5 kw	15 / 18.5 kw	15 / 18.5 kw	11 / 15 kw
ATC	random- arm type BT50 - 24 tools (opt 32 tools)			
Feed rate rapid	12 / 12 / 12 m/min	18 / 18 / 15 m/min	18 / 18 / 15 m/min	24 / 24 / 20 m/min
Net weight	16500 kgs	14000 kgs	13500 kgs	9500 kgs

## FREJOTH VERTICAL MACHINING CENTER-Compact units



MCV-300



V-700

### SPECIFICATIONS

	MCV-300	V-700
X / Y / Z axis travel	610 / 355 / 460 mm	700 / 400 / 550 mm (650 mm)
Table size / loading capacity	700 x 350 mm / 350 kgs	800 x 400 mm / 250 kgs
T - slot	16 mm x NO.5 x 63.5 mm	18 mm x NO.3 x 100 mm
Spindle nose to table surface	70 ~ 530 mm	150 ~ 700 mm (800 mm)
Spindle taper	BT 40 / CAT 40 / DIN 69871 A	
Spindle speed	10000 rpm - Direct drive	
Spindle motor	7.5 / 11 kw	5.5 / 7.5 kw
ATC style	Armless 16 tools	Random arm 24 tools
X / Y / Z rapid feed	20 / 20 / 18 M / min.	48 / 48 / 32 M / min.
Cutting feed	1 - 10000 mm / min.	1 - 10000 mm / min.
Net weight	2500 kgs	3690 kgs

## FREJOTH VERTICAL MACHINING CENTER - Compact units



S5



S8

### SPECIFICATIONS

	S5 (BT30)	S5 (BT40)	S8
X / Y / Z axis travel	350 / 210 / 340 mm	350 / 240 / 400 mm	400 / 300 / 500 mm
Table size / loading capacity	810 x 250 mm / 80 kgs		600 x 300 mm / 150 kgs
T - slot	16 mm x 3 T		16 mm x 3 T
Spindle nose to table surface	50 ~ 390 mm	75 ~ 475 mm	80 ~ 580 mm
Spindle taper	BT#30	BT#40	BT#40
Spindle speed	8000 / 10000 / 12000 / 15000 rpm		
Spindle motor	1.5 kw	2.2 kw	3.7 kw
ATC style / tools	Carousel type magazine / 8 tools		
X / Y / X rapid feed	15 M / min (15 x 15 x 15 / Fanuc), 10 x 10 x 10 M / min (Siemens)		
Cutting feed	1 ~ 10000 mm / min.		
Net weight	1060 kgs	1150 kgs	1840 kgs

# FREJOTH CNC TAPPING CENTER



ADT-A12040



ADT-R12030

## SPECIFICATIONS

\*Specifications are subject to change without prior notice.

	ADT-A12030	ADT-A12040	ADT-R12030	ADT-R12040
Table size / loading cap.	1300 x 530 mm / 400 kgs			
X / Y / Z travel	1200 / 500 / 350 mm	1200 / 500 / 550 mm	1200 / 500 / 300 mm	1200 / 500 / 400 mm
Spindle taper / speed	BT30 - 10000 rpm	BT40 - 8000 rpm	BT30- 10000 rpm	BT40 - 8000 rpm
Spindle motor	fanuc	7.5 / 5.5 kw	3.7 / 2.2 kw	7.5 / 5.5 kw
	mitsubishi	5.5 / 3.7 kw	7.5 / 5.5 kw	5.5 / 3.7 kw
X / Y / Z rapid traverse	48 / 48 / 48 m/min			
Atc No. / T - T second	20 / 2.2	24 / 2.4	14 / 3.0	14 / 3.5
Net weight	4570 kgs	4700 kgs	4500 kgs	4620 kgs

# FREJOTH CNC TAPPING CENTER - A SERIES



ADT-A7030

ADT-A7040



## SPECIFICATIONS

\*Specifications are subject to change without prior notice.

	ADT-A7030	ADT-A7040
Table size / loading cap.	800 x 430 mm / 250 kgs	800 x 430 mm / 250 kgs
X / Y / Z travel	700 / 400 / 350 mm	700 / 400 / 550 mm
Spindle taper / speed	BT30 - 10000 rpm	BT40 - 8000 rpm
Spindle motor	fanuc	5.5 kw
	mitsubishi	5.5 kw
X / Y / Z rapid traverse	48 / 48 / 60 m/min	48 / 48 / 48 m/min
Atc No. / T - T second	20+1 / 2.2	24+1 / 2.2
Net weight	3810 kgs	3980 kgs

## FREJOATH CNC TAPPING CENTER - A / R SERIES



ADT-A6040



ADT-R6040



### SPECIFICATIONS

\*Specifications are subject to change without prior notice.

	ADT-A6030	ADT-R6030	ADT-A6040	ADT-R6040
Table size / loading cap.	700 x 410 mm / 200 kgs		700 x 410 mm / 250 kgs	
X / Y / Z travel	600 / 400 / 350 mm	600 / 400 / 300 mm	600 / 400 / 600 mm	600 / 400 / 400 mm
Spindle taper / speed	BT30 - 10000 rpm		BT40 - 8000 rpm	
Spindle motor	fanuc 3.7 / 2.2 kw		7.5 / 5.5 kw	
	mitsubishi 5.5 / 3.7 kw		7.5 / 5.5 kw	
X / Y / Z rapid traverse	48 / 48 / 60 m/min		48 / 48 / 48 m/min	
Atc No. / T - t second	20 + 1 / 2.2	14 / 2.6	24 + 1 / 2.2	14 / 3.2
Net weight	3200 kgs	3100 kgs	3700 kgs	3550 kgs

## FREJOATH CNC TAPPING CENTER - R SERIES



ADT-R5030



ADT-R5630



### SPECIFICATIONS

( ): As Option  
\*Specifications are subject to change without prior notice.

	ADT-R4530	ADT-R5030	ADT-R5630	ADT-R6030
Table size / loading cap.	500 x 320 mm / 200 kgs	550 x 320 mm / 200 kgs	650 x 410 mm / 200 kgs	700 x 410 mm / 200 kgs
X / Y / Z travel	450 / 300 / 300 mm	500 x 300 x 300 mm	560 x 400 x 300 mm	600 / 400 / 300 mm
Spindle taper / speed	BT30 / 10000 rpm			BT30 / 60 - 10000 rpm
Spindle motor	fanuc 3.7 / 2.2 kw			
	mitsubishi 5.5 / 3.7 kw			
X / Y / Z rapid traverse	48 / 48 / 60 m/min		48 / 48 / 60 m/min	
Atc No. / T - t second	12 / 2.5	14 / 2.5	14 / 2.6	14 / 2.6
Net weight	2100 kgs	2200 kgs	2600 kgs	3100 kgs

## FREJOTH HORIZONTAL TAPPING CENTER



H4030



H4040P



HM4040

### SPECIFICATIONS

	H4030	H4040P	HM4040
Table size / loading cap	400 x 400 mm / 200 kgs	400 x 400 mm x 2 pcs / 300 kgs	400 x 400 mm / 400 kgs
Min. indexing precision of table		0.001 sec	
Table repeatability accuracy		4 sec	
X / Y / Z axis travel	400 / 450 / 380 mm	500 / 450 / 450 mm	560 / 500 / 560 mm
X / Y / Z rapid feed	48 / 60 / 48 M / min	48 / 48 / 48 M / min	48 / 48 / 48 M / min
Spindle taper / speed	BT30 / 10000 rpm	BT40 / 8000 rpm	BT40 / 10000 rpm
Spindle center to table surface	90 ~ 540 mm	100 ~ 550 mm	105 ~ 605 mm
Spindle nose to table center	190 ~ 570 mm	160 ~ 610 mm	100 ~ 660 mm
Spindle motor	5.5 / 3.7 kw	7.5 / 5.5 kw	15 / 11 kw
ATC	24 + 1 tools	30 + 1 tools	40 + 1 tools
Net weight	3700 kgs	5700 kgs	8150 kgs

## FREJOTH SUPER HIGH SPEED DRILLING & TAPPING CENTER

RAPID FEED X/Y/Z-60 m/min CUTTING FEED-20000 mm/min



ATV-500



### SPECIFICATIONS

	ATV-500	ATV-700
Travel-X / Y / Z axis	500 x 400 x 330 mm	700 x 400 x 330 mm
Spindle nose to table	150 ~ 480 mm	150 ~ 480 mm
Spindle speed		12000 rpm
Spindle motor		3.7 / 5.5 kw
X / Y / Z motor		1.5 / 1.5 / 2.2 kw
ATC - taper / No / type		BT - 30 / 16 / disc type
Table size / loading cap	650 x 400 mm / 250 kgs	850 x 400 mm / 250 kgs
Net weight	2500 kgs	3000 kgs

# FREJOTH CNC TAPPING CENTER - SWING TABLE TYPE



ADT-S3030

ADT-S500

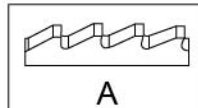
ADT-S6040

## SPECIFICATIONS

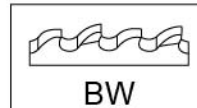
\*Specifications are subject to change without prior notice.

	ADT-S3030	ADT-S500	ADT-S6040
Table size	400 x 250 mm / 2 pcs	600 x 400 mm / 2 pcs	700 x 400 mm / 2 pcs
Table loading cap.	100 kgs	250 kgs	250 kgs
X / Y / Z travel	300 / 250 / 250 mm	500 x 400 x 350 mm	600 x 400 x 500 mm
Spindle taper / speed	BT30 - 10000 rpm	BT30 - 10000 rpm	BT40 - 8000 rpm
Spindle motor	fanuc	3.7 / 2.2 kw	7.5 / 5.5 kw
	mitsubishi	5.5 / 3.7 kw	5.5 / 3.7 kw
X / Y / Z rapid traverse	48 / 48 / 48 m/min	36 / 36 / 48 m/min	36 / 36 / 48 m/min
Atc No. / T - t second	14 - 2.6	20+1 - 2.2	24+1 - 3.1
Net weight	3300 kgs	5250 kgs	6600 kgs

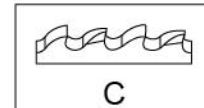
# SPEEDER CNC SAW BLADE SHARPENING MACHINE



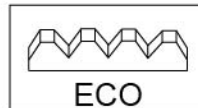
**A**  
For grinding  
Copper pipe  
and Aluminum  
pipe.



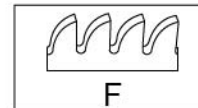
**BW**  
For grinding  
Curved teeth.  
Grinding and  
Chamfering.



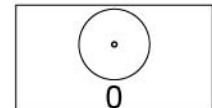
**C**  
For the C type  
teeth with  
high-low  
difference.



**ECO**  
For grinding  
ECO teeth  
type of Friction  
Saw Blade.



**F**  
For grinding F  
teeth type of  
Friction  
Saw Blade.



**O**  
For whole  
cutting off teeth  
could be ground  
off in one circle.

## SPECIFICATIONS

	CSG-500 3A	CSG-500 4A	CSG-650 3A	CSG-650 4A
Grinding range	Ø 95 ~ 500 mm	Ø 95 ~ 500 mm	Ø 100 ~ 630 mm	Ø 100 ~ 630 mm
Teeth number	10 ~ 998 teeth		10 ~ 998 teeth	
Saw blade thickness ( Max. )	8 mm		8 mm	
Cutting angle	0 ~ 30°		0 ~ 30°	
Grinding speed	1 ~ 60 teeth/min		1 ~ 60 teeth/min	
Wheel diameter	Ø200		Ø200	
Wheel bore	Ø32		Ø32	
Wheel thickness ( Max. )	8 mm		8 mm	
Wheel motor	4.0 kw		4.0 kw	
Wheel speed	2500 ~ 6000 rpm		2500 ~ 6000 rpm	
X / Z / B axis motor	AC servo motor			
Y axis motor for 4A	-	AC servo motor	-	AC servo motor
Net weight	1264 kgs	1342 kgs	1362 kgs	1425 kgs



## MORTON FLAT BED CNC LATHE - Bed width 725 mm



FCH-4600CNC

### SPECIFICATIONS

	FCH-4600CNC
Swing over bed	1150 mm
Swing over cross - slide	700 mm
Between centers	2200 / 3200 / 4200 / 5200 / 6200 / 7200 mm
Spindle motor	Alpha 40i (60 / 50 HP)
Spindle bore / nose / speed	181 mm / A2 - 15, 6 ~ 650 rpm, 255 mm / A2 - 15, 6 ~ 650 rpm, 375 mm / A2 - 20, 4 ~ 500 rpm, 530 mm / A2 - 28, 2 ~ 300 rpm
Turret	Standard V8, OD tool - 32 x 32 mm, ID tool - 60 mm dia.
X axis travel	560 mm
Z axis travel	2100 / 3100 / 4100 / 5100 / 6100 / 7100 mm
Rapid traverse - X / Z	6 M / min.
X / Z servo motor	X - Alpha 22i (5.3HP) Z - Alpha 40i (8HP)
Tailstock Quill dia.	240 mm
Tailstock / travel x Taper	180 mm x MT#6
Machine net weight	13260 / 15110 / 16980 / 18850 / 20730 / 24000 kgs

## MORTON FLAT BED CNC LATHE - Bed width 1000 mm



FCH-6000CNC

### SPECIFICATIONS

	FCH-6000CNC	FCH-8000CNC	FCH-10000CNC
Swing over bed	1500 mm	2000 mm	2500 mm
Swing over cross - slide	900 mm	1400 mm	1900 mm
Between centers	2210 / 3210 / 4210 / 5210 / 6210 mm		
Spindle motor	Alpha 40i (60 / 50 HP)		
Spindle bore / nose / speed	181 mm / A2 - 15, 6 ~ 650 rpm, 255 mm / A2 - 15, 6 ~ 650 rpm, 375 mm / A2 - 20, 4 ~ 500 rpm, 530 mm / A2 - 28, 2 ~ 300 rpm		
Turret	Standard V8 OD tools - 32 x 32 mm, ID tools - 60 mm dia.		
X axis travel	735 mm		
Z axis travel	2095 / 3095 / 4095 / 5095 / 6095 mm		
Rapid traverse - X / Z	6 M / min.		
X / Z servo motor	X - Alpha 22i (5.3HP) Z - Alpha 40i (8HP)		
Tailstock Quill dia.	240 mm		
Tailstock / travel x Taper	180 mm x MT#6		
Machine net weight	FCH - 6000 CNC - 14260 / 16110 / 17980 / 19850 / 21730 kgs		

## MORTON CNC FLAT BED LATHE - Bed Width 460 mm



FCH-2680CNC

### SPECIFICATIONS

	FCH-2640CNC	FCH-2660CNC	FCH-2680CNC	FCH-26120CNC	FCH-26160CNC
Swing over bed			660 mm		
Swing over cross - slide			370 mm		
Between centers	1155 mm	1655 mm	2155 mm	3435 mm	4385 mm
Spindle motor	Alpha P40i (30 / 25 HP)				
Spindle bore / nose / speed	120 mm / A2 - 11, 6 ~ 1600 rpm ; 186 mm / A2 - 15, 3 ~ 1000 rpm				
Turret	Standard V8 OD tool - 25 mm x 25 mm, ID - 40 mm dia.				
X axis travel			540 mm		
Z axis travel	950 mm	1450 mm	1950 mm	3220 mm	4170 mm
Rapid traverse - X / Z	10 M / min.				
X / Z servo motor	X - Alpha 12is (3.6HP) Z - Alpha 22iF (5.4HP)				
Tailstock Quill dia.	150 mm dia.				
Tailstock / travel x Taper	220 mm x MT#5				
Machine net weight	6400 kgs	6800 kgs	7400 kgs	8400 kgs	10100 kgs

## MORTON CNC FLAT BED LATHE - Bed Width 560 mm



FCH-3600CNC

### SPECIFICATIONS

	FCH-3600CNC	FCH-4800CNC
Swing over bed	900 mm	1200 mm
Swing over cross - slide	520 mm	820 mm
Between centers	1115, 2115, 3395, 4345, 5625, 6430 mm	
Spindle motor	Alpha P40i (30 / 25 HP)	
Spindle bore / nose / speed	120 mm / A2 - 11, 6 ~ 1600 rpm ; 186 mm / A2 - 15, 3 ~ 1000 rpm ; 258 mm / A2 - 15, 3 ~ 650 rpm ; 375 mm / A2 - 20, 4 ~ 500 rpm	
Turret	Standard V8 OD tool - 32 mm x 32 mm, ID - 50 mm dia.	
X axis travel	520 mm	
Z axis travel	950 / 1950 / 3220 / 4170 / 5360 / 6165 mm	
Rapid traverse - X / Z	10 M / min.	
X / Z servo motor	X - Alpha 12is (3.6HP) Z - Alpha 22is (5.4HP)	
Tailstock Quill dia.	150 mm dia.	
Tailstock / travel x Taper	220 mm x MT#5	
Machine net weight	8150 / 9200 / 10800 / 11800 / 13200 / 14500 kg	

## MORTON CNC FLAT BED LATHE - Bed Width 346 mm



FCH-1740ENC

### SPECIFICATIONS

	FCH-1740ENC	FCH-1760ENC	FCH-2140ENC	FCH-2160ENC
Swing over bed	430 mm		530 mm	
Swing over cross slide	185 mm		285 mm	
Between centers	1067 mm	1667 mm	1067 mm	1667 mm
Width of bed	346 mm			
Spindle bore	78 mm			
Spindle nose	A2 - 6			
Spindle speed	3 ~ 1650 rpm			
Spindle motor	10 HP			
Travel of X axis	240 mm			
Travel of Z axis	910 mm	1510 mm	910 mm	1510 mm
Rapid traverse (X / Z axis)	8 m / min			
Travel of tailstock quill	185 mm			
Diameter of tailstock quill	60 mm			
Taper of tailstock quill	MT 4			
Weight of machine	2700 kgs	3100 kgs	2800 kgs	3200 kgs

## MORTON CNC FLAT BED LATHE - Bed width 400 mm



FCH-2600CNC / B

### SPECIFICATIONS

	FCH-2600CNC / B
Swing over bed	660 mm
Swing over cross slide	370 mm
Between centers	1350 / 2100 mm
Spindle motor	15 HP (11 Kw)
Spindle bore / nose / speed	90 or 104 mm / A2 - 8 / 3 ~ 1600 rpm
Turret	V8 - OD - 25 x 25 mm, ID - 40 mm dia.
X axis travel	280 mm
Z axis travel	1260 / 2060 mm
Tailstock - Quill dia.	112 mm
Tailstock - travel x Taper	150 mm x MT#5
Machine net weight	4200 / 5200 kgs

## FREJOTH CNC HEAVY DUTY ROLLER LATHE



FEL-6300ENC / B

### SPECIFICATIONS

	FEL-4700ENC / B	FEL-5500ENC / B	FEL-6300ENC / B
Swing over bed	1190 mm	1385 mm	1584 mm
Swing over cross - slide	740 mm	940 mm	1140 mm
Bed width	800 mm (32")		
Between centers	2000 ~ 10000 mm		
Spindle bore / nose	230 mm / A2 - 15 (260 mm - A2 - 15, 310 / 360 mm - A2 - 20, 535 mm - A2 - 28)		
Spindle speeds (4 steps)	230 / 260 mm - 4 - 600 rpm / 310 / 360 mm - 3 - 400 rpm / 535 mm - 2 - 300 rpm		
Max. X / Z travel	X - 800 mm / Z - 1750 - 9750 mm		
Rapid feed	X / Z - 5 m / min		
Tailstock - dia / travel / taper	Ø200 / 300 mm / MT#7, (opt. rotary quill - Ø290 mm dia)		
Spindle motor	30 kw (opt. 37 kw)		

## MORTON CNC FLAT BED LATHE-Bed width 1345 mm/1575 mm with auxiliary guideway

Giant Heavy Duty



FEL-7900ENC

### SPECIFICATIONS

	FEL-7100ENC	FEL-7900ENC	FEL-8800ENC	FEL-9800ENC
Swing over bed	1800 mm	2000 mm	2250 mm	2500 mm
Swing over cross slide - half length	1325 mm	1510 mm	1745 mm	1985 mm
Swing over cross slide - full length (OPT)	1240 mm	1440 mm	1690 mm	1940 mm
Between centers	3000 ~ 12000 mm (Per 1000 mm increment)			
Spindle motor	45 Kw (75Kw) + inverter			
Spindle bore / nose	210 mm / A2 - 15 or A2 - 20			
Spindle speeds	5 ~ 460 rpm			
Turret	H4 - OD / 50 x 50 mm, V8 - OD / 32 x 32 mm / ID - 50 mm			
X axis - Half / full cross slide travel	720 / 1250 mm			
Z axis - Half / full travel	3000 ~ 12000 / 2600 ~ 11600 mm			
Rapid traverse - X / Z	5 / 5 M / min.			
Tailstock Quill dia.	290 mm Rotary quill			
Tailstock travel x Taper	300 mm x MT#7			

## FREJOTH CNC FLAT BED LATHE 2 AXES DRIVEN BY AC MOTOR INVERTER



FEL-3300ENC / B

### SPECIFICATIONS

	FEL-2300ENC	FEL-2600ENC	FEL-3000ENC	FEL-2600ENC / B	FEL-3000ENC / B	FEL-3300ENC / B
Swing over bed	600 mm	670 mm	770 mm	670 mm	770 mm	840 mm
Swing over cross slide	310 mm	380 mm	480 mm	380 mm	480 mm	550 mm
Bed Width	400 mm			460 mm		
Between centers	1500 / 2000 / 3000 mm			1500 / 2000 / 3000 / 4000 / 5000 mm		
Spindle bore / nose	80 mm / A1 - 8 or D1 - 8 (opt. 104 mm / A2 - 11)			104 mm / A2 - 11 (156 mm / A2 - 11, 230 mm / A2 - 15)		
Spindle speeds (4 steps)	80 mm bore - 16 - 1500 rpm, 104 mm bore - 13 - 1200 rpm			At 104 mm bore-13-1200 rpm, at 156 mm bore-11-800 rpm, at 230 mm bore-4-600 rpm		
Max. X / Z travels	X - 350 mm, Z - 1300 / 1800 / 2800 mm			X - 410 mm Z - 1300 / 1800 / 2800 / 3800 / 4800 mm		
Rapid feed	X - 5 m / min. Z - 5 m / min			X - axis - 5 m / min. Z - axis - 5 m / min		
Tailstock - dia / travel / taper	95 mm / 230 mm / MT#5			105 mm / 230 mm / MT#5		
Spindle motor	15 HP (opt. 20 HP)			15 HP (opt. 20 HP)		

## FREJOTH CNC OIL COUNTRY LATHE



FEL-3800ENC / B

### SPECIFICATIONS

	FEL-3800ENC / B	FEL-4200ENC / B
Swing over bed	960 mm	1060 mm
Swing over cross slide	530 mm	630 mm
Bed width	560 mm (22")	
Between centers	1500 ~ 6000 mm (60" ~ 240")	
Spindle bore / nose	156 mm / A2 - 11, (230 / 260 mm - A2 - 15, 310 / 360 mm - A2 - 20)	
Spindle speeds (4 steps)	at bore - 156 mm - 6 - 800 rpm / 230 / 260 mm - 4 - 600 rpm / 310 / 360 mm - 3 - 400 rpm	
Max. X / Z travels	X - 600 mm / Z - 1250 - 5750 mm	
Rapid feed	X / Z - 5 m / min	
Tailstock - dia / travel / taper	125 / 300 mm MT#6	
Spindle motor	22 kw (opt. 30 kw)	

## FREJOTH FLAT BED CNC LATHES - WITH GEAR BOX SPINDLE



FEL-1840ENC



FEL-2160ENC

### SPECIFICATIONS

	FEL-1840ENC	FEL-1860ENC	FEL-2140ENC	FEL-2160ENC	FEL-2180ENC	FEL-21120ENC
No. of control axis	2 AXIS					
Swing over bed	Ø460 mm			Ø533 mm		
Width of bed	Ø305 mm			Ø345 mm		
Max. turning dia.	Ø260 mm			Ø305 mm		
Max. turning length ( 4 way tool post )	750 mm	1250 mm	620 mm	1120 mm	1620 mm	2620 mm
Max. turning length ( Hyd. P8 turret )	600 mm	1100 mm	530 mm	1030 mm	1530 mm	2530 mm
Spindle speed	2 step - L / 27 ~ 830 rpm, H / 831 ~ 2500 rpm			4 step - inf. Variable 20 ~ 2000 rpm		
Spindle motor	7.5 / 11kw			AC servo 9 / 11 kw		
Spindle bore / nose / taper	69 mm A2 - 6 / 1 / 20			Ø80 mm / D1 - 8 (A2 - 8) 1 / 19.18		
Bar capacity	65 mm (60 mm)			Ø68 mm		
Travel - X / Z axis	230 mm / 850 mm	230 mm / 1350 mm	300 mm / 720 mm	300 mm / 1220 mm	300 mm / 1720 mm	300 mm / 2720 mm
Servo motor - X / Z axis	1.2 kw / 1.2 kw			1.8 kw / 2.5 kw		
Rapid feed - X / Z axis	7.5 / 10 m / min					
Type of turret	4 way tool post (Hydraulic P8)					
Tool size	OD - 25 x 25 mm I.D - 20 mm			□25 mm □25 mm / Ø32 mm		
Tailstock - Quill dia. / travel / taper	Ø68 mm x 153 mm / MT#4			Ø85 mm / 178 mm / MT#5		
Net weight	2350 kgs	2600 kgs	4050 kgs	4400 kgs	4800 kgs	5300 kgs

## FREJOTH FLAT BED CNC LATHES WITH BELT DRIVEN SPINDLE



FEL-22120ENC

### SPECIFICATIONS

	FEL-2240ENC	FEL-2260ENC	FEL-2280ENC	FEL-22120ENC
No. of control axis	2 AXIS			
Swing over bed	Ø550 mm			
Width of bed	Ø345 mm			
Max. turning dia.	Ø325 mm			
Max. turning length ( 4 way tool post )	680 mm	1180 mm	1680 mm	2680 mm
Max. turning length ( Hyd. P8 turret )	590 mm	1090 mm	1590 mm	2590 mm
Distance between centers	870 mm	1370 mm	1870 mm	2870 mm
Spindle speed	Inf. Variable 35 ~ 3500 rpm			
Spindle motor	AC servo - 9 / 11 kw			
Spindle bore	Ø91 mm			
Spindle nose / taper	A2 - 8 / 1 / 20			
Bar capacity	Ø78 mm			
Travel - X axis	300 mm			
Travel - Z axis	780 mm	1280 mm	1780 mm	2780 mm
Servo motor - X / Z axis	1.8 kw / 2.5 kw			
Rapid feed - X / Z axis	7.5 / 10 m / min			
Type of turret	4 way tool post (Hyd. VDI V8, Hydraulic P8)			
Tool size	□25 mm / Ø40 mm / Ø32 mm			
Tailstock - Quill dia. / travel / taper	Ø85 mm / 178 mm / MT#5			
Net weight	4050 kgs	4400 kgs	4800 kgs	5300 kgs

## FREJOTH FLAT BED CNC LATHES - WITH GEAR BOX SPINDLE



FEL-1640ENC



FEL-1660ENC

### SPECIFICATIONS

	FEL-1440ENC	FEL-1640ENC	FEL-1660ENC
No. of control axis		2 AXIS	
Swing over bed	Ø360 mm		Ø410 mm
Width of bed		260 mm	
Max. turning dia. ( 4 way tool post )	Ø170 mm		Ø220 mm
Max. turning dia. ( hyd. P8 turret )	Ø160 mm		Ø210 mm
Max. turning length ( 4 way tool post )		750 mm	1260 mm
Max. turning length ( hyd. P8 turret )		630 mm	1140 mm
Spindle speed ( 2 steps )		L : 25 ~ 480 rpm H : 481 ~ 3000 rpm	
Spindle motor		AC servo 5.5 / 7.5 kw	
Spindle bore / nose / taper		Ø52.5 mm / D1 - 6 (A1 - 6) / MT#6	
Bar capacity		Ø40 mm	
Travel - X / Z axis	205 mm / 815 mm		205 mm / 1325 mm
Servo motor - X / Z axis		0.75 kw / 1.2 kw	
Rapid feed - X / Z axis		7.5 / 10 m / min	
Type of turret		4 way tool post (Electric H4, Hydraulic P8)	
Tool size		□20 mm / Ø20 mm	
Tailstock - quill dia. / travel / taper		Ø58 mm / 140 mm / MT#4	
Net weight	2100 kgs	2150 kgs	2250 kgs

## FREJOTH FLAT BED CNC LATHES - WITH BELT DRIVEN SPINDLE



FEL-1640ENC / B



FEL-1660ENC / B

### SPECIFICATIONS

	FEL-1440ENC / B	FEL-1640ENC / B	FEL-1660ENC / B
No. of control axis		2 AXIS	
Swing over bed	Ø360 mm		Ø410 mm
Width of bed		Ø260 mm	
Max. turning dia. ( 4 way tool post )	Ø170 mm		Ø220 mm
Max. turning dia. ( hyd. P8 turret )	Ø160 mm		Ø210 mm
Max. turning length ( 4 way tool post )		700 mm	1210 mm
Max. turning length ( hyd. P8 turret )		680 mm	1190 mm
Spindle speed		40 ~ 5000 rpm	
Spindle motor		A.C. servo - 5.5 / 7.5 (7.5 / 11) kw	
Spindle bore / nose / taper		Ø46 mm / A2 - 5 / 1 / 19.18	
Bar capacity		Ø36 mm	
Travel - X / Z axis ( 4 way tool post )		205 mm / 865 mm	205 mm / 1375 mm
Travel - X / Z axis ( hyd. P8 turret )	167 mm / 710 mm	178 mm / 710 mm	178 mm / 1220 mm
Servo motor - X / Z axis		0.75 kw / 1.2 kw	
Rapid feed - X / Z axis		7.5 / 10 m / min	
Type of turret		4 way tool post (Electric H4, Hydraulic P8)	
Tool size		□20 mm / Ø20 mm	
Tailstock - quill dia. / travel / taper		Ø58 mm / 140 mm / MT#4	
Net weight	2100 kgs	2150 kgs	2250 kgs

## MORTON CNC FLAT BED LATHE-Bed Width 410 mm



FEL-28120ENC

### SPECIFICATIONS

	FEL-2400ENC	FEL-2800ENC
Swing over bed	610 mm	720 mm
Swing over cross - slide	360 mm	460 mm
Between centers	1100 / 1600 / 2100 / 3100 / 4100 mm	
Spindle motor	20 HP / Option 25 HP	
Spindle bore	83 mm / 105 mm / 130 mm / 160 mm	
Spindle nose	A2-8 or D1-8 / A2-11 or D1-11 / A2-11	
Spindle speed	40 ~ 2000 rpm / 40 ~ 1500 rpm / 40 ~ 1000 rpm	
Turret	H4 or V8 (OD tool 25 mm x 25 mm)	
X axis travel	450 mm	
Z axis travel	975 / 1475 / 1975 / 2975 / 3775 mm	
Rapid traverse - X / Z	7 / 8 m/min	
X / Z servo motor	1 kw / 2 kw	
Tailstock Quill dia.	80 mm / opt. 105 mm	
Tailstock / Travel x Taper	180 mm x MT#5	

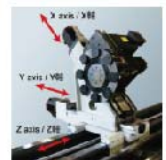
## MORTON CNC FLAT BED LATHE-Bed Width 440 mm



AFL-2200ENC



AFL-2000ENCx2100



AFL-2000ENC with Y

### SPECIFICATIONS

	AFL-2200ENC	AFL-2000ENC with Y axis
Swing over bed		710 mm
Swing over cross - slide	560 mm	510 mm
Between centers	600 / 1100 / 1600 / 2100 / 2600 / 3100 mm	
Spindle motor	15 / 18.5 kw	
Spindle bore	83 mm / 105 mm / 130 mm / 160 mm	
Spindle nose	A2-8 / A2-11	
Spindle speed (3steps)	40 ~ 2000 rpm / 40 ~ 1500 rpm / 30 ~ 1000 rpm	
Hyd. turret	V8 / opt. V12	-
Live Turret	opt. V8 (VDI40)	V8 (VDI40)
X axis travel	360 mm	410 mm
Z axis travel	600 / 1100 / 1600 / 2100 / 2600 / 3100 mm	
Y axis travel (45degree)	-	+ 50 mm
Rapid traverse - X axis	10 m/min	
Rapid traverse - Z axis	16 m/min	10 m/min
Rapid traverse - Y axis	-	10 m/min
X / Z servo motor	3 kw / 4 kw	
Tailstock Quill dia.	105 mm	
Tailstock / Travel x Taper	200 mm x MT#5	



## MORTON CNC FLAT BED LATHE - Bed width 206mm



FSML-1440NC

### SPECIFICATIONS

	FSML-1440NC	FSML-1740NC	FSML-1760NC	FSML-1780NC	FSML-2040NC	FSML-2060NC	FSML-2080NC
Swing over bed	356 mm		440 mm			510 mm	
Swing over cross slide	220 mm		235 mm			305 mm	
Distance between centers	1000 mm	1000 mm	1500 mm	2000 mm	1000 mm	1500 mm	2000 mm
Spindle motor	3.5 kw / Servo motor 5.7 kw (Opt.)				7.5 kw / Servo motor 7.5 kw (Opt.)		
Spindle hole / nose / bore taper	38 mm / D1-4 / MT#5				86 mm / D1-8 / MT#7 (Sleeve MT#5)		
Number of spindle speed range	3/1 (Opt.)				3/1 (Opt.)		
Cross slide travel - X axis	203 mm				280 mm		
Longitudinal travel - Z axis	840 mm	870 mm	1380 mm	1890 mm	870 mm	1380 mm	1890 mm
Rapid travel - X axis	6 M/min				6 M/min		
Rapid travel - Z axis	8 M/min				8 M/min		
Spindle speed range HI / MID / LOW	2000 - 410 / 540 - 110 / 140 - 30 rpm 30 - 2000 rpm Servo motor (Opt.)		2000 - 240 / 380 - 45 / 84 - 10 rpm		10 - 200 rpm Servo motor (Opt.)		
Tailstock barrel travel / taper / diameter	120 mm / MT# 3 / Ø45 mm				160 mm / MT# 5 / Ø75 mm		
Machine weight	1200 kgs	1800 kgs	2000 kgs	2300 kgs	2100 kgs	2300 kgs	2600 kgs

## FREJOTH SLANT BED LATHE



AJG-42



### SPECIFICATIONS

	AJG-42	AJG-52
Bar capacity	42 mm	52 mm
Max. turning diameter	250 mm	250 mm
Swing over bed	400 mm	400 mm
Max. working length	175 mm	150 mm
Spindle motor	5.5 / 7.5 kw	7.5 / 11 kw
Spindle speeds	max. 6000 rpm	max. 4000 rpm
Spindle bore / nose / chuck size	53 mm / A2-5/6"	61 mm / A2-6/8"
Travel - X / Z axis	220 mm / 200 mm	220 mm / 200 mm
X / Z - servo motor	1.2 / 1.2 kw	1.2 / 1.2 kw
X / Z - rapid feed	20 / 20 m/min	20 / 20 m/min
Turret type	V8	V8
Tool shank size	20 mm	20 mm
Tailstock - quill dia / travel / taper	60 mm / 130 mm / MT4	60 mm / 130 mm / MT4
Net weight	2400 kgs	2400 kgs

## FREJOTH CNC SLANT BED LATHE - LINEAR GUIDEWAY WITH TOOL TURRET



ALT-400M



### SPECIFICATIONS

	ALT-400M	ALT-520M
Bar capacity	52 mm	78 mm
Swing over bed / cross slide	400 / 320 mm	520 / 400 mm
Center distance	645 mm	845 mm
Max. turning dia / length	215 / 530 mm	275 / 710 mm
Spindle nose and chuck size	A2 - 6 - 8"	A2 - 8 - 10"
Front bearing diameter	100 mm	130 mm
Live turret spec	2 - 20 mm	
Max. cutting length	570 / 1200 mm	539 / 1169 mm
Tool holder size OD SQ / ID dia	OD-SQ 25 mm / ID-dia-40 mm	
Turret station/no. of live tools	12 / 12	12 / 12
Milling motor power / torque / speed	3.7 / 5.5 kw-35 N/m 10 - 5000 rpm	
Exchange time - second	0.6 (next tools) / 0.8 oppsite	
X / Z axis travel	190 / 530 mm	220 / 710 mm
X / Z rapid feed rate	20 / 24 m/min	20 / 20 m/min
Spindle motor	7.5 / 11 kw	15 / 18.5 kw
X / Z - axis motor	1.5 / 3.0 kw	1.5 / 3.0 kw
Tailstock travel	435 mm	580 mm
Tailstock - quill dia. / travel / taper	90 / 100 / MT5	110 / 150 / MT5
Net weight	4300 kgs	5000 kgs

## FREJOTH CNC SLANT BED LATHE - LINEAR GUIDEWAY



ALT-350



### SPECIFICATIONS

	ALT-350	ALT-400	ALT-520
Bar capacity	45 mm	52 mm	78 mm
Swing over bed / cross slide	350 / 280 mm	400 / 320 mm	520 / 400 mm
Center distance	455 mm	645 mm	845 mm
Max. turning dia / length	240 / 350 mm	320 / 530 mm	400 / 710 mm
Spindle nose and chuck size	A2 - 5 - 6"	A2 - 6 - 8"	A2 - 8 - 10"
Front bearing diameter	80 mm	100 mm	130 mm
Turret type / servo motor	V - 12 / 0.75 kw	V - 12 / 1.2 kw	V - 10 / 1.2 kw
Tool holder size OD (SQ) / ID dia	20 / 32 mm	25 / 40 mm	25 / 50 mm
X / Z axis travel	140 / 350 mm	180 / 530 mm	220 / 710 mm
X / Z rapid feed rate	24 / 30 m/min	20 / 24 m/min	20 / 20 m/min
Spindle motor	5.5 / 7.5 kw	7.5 / 11 kw	15 / 18.5 kw
X / Z - axis motor	1.2 / 1.8 kw	1.2 / 2.5 kw	1.2 / 2.5 kw
Tailstock travel	290 mm	435 mm	580 mm
Tailstock - quill dia. / travel / taper	75 / 100 / MT4	90 / 100 / MT5	110 / 150 / MT5
Net weight	3500 kgs	4300 kgs	5000 kgs

# MORTON SLANT BED LATHE

Box ways - Flat Bed / slant turret



ASL-52

ASL-80 / 1100

## SPECIFICATIONS

	ASL-52	ASL-80 / 580	ASL-80 / 1100
Swing over bed		590 mm	
Max. turning diameter		450 mm	
Swing over carriage		380 mm	
Between centers		580 mm	1180 mm
Spindle bore / nose	62 mm / A2 - 6		91 mm / A2 - 8
Bar capacity	52 mm		80 mm
Spindle speed	3200 rpm		2200 rpm
Hydraulic chuck size	8"	10"	10" / 12"
Tool station (Random)	Vertical V - 10 station Servo turret - OD tool / 25 x 25 mm, ID tools - 40 mm dia.		
X axis travel		245 mm (235 + 10)	
Z axis travel	520 mm		1100 mm
Rapid feed X / Z		X - 16 M / min. Z - 20 M / min.	
Main spindle power	25 HP		25 HP
X / Z axis motor	2.4 / 3.4 HP		2.4 / 3.4 HP
Tailstock - stroke		480 mm	1000 mm
Tailstock - Dia. x Taper x Travel		75 mm dia. x MT# 4 x 100 mm	112 mm dia. x MT# 4 x 100 mm
Net weight	3450 kgs	3500 kgs	5500 kgs

# MORTON SLANT BED LATHE

Box ways - Flat Bed / slant turret



ASL-90 / 1100

ASL-115 / 2000

## SPECIFICATIONS

	ASL-90 / 600	ASL-90 / 1100	ASL-115 / 2000
Swing over bed		550 mm	
Max. turning diameter		470 mm (Driven tool system - 300 mm)	
Swing over carriage		380 mm	
Max. cutting length	580 mm	1080 mm	2060 mm (1990 mm)
Spindle bore / nose	101 mm / A2 - 8		130 mm / A2 - 11
Bar capacity		90 mm	90 mm / 115 mm
Spindle speed		25 ~ 2000 rpm	20 ~ 2000 rpm
Hydraulic chuck size		12"	12" / 15"
Tool station (Random)	V10 or V12 Driven tool system - OD tool - 25 mm x 25 mm, ID tool - 40 mm dia.		
X axis		240 mm (Driven tool system - 265 mm)	
Z axis	590 mm	1090 mm	2070 / 2000 mm
Rapid feed X / Z		20 M / min. 20 M / min.	
Main spindle power		Fanuc - aP40i, 30 HP (22 Kw)	
X / Z axis motor		X - 3.6 HP (2.7 Kw) Z - 5.4 HP (4 Kw)	
Tailstock - stroke	460 mm	960 mm	1960 mm
Tailstock - Dia. x Taper x Travel		112 mm dia. x MT# 4 x 100 mm	
Net weight	5500 kgs	6500 kgs	8950 kgs

## FREJOATH CNC SLANT BED LATHE - 2 AXES BOX WAY



ASC-52



### SPECIFICATIONS

	ASC-52	ASC-65
Bar capacity	52 mm (2.04")	65 mm (2.56")
Max. turning diameter	300 mm for H10, 340 mm for H12, 250 mm for V12	
Swing over bed	630 mm	
Max. working length	580 mm for H10, 600 mm for H12, 590 mm for V12	
Spindle motor	9 / 11 kw (opt. 11 / 15 kw)	11 / 15 kw (opt. 15 / 18.5 kw)
Spindle speeds	45 ~ 4500 rpm	35 ~ 3500 rpm
Spindle bore / power chuck size	A2 - 6 / 210 mm	A2 - 6 / 254 mm
Travel - X / Z axis	190 / 590 mm for H10, 207 / 610 mm for H12, 220 / 600 mm for V12	
X / Z - servo motor	1.6 / 3 kw	
X / Z - rapid feed	15 / 20 m / min	
Turret type	H10, H12 or V12 (VDI 30)	
Tool shank size	H10, 25 mm / H12, 20 mm / V12, 20 mm	
Tailstock - quill dia. / travel / taper	programmable 85 / 120 / MT4	
Net weight	5200 kgs	5500 kgs

## FREJOATH GANG TYPE CNC LATHE



ACL-10



ACL-12

### SPECIFICATIONS

	ACL-10	ACL-12
No. of control axis	2 AXIS	
Machine type	Box way	
Swing over bed	Ø320 mm	
Standard turning dia.	Ø150 mm	
Standard turning length	100 mm	
Spindle speed	80 ~ 4000 rpm	60 ~ 3000 rpm
Spindle motor	15 HP	
Spindle bore / nose	Ø55 mm / A2 - 5	Ø75 mm / A2 - 6
Bar capacity	Ø45 mm	Ø65 mm
Travel - X / Z axis	480 mm / 250 mm	
Servo motor - X / Z axis	1.2 kw / 1.2 kw	
Rapid feed - X / Z axis	10 / 8 m/min	
Type of turret	Gang bed fixed on cross slide	
Tool size	□20 mm / Ø32 mm	
Net weight	2100 kgs	2200 kgs

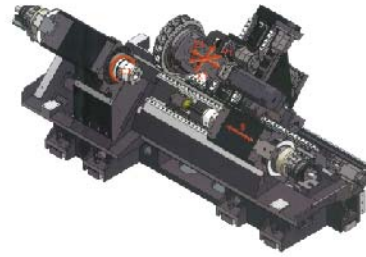


CT3-52Y2M

## SPECIFICATIONS

	CT3-52Y2M	CT3-76Y2M
<b>CONTROLLER</b>	Mitsubishi	Mitsubishi / Fanuc
Max / standard turning dia.		Ø 360 / 210 mm
Distance between centers		1050 mm
X1 / X2 / X3 axis travel		227.5 / 227.5 / 230 mm
Z1 / Z2 / Z3 axis travel	310 / 250 / 440 mm	285 / 250 / 425 mm
Y axis travel		± 50 mm
B axis travel	762 mm	680 mm
X / Y / Z axis rapid speed		16 / 6 / 40 M/min
Minimum input unit		0.001 mm
Spindle speed	6000 rpm	4000 rpm
Spindle motor	7.5 / 11 kw	18 / 22 kw (Fanuc) / 15 / 22 kw (Mitsubishi)
Spindle bore / nose	60.5 MM / A2-5	88 MM / A2-6
Spindle bar capacity / chuck size	51 mm / 6"	76 mm / 8"
Sub-spindle rpm	6000 rpm	4000 rpm
Sub-spindle motor	7.5 / 11 kw	18 / 22 kw (Fanuc) / 7.5 / 11 kw (Mitsubishi)
Sub-spindle bore / nose	60.5 MM / A2-5	86 MM / A2-6
Sub-spindle bar capacity	51 mm	65 mm
C axis min. moving unit / rapid speed		0.001 degree / 600 mm/min
Turret stations		16 stations - 25 x 25 mm and 25 mm dia. Tool
Live tool rotating mode		Single tool transmission
Live tools motor / rpm		3.7 / 5.5 kw (Mitsubishi), 4.5 kw (Fanuc), 60 ~ 6000 rpm
Number of tools		16 x 3
Collet / tool holder size		ER 32 / BMT 65
Total power	93 KVA	120 KVA

## MORTON CNC LATHE - 2 spindles / 1 Turret / 1Y - Axis



CT1

### SPECIFICATIONS

	CT1-65	CT1-76
<b>CONTROLLER</b>	Fanuc	Mitsubishi
Max. cutting dia.		325 mm
Standard cutting dia.		210 mm
Distance between centers		1070 mm
Max. cutting length		670 mm
X - axis travel		225
Z - axis travel		670
Y - axis travel		± 50 mm
X, Y, Z rapid speed		16 / 6 / 10 m/min
B axis travel		740 mm
B axis rapid traverse		40 m/min
Spindle motor	18 / 22 kw	15 / 22 kw
Spindle max. rpm		4000 rpm
Spindle bar capacity	65 mm	76 mm
Sub-spindle motor		7.5 / 11 kw
Sub-spindle rpm		4000 rpm
Sub-spindle bar capacity		65 mm
Turret stations	16 stations - 25 x 25 mm and 25 mm dia. Tool	
Live tool rotating mode	Single tool transmission	
Live tools motor / rpm	3.7 / 5.5 kw (Mitsubishi), 4.5 kw (Fanuc), 60 ~ 6000 rpm	
Collet / tool holder size	ER 32 / BMT 65	

## MORTON CNC LATHE - 2 spindles / 2 Turrets / 1Y - Axis

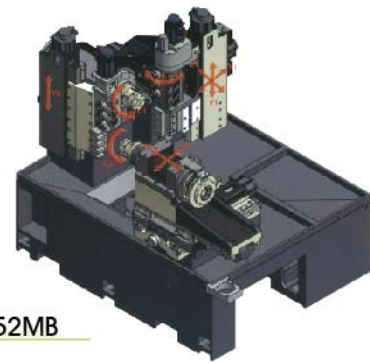


CT2-52YM

### SPECIFICATIONS

	CT2-62	CT2-62YM	CT2-62Y2M	CT2-66YM	CT2-76YM
<b>CONTROLLER</b>	Mitsubishi	Mitsubishi / Fanuc		Fanuc	Mitsubishi
Max / standard turning dia.		Ø 360 / 210 mm			
Distance between centers	925 mm		1050 mm	925 mm	
X1 / X2 axis travel	227.5 / 232 mm	227.5 / 230 mm	227.5 / 227.5 mm	227.5 / 230 mm	
Z1 / Z2 axis travel	440 / 440 mm		310 / 250 mm	415 / 415 mm	
Y1 axis travel			± 50 mm		
B axis travel	635 mm	650 mm	762 mm	555 mm	
X / Y / Z axis rapid speed			16 / 6 / 40 M/min		
Minimum input unit			0.001 mm		
Spindle speed	6000 rpm			4000 rpm	
Spindle motor	7.5 / 11 kw (Mitsubishi), 11 / 15 kw (Fanuc)			18 / 22 kw	15 / 22 kw
Center height			1188 mm		
Spindle bore / nose	60.5 MM / A2-5			88 MM / A2-6	
Spindle bar capacity / chuck size	51 mm / 6"			65 mm / 8"	76 mm / 8"
Sub-spindle rpm	6000 rpm			4000 rpm	
Sub-spindle motor	7.5 / 11 kw (Mitsubishi), 11 / 15 kw (Fanuc)			18 / 22 kw	7.5 / 11 kw
Sub-spindle bore / nose	60.5 MM / A2-5			86 MM / A2-6	
Sub-spindle bar capacity	51 mm			65 mm	
C axis min. moving unit / rapid speed	N / A		0.001 degree / 600 mm/min		
Live tool turret	N / A	16 stations - 25 x 25 mm and 25 mm dia. Tool			
Live tool rotating mode	N / A	Single tool transmission			
Live tools motor / rpm	N / A	3.7 / 5.5 kw, 60 ~ 6000 rpm			
Live tools number	N / A	16 tool			
Collet / tool holder size	N / A	ER 32 / BMT 65			
Total power	63 KVA	77 KVA	80 KVA	93 KVA	88 KVA

## MORTON CNC LATHE - Double Spindle Double Y - Axes, B - Axis



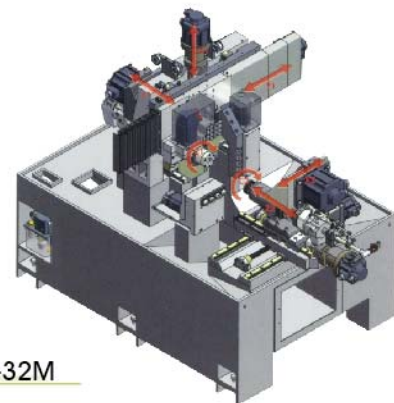
CY2-52MB

### SPECIFICATIONS

Unit : mm

		CY2-52MB
Spindle	Max. cutting dia.	Ø51
	Spindle motor	7.5 / 11 kw
	Spindle max. rpm	6000 rpm
	X1 - axis travel	200 mm
	Y1 - axis travel	455 mm
	Z1 - axis travel	192 mm
	Max. bar feeding dia.	Ø51
	Live tool motor	2.2 kw
Sub spindle	Live tool max. rpm.	6000 rpm
	Max. cutting dia.	Ø51
	Sub spindle motor	7.5 / 11 kw
	Sub spindle max. rpm.	6000 rpm
	X2 - axis travel	485 mm
	Y2 - axis travel	450 mm
	Z2 - axis travel	228 mm
	Bar capacity	Ø51
	Live tool motor	2.2 kw
	Live tool max. rpm.	6000 rpm

## MORTON SLIDING HEAD CNC LATHE



CB-32M

### SPECIFICATIONS

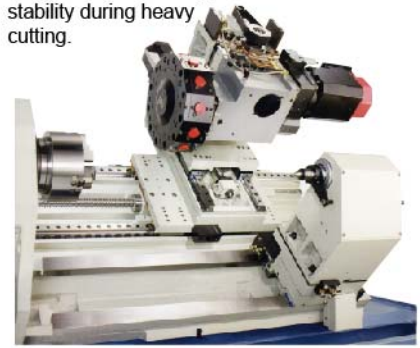
Unit : mm

		CB-32M	CB-36M
Spindle	Max. cutting dia.	Ø32	Ø36
	Spindle motor		7.0 kw
	Spindle max. rpm		6000 rpm
	X1 - axis travel		185
	Y1 - axis travel		490
	Z1 - axis travel		165
	Max. bar feeding dia.	Ø32	
Sub spindle	Max. cutting dia.		Ø32
	Sub spindle motor		4.4 kw
	Sub spindle max. rpm		6000 rpm
	X2 - axis travel		290
	Z2 - axis travel		285
Live Tool	Servo motor (main / sub)		1.5 / 0.75 kw
	Max. rpm		6000 rpm

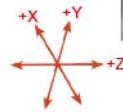
# FREJOATH CNC SLANT BED LATHE WITH Y AXIS



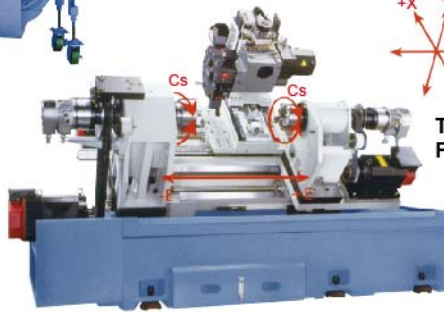
Roller linear guideways on Y axis that ensures high stability during heavy cutting.



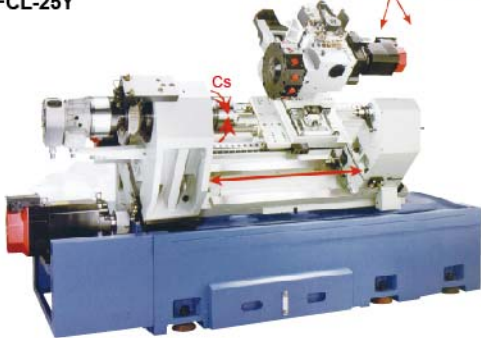
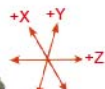
**FCL-20TTY**



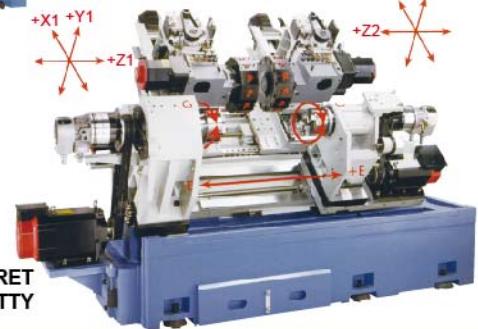
**TWIN SPINDLE / SINGLE TURRET  
FCL-20TSY**



**SINGLE SPINDLE / SINGLE TURRET  
FCL-25Y**



**TWIN SPINDLE / TWIN TURRET  
FCL-20TTY**



## SPECIFICATIONS

	FCL-20Y/25Y/30Y single spindle/single turret	FCL-15TSY/20TSY/30TSY twin spindle/single turret	FCL-15TTY/20TTY/25TTY twin spindle/twin turret
No. of control axis	4 axis (X, Z, C, Y)	7 axis (X, Z, B, C1, C2, Y, TD)	11 axis (X1, Z1, C1, B, Y1, TD1, X2, Z2, C2, Y2, TD2)
Machine type	Linear guide (X / Z axis)	Linear guide (X / Z axis), Boxway (B axis)	Linear guide (X / Z axis), Boxway (B axis)
Swing over bed	780 mm	780 mm	780 mm
Max. turning dia.	300 / 300 / 250 mm	300 / 300 / 250 mm	300 mm
Max. turning length	332 / 587 / 520 mm	231 / 500 / 470 mm	290 mm
Spindle nose	A2-6 / A2-6 / A2-8		
Spindle bore	61 / 77 / 90 mm		
Bar capacity	52 / 65 / 77 mm		
Spindle nose - main		A2-5 / A2-6 / A2-8	A2-5 / A2-6 / A2-6
Spindle bore - main		56 / 61 / 90 mm	56 / 61 / 77 mm
Bar capacity - main		45 / 51 / 77 mm	45 / 51 / 65 mm
Spindle nose - sub		A2-5 / A2-5 / A2-6	A2-5 / A2-5 / A2-6
Spindle bore - sub		56 / 56 / 61 mm	56 / 56 / 61 mm
Bar capacity - sub		45 / 45 / 51 mm	45 / 45 / 52 mm
Spindle motor	9/11, 11/15, 15/18 kw		
Spindle motor - main		5.5/7.5, 9/11, 11/15 kw	5.5/7.5, 9/11, 11/15 kw
Spindle motor - sub		5.5/7.5, 5.5/7.5, 7.5/11 kw	5.5/7.5, 5.5/7.5, 7.5/11 kw
Travel : X axis	180 / 180 / 150 mm	180 / 180 / 150 mm	
Travel : Z axis	410 / 685 / 610 mm	339 / 560 / 540 mm	
Travel : B axis		231 / 500 / 490 mm	520 / 500 / 465 mm
Travel : Y axis	40 / 40 / 60 (± mm)	40 / 40 / 60 (±mm)	
Travel : X1, X2 axis			150 ~ 180 mm
Travel : Z1, Z2 axis			334 mm
Travel : Y1, Y2 axis			40 (±mm)
Rapid (X, Z axis)	30 m/min	30 m/min	
Rapid (B axis)		20 m/min	20 m/min
Rapid (Y axis)	7 m/min	7 m/min	
Rapid (X1, X2, Z1, Z2 axis)			20 m/min
Rapid (Y1, Y2 axis)			7 m/min
Turret	VDI 30 / 30 / 40	VDI 30 / 30 / 40	VDI 30*2 sets
Turret station	12 tools	12 tools	12 tools
Net weight	5500 / 6320 / 7000 kgs	5480 / 6640 / 6830 kgs	7670 / 7800 / 8000 kgs



# FREJOTH CNC SLANT BED LATHES WITH SUB - SPINDLE

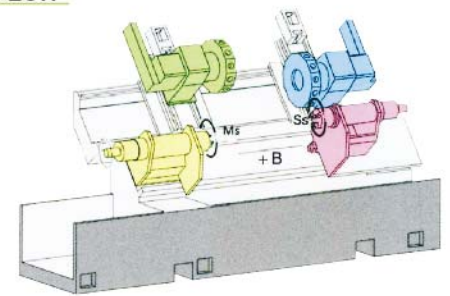
FCL-15TT/20TT/25TT (twin spindle, twin turret)  
 FCL-15TS/20TS/25TS (twin spindle, single turret)



FCL-20TS



FCL-20TT



## SPECIFICATIONS

	FCL-15TT	FCL-20TT	FCL-25TT	FCL-15TS	FCL-20TS	FCL-25TS
No. of control axis (axis)	5,opt:7(c axis)	5,opt:7(c axis)	5,opt:7(c axis)	3,opt:5(c axis)	3,opt:5(c axis)	3,opt:5(c axis)
Machine type	Linear way			Linear way		
Swing over bed	mm 620	620	620	600	630	650
Max. turning diameter	mm 440	440	440	250	490	470
Max. working length	mm 310	290	270	260	500	470
Spindle speed (main, sub)	rpm 10-6000,10-6000	10-4200,10-6000	10-3500,10-4200	10-6000,10-6000	10-4200,10-6000	10-3500,10-4200
Spindle motor (main, sub)	kw 5.5/7.5,5.5/7.5	9/11,5.5/7.5	11/15,7.5/11	5.5/7.5,5.5/7.5	9/11,5.5/7.5	11/15,7.5/11
Spindle bore / nose (main, sub)	mm dia.56(A2-5) /56(A2-5)	dia.61(A2-6) /56(A2-5)	dia.77(A2-6) /61(A2-6)	dia.56(A2-5) /56(A2-5)	dia.61(A2-6) /56(A2-5)	dia.90(A2-8) /61(A2-6)
Bar capacity (main, sub)	mm dia.45/45	dia.52/45	dia.65/52	dia.45/45	dia.52/45	dia.77/52
Travel X1 / X2 axes	mm 245	245	245	-	-	-
Travel Z1 / Z2 axes	mm 342	342	342	-	-	-
Travel X / Z / B axes	mm -	-	-	165/310/260	280/560/500	280/540/470
X1.X2 / Z1.Z2 / B axes motor	kw 1.6x2/1.6x2/1.6	1.6x2/1.6x2/1.6	3x2/1.6x2/1.6	-	-	-
X / Z / B axes motor	kw -	-	-	1.6/1.6/1.6	1.6/1.6/1.6	3/3/1.6
X / Z / B axis rapid feed	m/min -	-	-	30/30/20	30/30/20	30/30/20
X1.X2 / Z1.Z2 / B axis rapid feed	m/min 20	20	20	-	-	-
Turret type	Servo-VDI30-12T			Hyd.LS-200-12T	Hyd.LS-240-12T(opt.Servo type)	
Tool size	mm -	20x20	-	20x20	20x20	25x25
Net weight	kgs 7160	7300	7400	5280	6440	6630

## FREJOTH CNC SLANT BED LATHE - 2 AXIS BOX WAY



ATC-135

### SPECIFICATIONS

	ATC-35	ATC-40	ATC-45	ATC-50
Bar capacity	89.opt.110.116 mm	89.opt.110.116.160 mm	opt.115.135.205 mm	115.opt.135.205 mm
Max. turning diameter	500 mm	710 mm	850 mm	1020 mm
Swing over bed	660 mm	850 mm	970 mm	1100 mm
Max. working length	820 / 1580 / 2315 / 3100 mm	820 / 1580 / 2315 / 3100 mm	1118 / 1700 / 2200 / 3200 mm	2280 / 3280 / 4280 / 5280 mm
Spindle motor	22 / 26 kw	22 / 26 kw	30 / 37 kw	37 / 45 kw
Spindle speed	2500 / 625 rpm	2500 / 550 rpm	2 ~ 1500 rpm (3 stages)	2 ~ 1200 rpm (4 stages)
Spindle bore / power chuck size	105 mm / 12 inch	105 mm / 12 inch	160 mm / opt.18.24.32 inch	160 mm / opt.18.24.32 inch
Travel X axes	250 + 25 mm	355 + 25 mm	425 + 25 mm	510 + 25 mm
Travel Z axes	885 / 1645 / 2250 / 3165 mm	885 / 1645 / 2250 / 3165 mm	1250 / 1750 / 2250 / 3250 mm	2200 / 3200 / 4200 / 5200 mm
X / Z servo motor	5.4 / 5.4 kw	5.4 / 5.4 kw	5.4 / 9.4 kw	5.4 / 9.4 kw
X / Z - Rapid feed	12 / 15 m / min	12 / 15 m / min	12 / 16 m / min	12 / 15 m / min
Turret type	Vertical 10 (opt.12) hydraulic driven system		Vertical 12 hydraulic driven system	
Tool size	32 mm	32 mm	32 mm	32 mm
Tailstock travel	780 / 1540 / 2250 / 3060 mm	780 / 1540 / 2250 / 3060 mm	850 / 1450 / 1950 / 2950 mm	2000 / 3000 / 4000 / 5000 mm
Tailstock - quill dia. / travel	110 / 100 mm	110(opt.160 mm) / 100 mm	200 mm / 200 mm	200 mm / 200 mm
Tailstock taper	MT5	MT5	MT6	MT6
Net weight	10030 / 11300 / 13700 / 16300 kg	12500 / 14100 / 15600 / 17900 kg	14200 / 14950 / 15700 / 18400 kg	18000 / 23000 / 27000 / 32000 kg

## FREJOTH CNC SLANT BED LATHE - LINEAR GUIDEWAY



FCL-30

### SPECIFICATIONS

	FCL-20	FCL-25	FCL-30
Bar capacity	52 mm	65 mm	77 mm
Swing over bed	480 mm	600 mm	630 mm
Working length	462 / 700 / 1000 mm	430 / 690 / 1000 mm	700 / 1000 mm
Max. turning dia	280 mm	300 mm	442 mm
Spindle nose and chuck size	A2-6 8 inch	A2-6 10 inch	A2-8 10 inch.opt 12inch
Turret type	hydraulic 8 direct	hydraulic 12 direct	
Tool holder size OD (SQ) / ID dia	25 x 25 mm / 32 mm	25 x 25 mm / 40 mm	25 x 25 mm / 40 mm
X / Z axis travel	X : 142 mm / Z : 475 / 700 / 1000 mm	X : 180 mm / Z : 460 / 700 / 1000 mm	X : 250 mm / Z : 700 / 1000 mm
X / Z rapid feed rate	30 m / min	30 m / min	30 m / min
Spindle motor	9 / 11 kw	11 / 15 kw	15 / 18.5 kw
X / Z axis motor	1.8 kw / 1.6 kw	1.6 kw / 1.6 kw	3 kw / 3 kw
Tailstock travel	395 / 650 / 1000 mm	390 / 650 / 1000 mm	650 / 1000 mm
Tailstock - quill dia. / travel / taper	75 mm / 80 mm / MT4	75 mm / 80 mm / MT4	90 mm / 100 mm / MT5
Net weight	4550 / 6120 / 7000 kgs	5050 / 6120 / 7000 kgs	6230 / 7000 kgs

## FREJOTH CNC TOOL ROOM LATHE



ATL-1118CNC

### SPECIFICATIONS

	ATL-1118CNC
Maximum swing	Ø380 mm
Maximum turning diameter	Ø150 mm (Ø6")
Distance between centers	457 mm
Bar stock diameter (5C collet)	Ø27 mm (Ø1 - 1/16")
Hole through spindle	Ø31.75 mm (Ø1 - 1/4")
CNC controller	FANUC (standard)
Spindle speeds (variable)	50 ~ 4000 rpm (3 HP) / 50 ~ 6000 rpm (5 HP) - OPT.
Spindle nose I.D / O.D.	5C (10") / 4" taper
Chuck Diameter	Ø150 mm (Ø6")
Maximum X axis travel	220 mm
Maximum Z axis travel	340 mm
Rapid traverse	20 m / min
Inverter spindle motor	3 HP / 5 HP - OPT.
X, Z axis servo motor	X : β2 Z : β2
Coolant pump	1/4 HP
Tailstock spindle taper	MT No.2
Tailstock spindle travel	95 mm
Machine dimensions (L x W x H)	2050 x 1000 x 1650 mm (81" x 40" x 65")
Machine weight	1200 kgs (2640 lbs)

## FREJOTH HIGH - SPEED AND HIGH PRECISION CNC LATHE



AT-A70CNC



AJ-27CNC

### SPECIFICATIONS

		AT-A70CNC			AJ-27CNC	
Capacity	Swing over bed dia	270 mm	Capacity	Swing over bed	230 mm	
	Swing over cross slide dia	130 mm		Collet	Max diameter (5C Collet)	27 mm
	Collet	5C / YB 32			Collet type	5C
Max bar diameter	27 / 32 mm	Bore	I.D.		27 mm	
Headstock	Spindle hole		31.75 mm (5C) / 39 mm (YB 32)	Square	19 mm	
	Max speed		4000 / 6000 r.p.m		Hexagon	22 mm
	Max rating	2.2 kw (3HP) / 3.7 kw (5HP)	Spindle speed			50 - 4000 r.p.m
	Coolant pump	0.18 kw (1/4HP)	Spindle	Hole through spindle	31.75 mm	
Axis	X - Axis travel	400 mm	Travel of tool silde	X - Axis travel	100 mm	
	Z - Axis travel	200 mm		Z - Axis travel	100 mm	
	X Axis ball screw dia x pitch	20 x 5 mm		Motor	Main motor	1.5 kw (2HP)
	Z Axis ball screw dia x pitch	20 x 5 mm	Feed motor (X / Z)		0.4 KW	
	Machine size	Machine size (L x W x H)	227 x 88 x 176 cm	Machine dimensions		1120 x 620 x 1580
Machine weight		920 kg	Machine weight		500 kg	
				Height of machine		1580 mm
				Tool		12 mm

## FREJOTH CNC HEAVY DUTY EXTERNAL CYLINDRICAL / ROLLER GRINDING MACHINE - TRAVELLING TABLE TYPE



ATT40

### SPECIFICATIONS

	ATT40	ATT60	ATT85	ATT100	ATT120	
Max. weight of work with steadies	360 / 1200 kgs	2000 / 4000 kgs	4000 / 6000 kgs	7000 / 8000 kgs	12000 kgs	
Max. weight of work center to center	360 kgs / 600 kgs	1200 / 3000 kgs	1500 / 4000 kgs	1800 / 6000 kgs	2400 / 6000 kgs	
Min / Max. grinding diameter	400 mm	600 mm	850 mm	1000 mm	200 ~ 1200 mm	
Max. diameter of crown grinding	5 mm diameter					
Distance between centers	1 ~ 3 meters	2 ~ 6 meters	2 ~ 6 meters	2 ~ 6 meters	2 ~ 6 meters	
Headstock	power of workdrive	2.25 or 3.75 kw	7.5 or 11.25 kw	11.25 or 15 kw	11.25 or 15 kw	15 kw
	work speeds	15 ~ 150 rpm	8 ~ 80 rpm	6 ~ 60 rpm	6 ~ 60 rpm	5 ~ 50 rpm
Wheel head	power of wheel drive	7.5 kw	22.5 kw	30 kw	30 kw	30 kw
	spindle speed	600 ~ 1500 rpm	500 ~ 1400 rpm	400 ~ 1200 rpm	400 ~ 1200 rpm	400 ~ 1200 rpm
	traverse X axis	290 mm	315 mm	510 mm	510 mm	620 mm
	Max. rapid feed rate	1000 mm/min	1500 mm/min	1500 mm/min		
	grinding wheel dimension	510 x 50 x 152.4 mm	760 x 75 x 304.8 mm	915 x 100 x 304.8 mm or 915 x 100 x 508 mm		
	micro feed	0.001 mm / p				
Machine table	spindle lubrication system	combination of hydrodynamic & hydrostatic				
	slide traverse Z axis	1200 ~ 3200 mm	2200 ~ 6200 mm	2200 ~ 6200 mm		
	feed rate of Z axis	10 ~ 3000 mm/min	10 ~ 4500 mm/min	10 ~ 4500 mm/min		10 ~ 4500 mm/min
Tailstock	quill travel	50 mm	100 mm	150 mm	150 mm	180 mm
	moving method	manual	air floating	air floating	air floating	air floating
Net weight	5.6 ~ 10.6 ton	10.3 ~ 19 ton	12 ~ 26 ton	12 ~ 26 ton	21 ~ 38 ton	

Remark weight of work piece standard roller / heavy duty roller weight

## FREJOTH NC (PLC) EXTERNAL GRINDING MACHINES



APT100

### SPECIFICATIONS

	APT40	APT60	APT85	APT100	APT120	
Max. weight of work with steadies	600 / 1200 kgs	2000 / 4000 kgs	4000 / 6000 kgs	6000 kgs	10000 kgs	
Max. weight of work center to center	360 / 600 kgs	1200 / 3000 kgs	1500 / 4000 kgs	3600 kgs	6000 kgs	
Max. grinding diameter	400 mm dia	600 mm dia	850 mm dia	1000 mm dia	1200 mm dia	
Distance between centers	1 ~ 3 meters	1 ~ 5 meters	2 ~ 6 meters	2 ~ 8 meters	2 ~ 8 meters	
Headstock	power of work drive	2.25 or 3.75 kw	7.5 or 11.25 kw	11.25 or 15 kw	10 ~ 15 kw	10 ~ 15 kw
	work speeds var. speed	15 ~ 150 rpm	8 ~ 80 rpm	6 ~ 60 rpm	6 ~ 60 rpm	6 ~ 60 rpm
	spindle taper	MT5	MT6	MT6	MT6	MT6
	spindle loading kg / length	50 kgs / 150 mm	100 kgs / 150 mm	200 kgs / 150 mm	200 kgs / 150 mm	200 kgs / 150 mm
Wheel head	power of work drive	7.5 kw	22.5 kw	30 kw	20 ~ 40 kw	20 ~ 40 kw
	work speeds var speed	600 ~ 1500 rpm	500 ~ 1400 rpm	400 ~ 1200 rpm	500 ~ 1000 rpm	500 ~ 1000 rpm
	travel	290 mm	315 mm	510 mm	630 mm	720 mm
	hand feed per graduation	ø2 mm (0.005)	ø2 mm (0.005)	ø2 mm (0.005)	2 mm (0.005)	2 mm (0.005)
	grinding wheel dimension	510 x 50 x 152.4 mm	APT60 : 760 x 75 x 304.8 mm		APT85 : 915 x 100 x 304.8 mm	
Machine table	long travel	1200 ~ 3200 mm	2200 ~ 5200 mm	2200 ~ 6200 mm	1200 ~ 5200 mm	1200 ~ 5200 mm
	table feed rate	10 ~ 3000 mm/min	APT60, 85 : 10 ~ 4500 mm/min			10 ~ 6000 mm/min
	min auto traverse	30 mm	30 mm	30 mm	30 mm	30 mm
Tailstock	quill travel / taper	50 mm / MT5	100 mm / MT6	150 mm / MT6	150 mm / MT6	180 mm / MT6
Net weight	5.6 ~ 10.6 ton	8 ~ 17 ton	12 ~ 26 ton	12.5 ~ 26 ton	25 ton	

## FREJOTH EXTERNAL GRINDING MACHINE - CNC SERIES



AEG-1424CNC

### SPECIFICATIONS

	AEG-1124CNC	AEG-1424CNC
Swing over table	270 mm	350 mm
Between centers	600 mm	600 mm
Max. workpiece weight	Center work : 60 kgs / workhead only - 20 kgs	
<b>Wheel head &amp; Feed</b>		
Grinding wheel dimension	405 x 32-50 x 152.4 mm	
When speed	1650 / 1850 rpm	
Max. wheel circumferential speed	2000 mm / min.	
Traverse length	250 mm	
Swing angle	±15 deg.	
Manual infeed	0.001 / 0.01 / 0.1 mm	
<b>Table</b>		
Table longitudinal	700 mm	
Table swivel angle	toward / away operator : 6 deg. / 9 deg.	
Table manual infeed	0.001 / 0.01 / 0.1 mm	
<b>Workhead</b>		
Work spindle speed	30 ~ 360 rpm	
Spindle taper	MT #4	
Spindle bore	25 mm diameter	
Tailstock	MT NO.4 -travel : 32 mm	
Wheel head infeed servo motor	1.5 kw	
Table infeed servo motor	1.5 kw	
Wheelhead spindle motor	3.75 kw (5.6 / 7.5 kw)	
Net weight	2200 kgs	2200 kgs

## FREJOTH EXTERNAL GRINDING MACHINE - NC SERIES



AEG-1424NC

### SPECIFICATIONS

	AEG-1122NC	AEG-1130NC	AEG-1422NC	AEG-1430NC
Swing over table		270 mm		350 mm
Between centers	600 mm	750 mm	600 mm	750 mm
Max. workpiece weight - center work		60 kgs		80 kgs
<b>Wheel head &amp; Feed</b>				
Grinding wheel dimension	405 x 32-50 x 152.4 mm			
When speed	1650 / 1850 rpm			
Traverse length	250 mm			
Manual infeed	By - MPG 0.001 / 0.01 / 0.1 mm			
<b>Table</b>				
Table swivel angle	Toward/away-operator-6/9deg.	Toward/away-operator-4/9deg.	Toward/away-operator-6/9deg.	Toward/away-operator-4/9deg.
Table auto feed - variable speed	50 ~ 4000 mm / min.			
Table handle feed	one revolution - 12.5 mm			
<b>Workhead</b>				
Swivel angle	Toward operator - 30 deg. Away from Operator - 90 deg.			
Work spindle speed	30 ~ 450 rpm			
Spindle taper	MT #4			
Spindle bore	25 mm diameter			
Tailstock	MT #4 - quill travel - 32 mm			
Wheelhead spindle motor	3.7 kw			
Workhead spindle motor	0.4 kw			
Hydraulic system pump	0.75 kw			
Net weight	2100 kgs	2400 kgs	2100 kgs	2400 kgs

## FREJOTH 2 AXES / 3 AXES CNC SURFACE GRINDER



ASG-2550CNC

### SPECIFICATIONS

	ASG-2550CNC	ASG-3060CNC
Table size	250 x 500 mm	300 x 600 mm
Max. grinding surface	255 x 510 mm	305 x 610 mm
Max. spindle center to table	500 mm	600 mm
Rapid power up / down	550 mm/min	
Rapid power cross feed	1100 mm/min	
Table speed	3 ~ 25 m/min (hydraulic feed for 2 axes CNC) / 1 ~ 15 m/min (servo feed for 3 axes CNC)	
Wheel speed (60 hz)	3500 rpm	1750 rpm
Wheel dimension	180 x 13 x 31.75 mm	355 x 50 x 127 mm
Spindle motor	3 HP	7.5 HP
Machine net weight (2 / 3 axes)	2350 / 2500 kgs	2850 / 3000 kgs

## FREJOTH NC Surface Grinder - Adp Cantilever Type Series



ASG-3260ADP

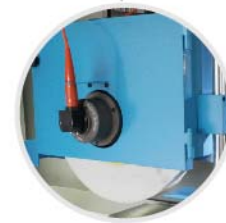
### SPECIFICATIONS

		ASG-3260ADP ASG-4060ADP	ASG-3280ADP ASG-4080ADP	ASG-32120ADP ASG-40120ADP	ASG-32160ADP ASG-40160ADP
Grinding surface of table	mm	800 x 1500 1000 x 1500	800 x 2000 1000 x 2000	800 x 3000 1000 x 3000	800 x 4000 1000 x 4000
Max. distance center of spindle to table	mm	800 [Option : 1000]			700 [Option : 900]
Table speed approx.		3 ~ 25			
Rapid power cross feed	mm / min	900			
Rapid power hand elevation	mm / min	225			
Auto cross feed motor	W	750 W AC SERVO MOTOR			
Rapid head elevation motor	W	1000 W AC SERVO MOTOR			
Wheel dimension	mm	405 x 50 x 127 [Max. 405 x 75 x 127]			
Wheel speed	rpm	1450 rpm			
Spindle motor	HP	10 [Option : 15]			
Machine net weight	Kgs	12800	14300	17300	20300
		13800	15300	18800	21300

## FREJOTH NC Surface Grinder - Adp Saddle Type Series



Auto Balancing System (option)



ASG-1632ADP

### SPECIFICATIONS

		ASG-1020ADP	ASG-1224ADP	ASG-1632ADP
Grinding surface of table	mm	250 x 500	300 x 600	400 x 800
Max. distance center of spindle to table	mm	500		550
Table speed approx.	M / min	5 ~ 25		
Rapid power cross feed	mm / min	900		
Rapid power hand elevation	mm / min	450		
Auto. Cross feed motor	w	750 (AC servo motor)		
Rapid head elevation motor	kw	1 (AC servo motor)		
Wheel dimension	mm	180 x 13 x 31.75	355 x 38 x 127	450 x 50 x 127
Wheel speed	R. P. M	2900	1450	
Spindle motor	HP	2	5	
Machine net weight	kg	2000	2500	3700

## FREJOTH NC Surface Grinder - Adp Column Type Series



Auto Balancing System (option)



ASG-2880ADP

### SPECIFICATIONS

		ASG-2040ADP ASG-2440ADP ASG-2840ADP	ASG-2060ADP ASG-2460ADP ASG-2860ADP	ASG-2080ADP ASG-2480ADP ASG-2880ADP
Grinding surface of table	mm	500 x 1000 600 x 1000 700 x 1000	500 x 1500 600 x 1500 700 x 1500	500 x 2000 600 x 2000 700 x 2000
Max. distance center of spindle to table	mm	600		
Table speed approx.	M / min	5 ~ 25		
Rapid power cross feed	mm / min	900		
Rapid power hand elevation	mm / min	300		
Auto Cross feed motor	kw	1.5 (AC servo motor)		
Rapid head elevation motor	kw	1 (AC servo motor)		
Wheel dimension	mm	450 x 50 x 127		
Wheel speed	R. P. M	1450		
Spindle motor	HP	10		
Machine net weight	kg	6870	7870	9070
		7170	8170	9370
		7470	8470	9670

## FREJOTH INTERNAL GRINDING MACHINE - CNC SERIES



AJG-1



AJG-1E



AJG-3

### SPECIFICATIONS

	AJG-1	AJG-1E	AJG-3
Range of grinding ID	Ø 6 ~ Ø 150 mm	Ø 6 ~ Ø 150 mm	Ø 6 ~ Ø 200 mm
Range of workpiece OD	Ø 300 mm	Ø 300 mm	Ø 320 mm
Length of grinding (inner)	Ø 150 mm	Ø 150 mm	Ø 300 mm
Loading workpiece length	Ø 150 mm	Ø 150 mm	Ø 450 mm
Swing of work-head	Ø 400 mm	Ø 400 mm	Ø 520 mm
Internal grinding unit traverse / infeed (X - axis)	Max. 200 mm	Max. 200 mm	Max. 350 mm
Internal grinding unit table stroke (Z - axis)	Max. 250 mm	Max. 250 mm	Max. 390 mm
Workhead speeds stepless, adjustable	1 ~ 900 rpm	1 ~ 900 rpm	1 ~ 900 rpm
Taper angle to be grounded	degree - 5 / + 25	degree - 5 / + 25	degree - 5 / + 20
Load on spindle head		90 kgs	
Net weight	appr. 1800 kgs	appr. 1800 kgs	appr. 3500 kgs

## FREJOTH CNC UNIVERSAL EXTERNAL GRINDING MACHINE



AEG-300CNC

### SPECIFICATIONS

	AEG-300CNC	AEG-350CNC
Max. work swing	305 mm	355 mm
Max. grinding dia.	300 mm	350 mm
Max. loading weight	90 kgs	150 kgs
Distance between centers	600 mm	1000 mm
Wheel speed	1800 rpm	1800 rpm
Wheel size ( OD x Width x ID )	Ø405 x (30 ~ 70) x Ø152.4 mm	
Wheel surface speed	27000 mm/min	
Wheel head travel	260 mm	
Tailstock center taper	MT#4	
Work head taper / speed	MT#4 / 30 ~ 900 rpm	
Work head swivel angle	+45 ~ -45 degree	
Table carriage feed rate	0 ~ 10000 mm/min	
Table travel	680 mm	1050 mm
Wheel head motor	7.5 HP / 4P	10 HP / 4P
Net weight	2800 kgs	3500 kgs



## SPEEDER TOOL & CUTTER GRINDER - CNC type



TG-4+4 Axis

### SPECIFICATIONS

	TG-4 + 4 Axis
Max. work piece length	400 mm
Max. turning diameter	Ø 200 mm
Grinding spindle speed	0 ~ 9000 rpm
Grinding spindle taper	BT #50
Grinding spindle resolution	0.001°
X / Y / Z / C axis	370 mm / 230 mm / 170 mm / ∞
Rapid feed X / Y / Z	12 / 12 / 9 M / min.
X / Y / Z / C axis motor	1.5 / 1.5 / 1.5 / 1.5 / kw
Coolant system motor	3HP + 2HP
Lubrication motor	25 Watts
CNC Controller	Mitsubish
Net weight	4530 kgs

## SPEEDER TOOL & CUTTER GRINDER - CNC type



TG-5 Master



TE-5

### SPECIFICATIONS

	TG-5 Master	TE-5
Max. work piece length		150 mm
Max. turning diameter		Ø 200 mm
Grinding spindle speed		0 ~ 9000 rpm
Grinding spindle peak power	7.5 / 11 kw	3.75 / 5.6 kw
Max. grinding wheel diameter		Ø 150 mm
X / Y / Z axis	370 mm / 230 mm / 180 mm	240 mm / 220 mm / 250 mm
A axis		-16° ~ +196°
C axis		∞
Rapid feed X / Y / Z	12 / 12 / 9 M / min.	10 / 10 / 8 M / min.
Rapid A / C axis		8 / 180 rpm
Linear resolution		0.001 mm
Radial resolution		0.001°
X / Y / Z / C / A axis motor		1.5 / 1.5 / 1.5 / 0.8 / 0.8 / kw
Coolant system motor	3 HP + 2 HP	2 HP + 2 HP
Lubrication motor		25 Wats
CNC Controller		Siemens
Net weight	4530 kgs	4000 kgs

## SPEEDER CNC SAW GRINDING MACHINE SERIES-4 AXIS



SNC-560



SNC-710

### SPECIFICATIONS

	SNC-560	SNC-710
Saw blade diameter	25 (opt.) 40 ~ 560 mm	25 (opt.) 40 ~ 710 mm
Pitch range	24 mm (max.)	24 mm (max.)
Wheel diameter	150 mm	150 mm
Wheel inner diameter	32 mm	32 mm
Wheel motor	3 kw	3 kw
Pneumatic pressure requirement	4 ~ 6 kg/cm <sup>2</sup>	4 ~ 6 kg/cm <sup>2</sup>
Total electric power	10 kw	10 kw
Gross weight	2200 kgs	2730 kgs
Dimension (W x H x D)	1680 x 1820 x 1860 mm	1700 x 2190 x 1790 mm

## SPEEDER CNC SAW GRINDING MACHINE



SNC-500C3-3axis



SNC-500CBN-2axis

### SPECIFICATIONS

	SNC-500C3	SNC-500CBN
Saw blade diameter	70 ~ 500 mm	70 ~ 500 mm
Pitch range	24 mm (max.)	24 mm (max.)
Wheel diameter	200 mm	200 mm
Wheel inner diameter	32 mm	32 mm
Wheel motor	3.75 kw	3.75 kw
Pneumatic pressure requirement	4 ~ 6 kg/cm <sup>2</sup>	-
Total electric power	9.5 kw	9 kw
Gross weight	1600 kgs	1500 kgs
Dimension (W x H x D)	1460 x 2000 x 2080 mm	1460 x 2000 x 2080 mm

# SPEEDER CNC VERTICAL GRINDING MACHINE



**AHV-1008CNC**

Suitable to grind components for large ships, aircraft

## SPECIFICATIONS

		AHV-1008CNC
Capacity	Range of I.D. Grinding	50 ~ 800 mm
	Max O.D. Grinding	1000 mm
	Max swing diameter	1000 mm
	Max workpiece height	800 mm
	Max table load	1200 kg
	Center height	1800 mm
	X axis travel	1500 mm
	Z axis travel	1700 mm
Wheel head spindle	Grinding wheel speed	1500 ~ 12000 rpm
	Grinding wheel diameter	45 ~ 305 mm
	Max. peripheral	33 m/s
	Grinding wheel spindle motor	15HP (opt. 20HP)
	Spindle taper	HSK 100A
Angular axis	Swivel angle (C.C.W)	+ - 30 degree manual
Workhead spindle	Workhead spindle rpm	10 ~ 240 rpm
	Table size	1000 mm
Work table	T slot nut	M 12
	Automatic exchange tool number	6
ATC	Tool magazine type	Umbrella type
	Spindle taper	HSK 100A
	Exchange type	X/Z servo movement
	Max. grinding wheel diameter	305
Machine measurement	Length x Width x Height	5450 x 3100 x 5500
	Net weight	25000 kg

# FREJOTH BED TYPE CNC MILL



**FBM-VST1200CNC**

## SPECIFICATIONS

	FBM-VST1500CNC	FBM-VST1200CNC
Travels - X / Y / Z / H	1500 / 630 / 600 / 550 mm	1200 / 520 / 600 mm
Table size	1800 x 520 mm	1470 x 350 mm
Table maximum loading	800 kgs	600 kgs
Vertical spindle nose to table		100 ~ 700 mm
Vertical spindle center to column	660 mm	520 mm
Vertical spindle speed - 50HZ		Inverter Variable 60 ~ 3600 rpm
Vertical spindle nose		N.S.T 40
Vertical spindle motor		5HP - 4P
Vertical quill travel		140 mm
Horizontal spindle nose	N.S.T 50	-
Horizontal spindle speed	6 steps / 100 ~ 590 rpm	-
Horizontal spindle travel - vertical	550 mm	-
Horizontal spindle center to table	0 - 550 mm	-
Horizontal spindle nose to column	-150 to +150 mm	-
Distance between two spindle	690 mm	-
Horizontal spindle motor	7.5HP - 4P	-
Net weight	6100 kgs	4000 kgs

## FREJOTH BED TYPE HEAVY DUTY CNC MILLING MACHINES



S-1000D



S-1500D

### SPECIFICATIONS

	S-1000D	S-1300D	S-1500D	S-1700D
Travels - X / Y / Z	1000 x 500 x 570 mm	1300 x 700 x 670 mm	1500 x 700 x 670 (900) mm	1700 x 700 x 670 (900) mm
Table size	1200 x 500 mm	1500 x 600 mm	1700 x 600 mm	1950 x 600 mm
Spindle nose to table top	100 ~ 670 mm	100 ~ 770 mm	100 ~ 770 (1000) mm	100 ~ 770 (1000) mm
Spindle center to column front	600 mm	700 mm	700 mm	700 mm
T - slot (width x no. x pitch)	16 x 5 x 86 mm	18 x 5 x 110 mm	18 x 5 x 110 mm	18 x 5 x 110 mm
Spindle speed	8000 rpm, (10000, 12000 rpm)			
Spindle taper	BT#40	BT#40	BT#40 (50)	BT#40 (50)
Spindle motor	7.5 / 11 kw	11 / 15 kw	11 / 15 kw	11 / 15 kw
ATC	Armless 20T (ARM type 24 T)			
Ball screw	40 x 10 mm, C5			
Net weight	4200 kgs	6000 kgs	6500 kgs	6800 kgs

## FREJOTH BED TYPE HEAVY DUTY CNC MILLING MACHINES



S-2473



S-3092

### SPECIFICATIONS

	S-1654	S-2063	S-2473	S-3092	S-30112
Travels - X / Y / Z	1000 x 508 x 500 mm	1270 x 635 x 600 mm	1500 x 700 x 700 mm	2000 x 840 x 610 (840) mm	2500 x 840 x 610 (840) mm
Table size	1370 x 400 mm	1600 x 500 mm	1854 x 610 mm	2330 x 760 mm	2840 x 760 mm
Table maximum loading	1000 kgs	1200 kgs	1500 kgs	1600 kgs	1700 kgs
Spindle nose to table top	100 ~ 700 mm	100 ~ 700 mm	100 ~ 800 mm	100 ~ 710 (940) mm	100 ~ 710 (940) mm
Spindle center to column front	530 mm	760 mm	760 mm	900 mm	900 mm
Spindle speeds	8000 rpm (10000 rpm)				
Spindle taper	BT#40	BT#40	BT#40, opt. BT#50	BT#40, opt. BT#50	BT#40, opt. BT#50
Spindle motor	10 HP	10 HP	15 HP	15 HP, opt. 20 HP	15 HP, opt. 20 HP
ATC	Armless No. 20T, Arm type No. 24T				
Ball screws (dia. x pitch)	Ø32 x Ø40 x Ø40 mm x 10P	Ø40 mm x 10P	Ø40 mm x 10P	Ø50 mm x 10P	Ø50 mm x 10P
	C5 Grade	C5 Grade	C5 Grade	C5 Grade	C5 Grade
Net weight	2400 kgs	3700 kgs	4100 kgs	8500 kgs	9000 kgs

## FREJOTH CNC UNIVERSAL BED-TYPE MILLING MACHINE



FUH-1250CNC



FUH-1000CNC

### SPECIFICATIONS

	FUH-1250CNC	FUH-1000CNC	FU-1000CNC
Travels - X / Y / Z	1250 x 500 x 470 mm	1000 x 500 x 430 mm	1000 x 350 x 430 mm
Table size	1800 x 400 mm	1500 x 360 mm	1500 x 360 mm
Table maximum loading	1000 kgs	800 kgs	800 kgs
Spindle center to table (H) with arbor / without arbor	50 ~ 480 / 360 ~ 790 mm	50 ~ 480 / 360 ~ 790 mm	50 ~ 480 / 360 ~ 790 mm
Spindle nose to table (V)	50 ~ 520 mm	50 ~ 480 mm	50 ~ 480 mm
T-slot (width x No. x L)	18 x 4 x 80 mm	18 x 4 x 80 mm	18 x 4 x 80 mm
Spindle speeds	L: 275 H: 2000 rpm	L: 275 H: 2000 rpm	L: 275 H: 2000 rpm
Spindle taper	NT#50 (BT#50)	NT#50 (BT#50)	NT#50 (BT#50)
Spindle motor	5.5 kw (7.5 kw)	5.5 kw (7.5 kw)	5.5 kw (7.5 kw)
Vertical rapid feed rate	2000 mm/min	2000 mm/min	2000 mm/min
Longitudinal & cross rapid rate	4000 mm/min	4000 mm/min	4000 mm/min
Vertical cutting feed rate	0-2000 mm/min	0-2000 mm/min	0-2000 mm/min
Longitudinal & cross feed rate	0-4000 mm/min	0-4000 mm/min	0-4000 mm/min
Net weight (approx)	3200 kgs	2900 kgs	2600 kgs

## FREJOTH VERTICAL TURRET CNC MILLING MACHINE WITH 2/3 AXIS BALLSCREW



33HP-CNC



33VS-CNC

### SPECIFICATIONS

	32/33VS-CNC	32/33VK-CNC	32/33HP-CNC	42/43SH-CNC	42/43VH-CNC	42/43FH-CNC
Table	229 x 1067 mm	254 x 1270 mm	254 x 1270 mm	254 x 1270 mm	254 x 1270 mm	254 x 1270 mm
Long. travel	575 mm	575 mm	575 mm	575 mm	575 mm	575 mm
Cross travel	290 mm	360 mm	360 mm	360 mm	360 mm	360 mm
Vertical travel	405 mm	360 mm	360 mm	450 mm	450 mm	450 mm
Spindle motor	3 HP	3 HP	3 HP	5 HP	5 HP	5 HP
Spindle taper	R8 / NT30	R8 / NT30	R8 / NT30	NT40	NT40	NT40
Table T slots (number x size)	3 x 16 mm	3 x 16 mm	3 x 16 mm	3 x 16 mm	3 x 16 mm	3 x 16 mm
Spindle speed 60Hz	50 ~ 575 ~ 5000 rpm	50 ~ 575 ~ 5000 rpm	50 ~ 575 ~ 5000 rpm	75 ~ 3450 rpm	60 ~ 4200 rpm	50 ~ 575 ~ 5000 rpm
Spindle nose to table	60 ~ 445 mm	70 ~ 440 mm	60 ~ 420 mm	60 ~ 530 mm	60 ~ 530 mm	60 ~ 530 mm
Spindle centerline to column	150 ~ 480 mm	102 ~ 652 mm	127 ~ 660 mm	150 ~ 700 mm	150 ~ 700 mm	150 ~ 700 mm
Quill travel	120 mm	120 mm	120 mm	127 mm	127 mm	127 mm
Overarm travel	305 mm	550 mm	550 mm	550 mm	550 mm	550 mm
Way type	Dovetail way	Dovetail way	Square way	Square way	Square way	Square way

# SPEEDER CNC DEEP HOLE DRILLING MACHINES Three axes feed Machining



DWP-40



DWP-60

## SPECIFICATIONS

	DWP-40	DWP-60	DWP-80	DWP-80A	DWP-100	DWP-100A
Drilling dia.	3 ~ 30 mm (Opt. 4 - 40 mm diameter)					
Drilling depth	1000 mm	1000 mm	1500 mm (optional - 2000 mm)			
Working table	1200 x 1000 mm	1700 x 1000 mm	2200 x 1500 mm		2700 x 1500 mm	
Table loading capacity	8000 kgs			15000 kgs		
T - slot	18 mm x No. 6 x 160 mm			22 mm x No. 8 x 180 mm		
X - axis	1000 mm	1500 mm	2000 mm		2500 mm	
Y - axis	800 mm		1000 mm	1500 mm	1000 mm	1500 mm
Z - axis	1650 mm		2200 mm ( Opt. 2800 mm)			
Spindle speed	10 ~ 8000 rpm					
Spindle motor	7.5 kw			7.5 kw		
X / Y / Z axis motor	4.5 / 3.5 / 2 kw			7 / 4.5 / 2 kw		
Rapid traverse rate	X / Y axis - 6000 mm / min. Zaxis - 10000 mm / min.					
Coolant tank cap.	1400 L					
H / L pressure coolant pumps	7.5 / 10 HP					
Cooler capacity	7500 ~ 9000 kcl / hr.					
Net weight	12000 kgs	14000 kgs	20000 kgs	23000 kgs	25000 kgs	28000 kgs

# SPEEDER CNC DEEP HOLE DRILLING MACHINES

Single double or multiple spindles gun drilling



DWP-50S4



DWP-200S

## SPECIFICATIONS

	DWP-50S4	DWP-100S2	DWP-100S2D	DWP-150S2	DWP-150S2D	DWP-200S	DWP-200SD
Drilling diameter	3 ~ 25 mm dia.	3 ~ 30 mm (Optional 4 - 40 mm diameter)					
Drilling depth	500 mm	1000 mm	1000 mm	1500 mm	1500 mm	2000 mm	2000 mm
Z - axis travel	1200 mm	1600 mm	1600 mm	2200 mm	2200 mm	2800 mm	2800 mm
Spindle speed	10 ~ 8000 rpm						
Spindle motor	7.5 kw						
Z - axis motor	3.5 kw	3.5 kw	3.5 kw	3.5 kw	3.5 kw	2.0 kw	2.0 kw
Coolant capacity	12500 ~ 15000 kcl / hr.					7500 ~ 9000 kcl / hr.	
Drum type paper filter	360 L / min.					200 L / min.	

## FREJO TH CNC DEEP HOLE DRILLING MACHINE



**ALA-2000~5000**  
(drilling capacity : 30 ~ 200 mm)



**ALB-2000~11000**  
(drilling capacity : 30 ~ 200 mm)

### SPECIFICATIONS

	ALA-2000~5000	ALB-2000~11000
Drilling diameter	30 ~ 120 mm (opt. 30 ~ 200 mm)	30 ~ 120 mm (opt. 30 ~ 200 mm)
Drilling depth	2000 / 3000 / 4000 / 5000 mm	2000 / 3000 / 4000 / 5000 mm
Swing over bed	860 mm	1160 mm
Max turning diameter	400 mm	510 mm
Width of bed	570 mm	800 mm
Spindle nose/bore	A2-8 (81 mm)	A2-11 (83 mm)
Spindle speed	100 ~ 1100 rpm (2steps)	50 ~ 1100 rpm (4steps)
Spindle motor	75 HP (opt. 100 HP)	100 HP (opt. 125 HP)
Z1 axis motor	4 kw	9 kw
Z2 axis motor	-	3 HP + inverter
Controller	Fanuc	Fanuc

## FREJO TH CNC SCREW CUTTING MACHINE



**FLM-2000**

### SPECIFICATIONS

	FLM-1500	FLM-2000	FLM-3000	FLM-4000	FLM-5000
Swing over bed			720 mm		
Swing over cross slide			370 mm		
Distance between centers	1600 mm	2100 mm	3100 mm	4100 mm	5100 mm
Width of bed			410 mm		
C axis bore		Ø115 mm		Ø105 / 160 mm(Opt.)	
C axis speed			3000°		
C axis servo motor			20 Nm		
Milling head			NT 50#		
Main motor			11 / 15 kw		
Spindle speed			40 ~ 4000 RPM		
Y axis travel (manual)			50 mm		
Support clamping capacity			Ø30 ~ Ø120 mm		
X axis travel	1300 mm	1800 mm	2800 mm	3800 mm	4800 mm
Z axis travel			250 mm		
Servo motor			X=20 Nm Z=11 Nm		
Rapid traverse			5000 mm/min		
Feed rate			1 ~ 5000 mm/min		
Quill diameter			Ø80 mm		
Quill travel			180 mm		
Taper of center			5#		
X axis ball screw			Ø50 P=10 mm		
Z axis ball screw			Ø32 P=5 mm		
CNC controller			FANUC Oi-M		
Control axes			3 / 4 (Opt.)		

## morgon RADIAL DRILLING MACHINES - NC TYPE



FRD-1300NCH



Auto Drilling



Auto Chips Cut Off



Auto Peak Drilling  
(full pulling distance)



Random Tapping



Auto Opposite Drilling



Auto Peak Drilling  
(changeable pulling distance)



Semi-Auto Tapping

### SPECIFICATIONS

	FRD-1300NCH	FRD-1600NCH
Drilling cap. - steel / cast iron	55 / 66 mm	55 / 70 mm
Tapping cap. - steel / cast iron	M50 / M60	M50 / M60
Boring cap. - steel / cast iron	100 / 160 mm	126 / 186 mm
Spindle stroke	250 mm	300 mm
Horizontal travel of headstock	915 mm	1310 mm
Column diameter	Ø300 mm	Ø336 mm
Base size	1800 x 800 x 170 mm	2350 x 920 x 220 mm
Table size	650 x 500 x 410 mm	800 x 540 x 400 mm
Spindle center to column surface	min. 330 mm/max. 1250 mm	min. 400 mm/max. 1600 mm
Spindle nose to base	min. 290 mm/max. 1210 mm	min. 260 mm/max. 1410 mm
Spindle speed ( 2 steps by inverter )	20 ~ 1500 rpm	20 ~ 1500 rpm
spindle taper	MT#5	MT#5
Spindle motor	5 HP (6P)	5 HP (6P)
Net weight	2150 kgs	3150 kgs

## morgon RADIAL DRILLING MACHINES - NC TYPE



FRD-2000NCH



Auto Drilling



Auto Chips Cut Off



Auto Peak Drilling  
(full pulling distance)



Random Tapping



Auto Opposite Drilling



Auto Peak Drilling  
(changeable pulling distance)



Semi-Auto Tapping

### SPECIFICATIONS

	FRD-2000NCH	FRD-2500NCH
Drilling cap. - steel / cast iron	85 / 105 mm	85 / 105 mm
Tapping cap. - steel / cast iron	M65 / M75	M65 / M75
Boring cap. - steel / cast iron	150 / 200 mm	150 / 200 mm
Spindle stroke	400 mm	400 mm
Horizontal travel of headstock	1530 mm	2030 mm
Column diameter	480 mm	480 mm
Base size	2900 x 1200 x 250 mm	3400 x 1200 x 250 mm
Table size	800 x 540 x 400 equal*2pcs	800 x 540 x 400 equal*2pcs
Spindle center to column surface	min.420 mm/max. 2000 mm	min.420 mm/max. 2500 mm
Spindle nose to base	min.560 mm/max. 1800 mm	min.560 mm/max. 1800 mm
Spindle speed	2 steps by inverter 20 ~ 1300 rpm	
Spindle feed	DC motor 0.05 - 200 mm/min distance	
Spindle taper	MT#6	MT#6
Spindle motor	10HP (OPT.-15)	10HP (OPT.-15)
Net weight	7200 kgs	7800 kgs



## SPEEDER NC AUTOMATIC HYDRAULIC BANDSAW



SBS-4242NC



SBS-5650NC

### SPECIFICATIONS

		SBS-3028NC	SBS-4033NC	SBS-4242NC	SBS-5046NC	SBS-5650NC
Cutting capacity	●	10 ~ 280 mm	10 ~ 330 mm	10 ~ 420 mm	10 ~ 460 mm	10 ~ 500 mm
	■	W10 x H10 ~ W300 x H280 mm	W10 x H10 ~ W400 x H330 mm	W10 x H10 ~ W420 x H420 mm	W10 x H10 ~ W510 x H460 mm	W10 x H10 ~ W560 x H500 mm
Bundle cutting	Max.	W250 x H100 mm	W370 x H170 mm	W370 x H200 mm	W480 x H240 mm	W480 x H260 mm
	Min.	W165 x H15 mm	W165 x H50 mm	W165 x H80 mm	W240 x H80 mm	W240 x H80 mm
Saw blade	Size	3820 x 34 x 1.1 mm	4242 x 34 x 1.1 mm	4880 x 41 x 1.3 mm	5300 x 41 x 1.3 mm	5450 x 41 x 1.3 mm
	Speed	16 ~ 85 m/min				
Motors output	Tension	Hydraulic				
	Saw blade	3.7 KW	3.7 KW	5.5 KW	5.5 KW	5.5 KW
	Hydraulic pump	0.75 KW	0.75 KW	1.5 KW	1.5 KW	1.5 KW
	Coolant pump	0.2 KW				
Tanks	Hydraulic	60 L	60 L	85 L	85 L	85 L
	Coolant	80 L	90 L	100 L	110 L	110 L
Feeding length (single / multiple)		400 / 3600 mm	500 / 4500 mm	500 / 4500 mm	500 / 4500 mm	500 / 4500 mm
Working height		700 mm	700 mm	700 mm	750 mm	750 mm
Dimension (W x L x H)		2100 x 1900 x 1300 mm	2250 x 2195 x 1400 mm	2450 x 2235 x 1665 mm	2580 x 2240 x 1800 mm	2630 x 2260 x 1820 mm
Net weight		1750 kgs	2000 kgs	2500 kgs	2850 kgs	3000 kgs

## SPEEDER NC AUTOMATIC HYDRAULIC BANDSAW



SBS-6056NC

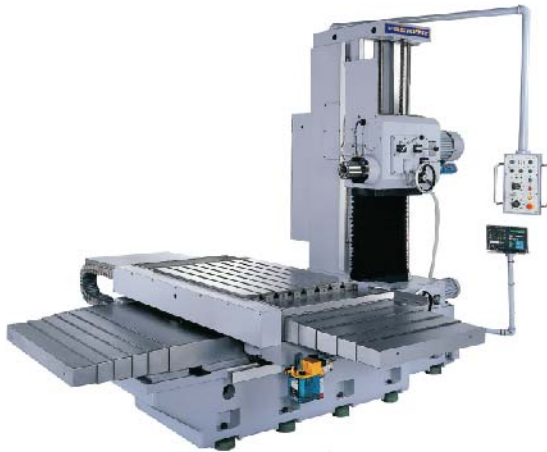


SBS-8070NC

### SPECIFICATIONS

		SBS-6056NC	SBS-6260NC	SBS-8056NC	SBS-8070NC	SBS-1080NC
Cutting capacity	●	10 ~ 560 mm	10 ~ 600 mm	10 ~ 560 mm	100 ~ 700 mm	200 ~ 800 mm
	■	W10 x H10 ~ W610 x H560 mm	W10 x H10 ~ W620 x H600 mm	W10 x H10 ~ W800 x H560 mm	W100 x H100 ~ W800 x H700 mm	W200 x H25 ~ W1000 x H800 mm
Bundle cutting	Max.	NA	W480 x H440 mm	NA	NA	NA
	Min.		W260 x H360 mm			
Saw blade	Size	6600 x 54 x 1.6 mm	6560 x 41 x 1.3 mm	7000 x 54 x 1.6 mm	8000 x 54 x 1.6 mm	8000 x 67 x 1.6 mm
	Speed	16 ~ 85 m/min				
Motors output	Tension	Hydraulic				
	Saw blade	7.5 KW	5.5 KW	7.5 KW	11.2 KW	11.2 KW
	Hydraulic pump	2.2 KW	1.5 KW	2.2 KW	2.2 KW	2.2 KW
	Coolant pump	0.2 KW				
Tanks	Hydraulic	130 L	95 L	130 L	135 L	130 L
	Coolant	140 L	150 L	140 L	230 L	240 L
Feeding length (single / multiple)		400 / 3600 mm	400 / 3600 mm	400 / 3600 mm	400 / 3600 mm	400 / 3600 mm
Working height		850 mm	800 mm	850 mm	800 mm	830 mm
Dimension (W x L x H)		3210 x 2135 x 2160 mm	3210 x 2130 x 2030 mm	3410 x 2135 x 2160 mm	3910 x 2140 x 2300 mm	4350 x 2390 x 2750 mm
Net weight		4500 kgs	3800 kgs	4850 kgs	7100 kgs	11500 kgs

## FREJOTH HORIZONTAL BORING & MILLING MACHINE - Conventional Type



HBM-110 / 14



HBM-110 / 18

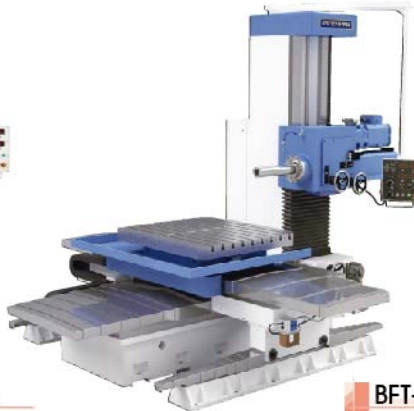
### SPECIFICATIONS

	HBM-110 / 14	HBM-110 / 18
Travel : X / Y / Z axis	1400 / 1200 / 1100 mm	1800 / 1400 / 1250 mm
Spindle center to table top	0 ~ 1200 mm	0 ~ 1400 mm
Spindle end to table center	255 ~ 1355 mm	255 ~ 1505 mm
Table size / loading capacity	1100 x 800 mm / 1400 kgs	1500 x 800 mm / 2000 kgs
Table - T S lot	20 mm x No.7 x 100 mm	
Spindle nose / speeds 60HZ	ISO R297 No.50 / 12 steps 45 ~ 1500 rpm (30 ~ 1000 rpm opt.)	
Spindle motor	AC7.5 kw x 4P	
Rapid Feed rate 60HZ	2880 mm / min.	2800 mm / min.
Auto feed 60HZ	28 ~ 875 mm / min.	3 ~ 950 mm / min.
Z axis boring feeds	12 step - 0.028 ~ 0.875 mm / rev.	-
Net weight	8400 kgs	11500 kgs

## FREJOTH HORIZONTAL BORING & MILLING MACHINE - With "W" axis conventional Type



BFT-110



BFT-110L



Outside diameter: 560 mm  
Slide stroke: 170 mm (-50 ~ 120 mm)  
Max. speed of facing head: 200 rpm  
Max. boring capacity: 820 mm

### SPECIFICATIONS

	BFT-110	BFT-110L
Travels - X / Y / Z / W	1600 x 1000 x 1250 x 400 mm	1800 x 1400 x 1400 x 550 mm
Table size	1000 x 800 mm	1200 x 1400 mm
Table maximum loading	2500 kgs	5000 kgs
Table indexing (360 degree)	1 degree / division	1 degree / division
T-slot (width x No. x pitch)	22H8 x 7 x 100 mm	22H8 x 9 x 120 mm
Spindle center to table top	0 ~ 1000 mm	0 ~ 1400 mm
Spindle end to table center	372 ~ 1622 mm	557 ~ 1977 mm
Spindle speeds	20 ~ 1000 rpm (2 ranges, variable)	20 ~ 1500 rpm (2 ranges, variable)
Spindle taper	ISO#50	ISO#50
Spindle diameter	110 mm	110 mm
Spindle motor	AC 20HP	AC 20HP
Rapid feed rate X / Y / Z / W	2800 / 2800 / 2800 / 1200 mm/min	2800 / 2800 / 2800 / 1200 mm/min
Cutting feed rate X / Y / Z	3 ~ 950 mm / min	3 ~ 950 mm / min
Cutting feed rate W	3 ~ 400 mm / min	3 ~ 400 mm / min
Net weight	12500 kgs	15400 kgs

# FREJOTH BED TYPE VERTICAL MILLING & BORING MACHINE WITH HORIZONTAL HEAD



FBM-5VHL



FBM-8VHL

## SPECIFICATIONS

	FBM-5VHL	FBM-8VHL
Table travel-Longitudinal / Cross	1500 / 600 mm	2000 / 800 mm
Vertical Head travel-Z axis		700 mm
Table size	2200 x 500 mm	2700 x 750 mm
T - slot	18 mm x No.5 x 90 mm	18 mm x No.5 x 150 mm
Vertical Spindle nose to table top	100 ~ 800 mm	70 ~ 770 mm
Vertical Spindle center to column front	550 mm	800 mm
Vertical Spindle nose		ISO R297 No.50
Vertical Spindle speed-60Hz	12 steps / 45 ~ 1500 rpm	Variable / 45 ~ 1500 rpm
Vertical Spindle motor		11 kw
Vertical Spindle feeds	0.05 ~ 0.2 mm / rev.	3 ~ 300 mm / min.
Vertical head Rapid traverse (Long. & Cross)	3300 mm / min.	3100 mm / min.
Vertical head Feed rate (Long. & Cross)	Variable / 28 ~ 1000 mm / min.	Variable / 28 ~ 1000 mm / min.
Horizontal Spindle head travel-W axis		650 mm
Horizontal Spindle speed - 60HZ		12 steps / 40 ~ 1450 rpm
Horizontal head rapid traverse - W axis		3800 mm / min.
Horizontal feed rate - W axis		Variable / 28 ~ 1000 mm / min.
Horizontal Spindle motor		5.5 kw
Net weight	8700 kgs	13000 kgs

# FREJOTH BED TYPE VERTICAL & HORIZONTAL MILL



FBM-GST1500

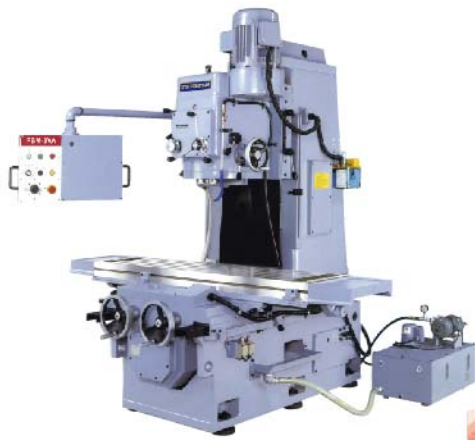


FBM-VST1500

## SPECIFICATIONS

	FBM-GST1500	FBM-VST1500
Travels - X / Y / Z / H		1500 / 630 / 600 / 550 mm
Table size		1800 x 520 mm
Table T-slot (W x NO. x Pitch)		18 x 5 x 80
Vertical spindle nose to table	65 ~ 665 mm	100 ~ 700 mm
Vertical spindle center to column		660 mm
Vertical spindle speed - 50HZ	90 ~ 593 rpm	Inverter vari. 60 ~ 3600 rpm
Vertical spindle swiveling angle	FIXED	45° (R & L)
Vertical spindle nose		N.S.T 50
Vertical spindle motor		5HP - 4P
Vertical quill travel	-	140 mm
Horizontal spindle nose		N.S.T 50
Horizontal spindle speed		6 steps / 100 ~ 590 rpm
Horizontal spindle travel - vertical		550 mm
Horizontal spindle center to table		0 ~ 550 mm
Horizontal spindle nose to column		-150 to +150 mm
Distance between two spindle		690 mm
Horizontal spindle motor		7.5HP - 4P
Net weight	6600 kgs	6400 kgs

## FREJOOTH BED TYPE VERTICAL MILLING & BORING MACHINE



FBM-3VA



FBM-4V

### SPECIFICATIONS

	FBM-3VA	FBM-4V
Table travel-Longitudinal / Cross	1000 / 380 mm	1200 / 450 mm
Vertical Head travel - Z axis	500 mm	550 mm
Table size	1700 x 380 mm	1900 x 450 mm
T - slot	18 mm x No.5 x 70 mm	18 mm x No.5 x 80 mm
Spindle nose to table top	100 ~ 600 mm	100 ~ 650 mm
Spindle center to column front	380 mm	450 mm
Vertical Spindle nose	ISO R297 No.50	
Vertical Spindle speed - 60Hz	12 steps / 45 ~ 1500 rpm	
Vertical Spindle motor	5.5 kw	7.5 kw
Vertical Spindle feeds	0.05 ~ 0.2 mm / rev.	
Rapid traverse (Long. & Cross)	2800 mm / min.	2880 mm / min.
Feed rate (Long. & Cross)	Variable / 28 ~ 1000 mm / min.	60 HZ : 12 steps / 28 ~ 875 mm / min.
Net weight	4000 kgs	5200 kgs

## FREJOOTH BED TYPE VERTICAL MILLING & BORING MACHINE



FBM-5VL



FBM-8VL

### SPECIFICATIONS

	FBM-5VL	FBM-8VL
Table travel-Longitudinal / Cross	1500 / 600 mm	2000 / 800 mm
Vertical Head travel - Z axis	700 mm	700 mm
Table size	2200 x 500 mm	2700 x 750 mm
T - slot	18 mm x No.5 x 90 mm	18 mm x No.5 x 150 mm
Spindle nose to table top	100 ~ 800 mm	70 ~ 770 mm
Spindle center to column front	550 mm	800 mm
Vertical Spindle nose	ISO R297 No.50	
Vertical Spindle speed - 60Hz	12 steps / 45 ~ 1500 rpm	Variable / 45 ~ 1500 rpm
Vertical Spindle motor	11 kw	11 kw
Vertical Spindle feeds	0.05 ~ 0.2 mm / rev.	3 ~ 300 mm / min.
Rapid traverse (Long. & Cross)	3300 mm / min	3100 mm / min.
Feed rate (Long. & Cross)	Variable / 28 ~ 1000 mm / min	Variable / 28 ~ 1000 mm / min.
Net weight	7000 kgs	11800 kgs

## FREJOTH BED TYPE MILLING MACHINE



FU-1600



FU-2000

### SPECIFICATIONS

	FU-1600	FV-1600	FH-1600	FU-2000	FV-2000	FH-2000
Travels - X / Y / Z	1600 x 710 (760) x 710 mm			2000 x 710 (700) x 670 mm		
Table size	2200 x 540 mm			2600 x 600 mm		
Table maximum loading	1500 kgs			1500 kgs		
Spindle nose to table (V)	50 ~ 760 mm	150 ~ 860 mm	-	50 ~ 720 mm	150 ~ 820 mm	-
T-slot (width x No. x pitch)	18 x 6 x 80 mm			18 x 6 x 100 mm		
Spindle speeds 60 HZ	110 ~ 1500 rpm (8 steps)			110 ~ 1500 rpm (8 steps)		
Spindle taper	NT#50			NT#50		
Spindle motor	11 kw (15 HP)			11 kw (15 HP)		
Vertical rapid feed rate	700 mm / min			700 mm / min		
Longitudinal & cross rapid rate	2000 mm / min			2000 mm / min		
Vertical feed rate	8 ~ 450 mm / min			8 ~ 450 mm / min		
Longitudinal & cross feed rate	16 ~ 1200 mm / min			16 ~ 1200 mm / min		
Net weight	6500 kgs			8100 kgs		

## FREJOTH BED TYPE VERTICAL / HORIZONTAL MILLING MACHINE



FHV-1250A



FHS-1250 / 1000

### SPECIFICATIONS

	FHV-1250A	FHV-1000A	FHS-1250	FHS-1000
Travels - X / Y / Z	1250 x 540 x 470 mm	1000 x 540 x 430 mm	1250 x 540 x 470 mm	1000 x 540 x 430 mm
Table size	1800 x 400 mm	1500 x 360 mm	1800 x 400 mm	1500 x 360 mm
Table maximum loading	1000 kgs	800 kgs	1000 kgs	800 kgs
Spindle nose to table (V)	130 ~ 600 mm	170 ~ 600 mm	-	-
T-slot (width x No. x pitch)	18 x 4 x 80 mm			
Spindle speeds 60 HZ	95 ~ 1200 rpm (8 steps)			
Spindle taper	NT#50			
Spindle motor	5.5 kw (7.5 HP) - 4P			
Vertical rapid feed rate	700 mm / min			
Longitudinal & cross rapid rate	2000 mm / min			
Vertical feed rate	8 ~ 450 mm / min			
Longitudinal & cross feed rate	16 ~ 1200 mm / min			
Net weight	3200 kgs	2900 kgs	3200 kgs	2900 kgs

## FREJOOTH BED TYPE MILLING MACHINE



FU-1000



FH-1000



FUH-1250A

### SPECIFICATIONS

	FU-1000	FH-1000	FUH-1000A / FU-1000B	FH-1250	FUH-1250A / FU-1250B
Travels - X / Y / Z	1000 x 380 x 430 mm	1000 x 540 x 430 mm	1000 x 540 x 430 mm	1250 x 540 x 470 mm	1250 x 540 x 470 mm
Table size	1500 x 360 mm	1500 x 360 mm	1500 x 360 mm	1800 x 400 mm	1800 x 400 mm
Table maximum loading	800 kgs	800 kgs	800 kgs	1000 kgs	1000 kgs
Spindle center to table (H) arbor arm used	50 ~ 480 mm	90 ~ 520 mm	100 ~ 530 mm	90 ~ 560 mm	60 ~ 530 mm
T-slot (width x No. x pitch)	18 x 4 x 80 mm				
Spindle speeds (60 HZ)	40 ~ 1750 rpm (12 steps)				
Spindle taper	NT#50				
Spindle motor	5.5 kw (7.5 HP) - 4P				
Vertical rapid feed rate	700 mm/min				
Longitudinal & cross feed rate	16 ~ 1200 mm / min				
Vertical feed rate	8 ~ 450 mm / min				
Longitudinal & cross rapid speed	2000 mm / min				
Net weight	2600 kgs	2700 kgs	2900 kgs	3000 kgs	3200 kgs

## FREJOOTH BED TYPE VERTICAL MILLING MACHINES



FBM-4VF

### SPECIFICATIONS

	FBM-3V	FBM-3VS	FBM-3VF	FBM-4V	FBM-4VS	FBM-4VF	FBM-5V	FBM-5VF
Driving type	Pulley Step Change Speed	Pulley Stepless Change Speed	Variable inverter Change Speed	Pulley Step Change Speed	Pulley Stepless Change Speed	Variable inverter Change Speed	Pulley Step Change Speed	Variable Inverter Change Speed
Travels - X / Y / Z	760 x 460 x 520 mm (opt. 720 mm)			1000 (opt. 1200) x 500 x 520 (opt. 720) mm				
Table size	1370 x 255 mm (opt. 1370 x 305 mm)			1524 x 305 mm (opt. 1524 x 406 mm)				
Spindle to table				130 - 650 mm (opt. 130 - 850 mm)				
T-slot (width x No. pitch)	16 x 3 x 65 mm			16 x 3 x 65 mm (opt. 16 x 4 x 70 mm)				
Spindle speed	L : 78 - 435 H : 620 - 3490 (10 steps)						L : 65 - 480 H : 500 - 3580 (16 steps)	
Spindle taper	NT #40 / BT #40							
Spindle motor	5 HP / 3.75 kw							
Rapid traverse rate	X . Y : 1500 mm/min				Z : 1300 mm/min			
X . Y . Z traverse rate	X . Y : 25 - 1000 mm/min				Z : 21 - 860 mm/min			
Net weight	2300 kgs			2600 kgs			2700 kgs	

## FREJOTH BED TYPE VERTICAL MILLING MACHINES



FBM-300VST



FBM-300ST



FBM-5VSB

### SPECIFICATIONS

	FBM-300VST	FBM-300ST	FBM-5VSB
Travels - X / Y / Z (manual)	930 x 430 x 550 mm	930 x 430 x 550 mm	775 x 430 x 550 mm
Table size	1270 x 370 mm	1270 x 370 mm	1270 x 254 mm
Spindle nose to table top	130 ~ 670 mm	130 ~ 670 mm	155 ~ 695 mm
Spindle center to column	450 mm	450 mm	450 mm
T-slot ( width x No. x pitch )	16 x 3 x 80 mm	16 x 3 x 80 mm	16 x 3 x 63 mm
Spindle speeds (50 HZ)	60 ~ 3600 rpm	60 ~ 1500 rpm	66 ~ 3165 rpm
Spindle taper	N.S.T 40	N.S.T 40	N.S.T 40
Spindle motor	5 HP - 4P (Inverter)	5 HP - 6P (Inverter)	5 HP - 4P
Longitudinal rapid feed rate (50 HZ)	2083 mm / min	-	-
Longitudinal feed rate (50 HZ)	18 ~ 640 mm / min, (12 steps)	30 ~ 3000 mm / min, VARI.	-
Cross feed rate (50 HZ)	-	30 ~ 3000 mm / min, VARI.	-
Vertical feed rate (50 HZ)	565 mm / min, rapid	30 ~ 2200 mm / min, VARI.	565 mm / min, rapid
Net weight	2550 kgs	2600 kgs	2300 kgs

## FREJOTH BED TYPE VERTICAL MILLING MACHINES



FBM-1200VST



FBM-1200ST

### SPECIFICATIONS

	FBM-1200VST	FBM-1200ST
Travels - X / Y / Z	1200 x 520 x 600 mm	1200 x 520 x 600 mm
Table size	1470 x 350 mm	1470 x 350 mm
Spindle nose to table top	100 ~ 700 mm	54 ~ 654 mm
Spindle center to column	520 mm	520 mm
T-slot ( width x No. x pitch )	18 x 3 x 100 mm	18 x 3 x 100 mm
Spindle speeds (50 HZ)	60 ~ 3600 rpm	60 ~ 1500 rpm
Spindle taper	N.S.T 40	N.S.T 50
Spindle motor	5 HP - 4P (Inverter)	15 HP - 6P (Inverter)
Longitudinal feed rate (50 HZ)	30 ~ 3000 mm / min, VARI.	30 ~ 3000 mm / min, VARI.
Cross feed rate (50 HZ)	30 ~ 3000 mm / min, VARI.	30 ~ 3000 mm / min, VARI.
Vertical feed rate (50 HZ)	30 ~ 3000 mm / min, VARI.	30 ~ 3000 mm / min, VARI.
Net weight	4000 kgs	4100 kgs

## FREJOATH HORIZONTAL & VERTICAL UNIVERSAL MILLING MACHINE



HVU-2500UM



HVU-2500M

### SPECIFICATIONS

	HVU-2500UM	HVU-2500M
Travels - X / Y / Z	1150 x 400 x 500 mm	
Distance from spindle to overam	155 mm	
Table size	1500 x 350 mm	
T-slot ( width x no. )	16 x 5 mm	
Rotary movement of table in both dir.	45°	
Spindle speeds ( horizontal ) - 50 HZ	40 ~ 1800 rpm (12 steps)	
Spindle speeds ( vertical ) - 50 HZ	35 ~ 1600 rpm (12 steps)	
Spindle taper	ISO#40 (#50)	
Spindle motor ( horizontal )	7.5 HP	
Spindle motor ( vertical )	5.5 HP	
Rapid traverse - Longitudinal & cross	1208 mm / min (60 HZ)	
Rapid traverse - vertical	604 mm / min	
Feeds - longitudinal & cross	10 ~ 1208 mm / min	
Feeds - vertical	5 ~ 604 mm / min	
Net weight	3200 kgs	

## FREJOATH HORIZONTAL & VERTICAL UNIVERSAL MILLING MACHINE



HVU-2500U



HVU-S2500U



HVU-2500QM

### SPECIFICATIONS

	HVU-2500U	HVU-S2500U	HVU-2500QM
Travels - X / Y / Z	1150 x 400 x 500 mm	950 x 380 x 450 mm	1150 x 400 x 500 mm
Distance from spindle to overam	155 mm		
Table size	1500 x 350 mm	1300 x 300 mm	1500 x 350 mm
T-slot ( width x no. )	16 x 5 mm	16 x 3 mm	16 x 5 mm
Rotary movement of table in both dir.	45°		
Spindle speeds ( horizontal ) - 50 HZ	40 ~ 1800 rpm (12 steps)	50 ~ 1700 rpm (12 steps)	40 ~ 1800 rpm (12 steps)
Spindle speeds ( vertical ) - 50 HZ	-	-	70 ~ 3600 rpm - Variable Speed
Spindle taper	ISO#40 (#50)	ISO#40	ISO#40 (#50)
Spindle motor ( hor )	7.5 HP	5 HP	7.5 HP
Spindle motor ( ver )	-	-	5 HP
Rapid traverse - Longitudinal & cross	1208 mm/min (60 HZ)		
Rapid traverse - vertical	604 mm / min	5 ~ 604 mm / min	604 mm / min
Feeds - longitudinal & cross	10 ~ 1208 mm / min		
Feeds - vertical	5 ~ 604 mm / min		
Net weight	3100 kgs	2500 kgs	3200 kgs



## FREJOTH HORIZONTAL & UNIVERSAL MILLING MACHINE - Heavy Duty Type



AH-450

### SPECIFICATIONS

	AH-450	AU-450
Travels - X / Y / Z	950 x 320 x 470 mm	
Table size / swivel	1300 x 300 mm / fixed	1300 x 300 mm / 45 deg.
Longitudinal / cross / vertical feed	12 steps - 13 ~ 621 / 13 ~ 621 / 7 ~ 361 mm / min.	
Longitudinal / cross / vertical rapid traverse	2960 / 2960 / 1520 mm / min.	
Horizontal spindle taper / speed	ISO #40 / 12 steps - 50Hz - 36 ~ 1415 rpm / 60 Hz - 45 ~ 1700 rpm	
Horizontal spindle center to table	22 ~ 492 mm	0 ~ 470 mm
Horizontal spindle center to overarm bottom	135 mm	
Horizontal spindle motor	3.7 Kw	
Table feed and rapid traverse motor	2.2 Kw	
Net weight	2350 kgs	

## FREJOTH UNIVERSAL MILLING MACHINE



FU-1A



FU-2

### SPECIFICATIONS

	FU-1A	FU-2
Travels - X / Y / Z	560 / 300 / 420 mm	930 / 400 / 450 mm
Table size / swivel	1050 x 240 mm / 45 deg.	1270 x 300 mm / 45 deg.
Table longitudinal feed 60 Hz	6 steps / 21 ~ 246 mm / min.	6 steps / 22 ~ 384 mm / min.
Table longitudinal rapid speed 60 Hz	2056 mm / min.	
Horizontal spindle taper	ISO #40	
Horizontal spindle speed 60 Hz.	6 steps / 108 ~ 1470 rpm	9 steps / 65 ~ 1500 rpm
Horizontal spindle center to table	0 ~ 320 mm	0 ~ 450 mm
Horizontal spindle center to over arm bottom	120 mm	175 mm
Horizontal spindle motor	2.2 kw	3.75 kw
Table longitudinal feed motor	0.75 kw	0.563 kw
Table vertical rapid traverse motor	-	0.375 kw
Net weight	1200 kgs	2550 kgs

## FREJOATH VERTICAL & HORIZONTAL MILLING MACHINES



FVHM-GVS300A



FVHM-GS300A

### SPECIFICATIONS

	FVHM-GVS300A	FVHM-GS300A
Travels - X / Y / Z	930 x 400 x 450 mm	
Overarm travel	500 mm	
Table size	1270 x 300 mm	
Table longitudinal / cross feed	long. 23 - 384 mm / min / cross. 50 - 2200 mm / min	
Vertical spindle nose to table	95 ~ 545 mm	
Vertical spindle center to column	190 ~ 690 mm	
Vertical spindle swivelling angle	R & L - 45 deg.	
Vertical spindle taper / Quill travel	NT# 40 / 140 mm	
Vertical spindle speed - 60 HZ,	variable 90 ~ 3800 rpm	16 steps 75 ~ 3600 rpm
Horizontal spindle taper / speed	NT# 40 / 9 steps 65 ~ 1500 rpm	
Horizontal spindle center to table	0 ~ 450 mm	
Horizontal spindle center to over arm bottom	173 mm	
Vertical spindle motor	5 HP - 4 P	5 HP - 2 / 4 P
Horizontal spindle motor	5 HP - 4 P	5 HP - 2 / 4 P
Net weight	2450 kgs	2350 kgs

## FREJOATH VERTICAL & HORIZONTAL MILLING MACHINES



FVHM-GEVS500A



FVHM-250S

### SPECIFICATIONS

	FVHM-GEVS500A	FVHM-250A	FVHM-250S
Type of machine	AC Invearter	Variable speed	step pulley
Travels - X / Y / Z	930 x 520 x 440 mm	700 x 250 x 440 mm	
Overarm travel	600 mm	300 mm	
Table size / swivel	1270 x 370 mm (1470 x 370 mm)	1100 x 250 mm	
Table longitudinal / cross feed 60HZ	30 ~ 3000 mm / min.	6 steps / 22 ~ 384 mm / min.	
Vertical spindle nose to table	85 ~ 505 mm	30 ~ 470 mm	
Vertical spindle center to column	185 ~ 785 mm	200 ~ 500 mm	
Vertical spindle swivelling angle	-	R & L - 45 deg.	
Vertical spindle taper / Quill travel	NT# 40 / 140 mm	NT# 40 / 127 mm	
Vertical spindle speed 60 HZ	Vari - 60 ~ 3600 rpm	vari. 80 ~ 3800 rpm	10 steps / 60 ~ 3600 rpm
Horizontal spindle taper / speed	N. S. T. 40 / 9 steps / 65 ~ 1500 rpm	N. S. T. 40, 6 steps / 70 ~ 1320 mm	
Horizontal spindle center to table	25 ~ 395 mm	0 ~ 420 mm	
Horizontal spindle center to over arm bottom	600 mm	115 mm	
Vertical spindle motor	5 HP - 4 P INVERTER	5 HP - 4 P	5 HP - 4 P
Horizontal spindle motor	5 HP	3 HP - 4 P	
Net weight	2650 kgs	1350 kgs	1300 kgs

# FREJOTH VERTICAL TURRET & HORIZONTAL MILLING MACHINE - Heavy Duty Type



AVHM-450S



AVHM-450V



AVHM-450EVS



FUHM-H500

## SPECIFICATIONS

	AVHM-450S	AVHM-450V	AVHM-450EVS	FUHM-H500	FUHM-H600
Type of machine	Step Pulley	Inf. Variable	AC inverter	Travels - X / Y / Z	930 / 520 / 440 mm
Travels - X / Y / Z	950 x 320 x 470 mm			Overarm travel	600 mm
Overarm travel / swivel	510 mm / 360 deg.			Table size	1270 x 370 mm (1470 x 370 - OPT.)
Table size	1300 x 300 mm			Table longitudinal / cross feed	Variable 30 ~ 3000 mm / min
Table longitudinal / cross / vertical feed	12 steps - 13 ~ 621 / 13 ~ 621 / 7 ~ 361 mm / min.			Table vertical feed	960 mm / min. (Variable 30 ~ 1150 - OPT.)
Table longitudinal / cross / vertical rapid traverse	2960 / 2960 / 1520 mm / min.			Universal spindle nose to table	0 - 230 mm
Vertical head spindle nose to table	130 ~ 600 mm			Universal spindle center to column	315 mm
Vertical head spindle center to column	100 ~ 610 mm			Universal spindle swivelling angle	360°
Vertical head swivel	L & R - 45 deg.			Universal spindle taper / Quill travel	N.S.T 40
Vertical spindle taper / Quill travel	ISO # 40 / 130 mm			Universal spindle speed - 50 HZ	60 ~ 1440 rpm
Vertical spindle speed 50 / 60 HZ	70 ~ 2625 / 85 ~ 3150 rpm	100 ~ 3000 / 120 ~ 3600 rpm	40 ~ 4000 / 40 ~ 4000 rpm	Horizontal spindle taper / speed	N.S.T 40
Horizontal spindle taper / speed	ISO #40 / 12 steps - 50Hz - 36 ~ 1415rpm / 60Hz - 45 ~ 1700rpm	45 ~ 1700 rpm variable		Horizontal spindle center to table top	-8 ~ 412 mm
Horizontal spindle center to table	22 ~ 492 mm			Horizontal spindle center to bottom of ram	175 mm
Horizontal spindle center to overarm bottom	182 mm			Horizontal spindle motor	5HP - 4P
Vertical spindle motor	2.2 Kw	3.7 Kw	3.7 Kw	X, Y axes feed motor	AC SERVO 750W
Horizontal spindle motor	3.7 Kw			Z axis feed motor	1HP - 2P (AC SERVO 850W - OPT.)
Table feed and rapid traverse motor	2.2 Kw			Coolant pump	1 / 8HP - 2P
Net weight	2650 kgs			Net weight	2450 kgs

# FREJOTH VERTICAL TURRET MILLING MACHINES



FVTM-S360A



FVTM-VS360A



FVM-5KA

## SPECIFICATIONS

	FVTM-S360A	FVTM-VS360A	FVM-5KA	FVM-5VKA
Travels - X / Y / Z	700 / 360 / 360 mm (900 / 360 / 360 mm OPT.)		900 / 400 / 450 mm	
Overarm travel	450 mm		420 mm	
Table size	1200 x 280 mm (1270 x 370 mm OPT.)		1370 x 254 mm	
T - Slot (W x NO. x PITCH)	16 mm x 3 x 65 mm (18 x 3 x 80 mm OPT.)		16 x 3 x 63 mm	
Spindle nose to table - 50 HZ	0 ~ 500 mm		150 ~ 600 mm	
Spindle center to column - 50 HZ	185 ~ 635 mm		130 ~ 550 mm	
Spindle swivelling angle	R & L - 45 deg.		45° (R & L)	
Vertical spindle taper	N. S. T. 40			
Quill travel	140 mm			
Vertical speed - 60 HZ / 50 HZ	75 ~ 3600 rpm, 16 steps	variable, 80 ~ 3800 rpm	16 steps / 60 ~ 3000 rpm	Variable / 75 ~ 3165 rpm
Vertical spindle motor	3 HP - 2 / 4P	5 HP - 4P	5 HP - 2P / 4P	5 HP - 4P
Vertical rapid feed	1150 mm / min.		360 mm / min.	
Long. and cross feed	Variable - 0 ~ 1800 (Opt.)		800 mm / min (Opt.)	
Net weight	1900 kgs		1600 kgs	1650 kgs

## FREJOOTH VERTICAL TURRET AND HORIZONTAL MILLING MACHINES



LC-4HG



LC-5HG

### SPECIFICATIONS

	LC-4HVN	LC-4HS	LC-4HG	LC-5HV	LC-5HS	LC-5HG
Travels - X / Y / Z	800(920) / 415 / 460(435) mm			835(815) / 380 / 435 mm (powered)		
Over arm travel	470 mm			470 mm		
Table size / loading cap	1300(1420) x 260 mm / 200 kgs			1300 x 300 mm		
Spindle nose to table surface	115 ~ 550 mm			115 ~ 550 mm	75 ~ 510 mm	75 ~ 510 mm
Spindle center to column front	355 ~ 825 mm		255 ~ 725 mm	355 ~ 825 mm		
Spindle taper	ISO40					
Spindle motor	3 HP		5 HP	3(5) HP	3(5) HP	5 HP
Spindle speed - rpm	var 60 - 4500		16 step 75 - 3600	var 60 - 4500	16 step 75 - 3600	
Quill dia / travel	90 / 127 mm		110 / 135 mm	90 / 127 mm		110 / 135 mm
Table rapid travel vertical motor	1.5 HP - 6P			1.5 HP - 6P		
Table longitudinal travel motor	1/0.5 HP - 4/8 P			DC servo - 4.5 N m 1 HP - 4 P(2 HP - 4P / 8P)		
Table cross travel motor	DC servo - 4.5 Nm					
Horizontal spindle taper	ISO40			ISO40		
Horizontal spindle motor	5 HP - 4P			5 HP - 4P		
Horizontal spindle speed	50 HZ - 6 step 45 ~ 980 rpm			60 HZ - 6 step 55 ~ 1160 rpm		
Spindle center to overarm	25 mm ~ 410 mm					
Spindle center to column surface	146 mm					
Net weight	2010 kgs			2010 kgs		

## FREJOOTH VERTICAL TURRET MILLING MACHINES



FMS-626



FMS-830

### SPECIFICATIONS

	FMS-626	FMS-830
Travels - X / Y / Z	370 x 150 x 325 mm	470 x 200 x 455 mm
Quill travel	75 mm	89 mm
Table size	152 x 600 mm	205 x 760 mm
T - slot ( width x no. )	3 / 8" x 3 mm	3 / 8" x 3 mm
Spindle nose to table surface	0 ~ 345 mm	57 ~ 510 mm
Spindle center to column front	-	-
Spindle speeds	230 ~ 2500 (9 step) rpm	230 ~ 3200 (9 step) rpm
Spindle taper	R8 (MT3 / NT#30)	R8 (MT3 / NT#30)
Spindle motor	1 HP (1 ph or 3 ph)	1-1 / 2 HP (1 ph or 3 ph)
Vertical travel of table	325 mm	455 mm
Head swivel / tilting	360° / 90°	360° / 90°
Net weight	260 kgs	450 kgs

## FREJOTH VERTICAL TURRET & HORIZONTAL MILLING MACHINE



FVHM-320S



FVHM-320V

### SPECIFICATIONS

	FVHM-320S	FVHM-320V	FVHM-320EVS
Type of mill	step pulley	variable speed	AC inverter
Travels - X / Y / Z		1000 / 380 / 460 mm	
Overarm travel / swivel		450 mm / 360 deg.	
Table size		300 x 1500 mm	
Table longitudinal feed		60HZ : 12 steps - 12 ~ 270 mm / min.	
Table longitudinal rapid traverse		60HZ : 1800 mm / min.	
Vertical head spindle nose to table		90 ~ 500 mm (0 - 450 mm)	
Vertical head swivel		R & L - 90 deg.	
Vertical spindle taper / Quill travel		NT # 40 / 140 mm	
Vertical spindle speed 60 HZ	16Step (75 ~ 3600 rpm)	Var. (70 ~ 3800 rpm)	Inverter - 0 ~ 4000 rpm
Horizontal spindle taper / speed		NT #40 / 9 steps : 90 ~ 1320 rpm	
Horizontal spindle center to table		0 ~ 460 mm	
Horizontal spindle center to over arm bottom		160 mm	
Vertical spindle motor		5 HP	
Horizontal spindle motor		5 HP	
Table longitudinal feed motor		2 HP	
Net weight		2100 kgs	

## FREJOTH VERTICAL TURRET & HORIZONTAL MILLING MACHINE - SWIVEL TABLE



FVHM-15V

### SPECIFICATIONS

	FVHM-15S	FVHM-15V	FVHM-15EVS
Travels - X / Y / Z		700 / 300 / 330 mm	
Overarm travel / swivel		455 mm / 360 deg.	
Table size / swivel		300 x 1200 mm / R & L 45 deg.	
Table longitudinal feed		60HZ : 6 steps - 21 ~ 246 mm / min.	
Table longitudinal rapid traverse		60HZ : 2056 mm / min.	
Vertical head spindle nose to table		70 ~ 420 mm	
Vertical head spindle center to column		155 ~ 475 mm	
Vertical head swivel		R & L - 90 deg.	
Vertical spindle taper / Quill travel		NT # 40 / 150 mm	
Vertical spindle speed 60HZ	20 steps - 36 ~ 3925 rpm	Vari. - 70 ~ 3800 rpm	Vari. - 0 ~ 4000 rpm
Horizontal spindle taper / speed		NT #40 / 60HZ : 6 step -108 ~ 1470 rpm	
Horizontal spindle center to table		0 ~ 330 mm	
Horizontal spindle center to over arm bottom		135 mm	
Vertical spindle motor		5 HP	
Horizontal spindle motor		4 HP	
Table longitudinal feed motor		1 - 1 / 2 HP	
Net weight		1250 kgs	

## FREJOOTH VERTICAL TURRET MILLING MACHINES - AC INVERTER + VARIABLE SPEED



VK-406I



VK-420I

### SPECIFICATIONS

	VK-406I	VK-420I
Travels - X / Y / Z	900 x 305 x 406 mm	830 x 400 x 406 mm
Table size	1245 x 229 mm	1270 x 254 mm
Table maximum loading	250 kgs	350 kgs
T-slot ( width x no. )	16 x 3 mm	16 x 3 mm
Spindle nose to table center	57 x 463 mm	57 x 463 mm
Spindle center to column front	213 ~ 533 mm	200 ~ 680 mm
Spindle speeds	60 ~ 4200 rpm	60 ~ 4200 rpm
Spindle taper	R8 or ISO#30	ISO#40
Spindle motor	3 HP	4 HP
Quill travel	127 mm	127 mm
Head swivel / tilting	90° / 45°	90° / 45°
Net weight	1080 kgs	1380 kgs

## FREJOOTH VERTICAL TURRET MILLING MACHINES - AC INVERTER + VARIABLE SPEED



VK-430I



VK-450I

### SPECIFICATIONS

	VK-430I	VK-450I
Travels - X / Y / Z	930 x 400 x 406 mm	960 x 460 x 450 mm
Table size	1372 x 254 mm	1372 x 254 mm
Table maximum loading	350 kgs	450 kgs
T-slot ( width x no. )	16 x 3 mm	16 x 3 mm
Spindle nose to table center	57 ~ 463 mm	60 ~ 530 mm
Spindle center to column front	200 ~ 680 mm	165 ~ 725 mm
Spindle speeds	60 ~ 4200 rpm	50 ~ 5000 rpm
Spindle taper	ISO#40	ISO#40
Spindle motor	5 HP	5 HP
Quill travel	127 mm	127 mm
Head swivel / tilting	90° / 45°	90° / 45°
Net weight	1400 kgs	1530 kgs

## FREJOTH VERTICAL TURRET MILLING MACHINES



FVTM-500A



FVTM-500S



FVTM-VS300A



FVTM-S300A

### SPECIFICATIONS

	FVTM-500A	FVTM-500S	FVTM-VS300A	FVTM-S300A
Travels - X / Y / Z	930 / 520 / 360 mm		930 / 400 / 450 mm	
Overarm travel	500 mm		420 mm	
Table size / swivel	1270 x 370 mm (1470 x 370 mm OPT.)		1270 x 300 mm (1470 x 370 mm OPT.)	
Longitudinal / cross feed	30 ~ 3000 mm / min.		6 steps / 22 ~ 384 mm / min.	
Vertical rapid feed	1150 mm / min.		430 mm / min.	
Spindle nose to table	0 ~ 500 mm		35 ~ 485 mm	
Spindle center to column	185 ~ 685 mm		130 ~ 550 mm	
Spindle swivelling angle	R & L - 45 deg.			
Spindle taper / Quill travel	N. S. T. / 140 mm			
Spindle speed 60 HZ	Inverter Vari. - 60 ~ 3600 rpm	16 steps - 75 ~ 3600 rpm	Vari. - 90 ~ 3800 rpm	16 step - 75 ~ 3600 rpm
Spindle motor	5 HP - 4 P	5 HP - 2 / 4 P	5 HP - 4 P	5 HP - 2 P / 4 P
Net weight	2250 kgs		1700 kgs	1600 kgs

## FREJOTH VERTICAL TURRET MILLING MACHINES



FVTM-S300



FVTM-VS300



FVTM-5VK



FVTM-4EVS

### SPECIFICATIONS

	FVTM-S300	FVTM-VS300	FVTM-5VK	FVTM-4EVS
Travels - X / Y / Z	930 / 400 / 450 mm		775 / 400 / 450 mm	775 / 400 / 406 mm
Overarm travel / swivel	420 mm / 360 deg.		420 mm / 360 deg.	480 mm / 360 deg.
Table size	1270 x 300 mm		1270 x 254 mm	
T - Slot (W x NO. x PITCH)	16 mm x 3 x 80 mm		16 mm x 3 x 63 mm	
Spindle nose to table	55 ~ 505 mm		55 ~ 505 mm	40 ~ 406 mm
Spindle center to column	130 ~ 550 mm		130 ~ 550 mm	200 ~ 680 mm
Spindle swivelling angle	R & L - 45 deg.		R & L - 45 deg.	45° ~ (R & L, F & B)
Spindle taper	N. S. T. 40		N. S. T. 40	R8 or N. S. T. 30
Quill travel	127 mm		127 mm	
Spindle speed 60 HZ	70 ~ 3600 rpm (10 steps)	Vari. 80 ~ 3800 rpm	Vari. 80 ~ 3800 rpm	Vari. 60 ~ 3600 rpm
Spindle motor	5 HP - 4 P		5 HP - 4 P	3 HP - 4 P (inverter)
Long. feed / Vere. rapid motor	3 / 4 HP / 1 / 2 HP		-	-
Net weight	1650 kgs	1700 kgs	1500 kgs	1280 kgs

## FREJOOTH VERTICAL TURRET MILLING MACHINES



FM-2S/2V



FM-3S/3V



F-2J

### SPECIFICATIONS

	FM-2S/2V	FM-3S/3V	F-2J
Travels - X / Y / Z	650 x 305 x 406 mm	860 x 390 x 380 mm	787 x 305 x 362 mm
Over arm travel	305 mm	550 mm	330 mm
Table size	230 x 1067 mm	254 x 1370 mm	1220 x 230 mm
Table maximum loading	340 kgs	430 kgs	200 kgs
T-slot ( width x no. )	16 x 3 mm	16 x 3 mm	16 x 3 mm
Spindle nose to table center	42 ~ 469 mm	40 ~ 420 mm	102 ~ 464 mm
Spindle center to column front	171 ~ 476 mm	102 ~ 652 mm	162 ~ 492 mm
Spindle speeds	60 ~ 4200 (60 HZ) , 50 ~ 3750 (50 HZ) rpm	60 ~ 4200 (60 HZ) , 50 ~ 3750 (50 HZ) rpm	60 ~ 4200 (60 HZ) rpm
Spindle taper	R8 or NT#30	R8 or NT#30	7207 P4
Spindle motor	2 HP / 3 HP	3 HP	2 HP (3 HP opt)
Quill diameter / travel	Ø85 / 125 mm	Ø85 / 125 mm	Ø85 / 127 mm
Head swivel / tilting	90° / 45°	90° / 45°	90° / 45°
Net weight	900 kgs	1300 kgs	970 kgs

## FREJOOTH VERTICAL TURRET MILLING MACHINES



FM-4S/4V



FM-5S/5V

### SPECIFICATIONS

	FM-4S/4V	FM-5S/5V
Travels - X / Y / Z	860 x 400 x 430 mm	960 x 390 x 430 mm
Over arm travel	550 mm	550 mm
Table size	254 x 1370 mm	315 x 1470 mm
Table maximum loading	410 kgs	550 kgs
T-slot ( width x no. )	16 x 3 mm	16 x 3 mm
Spindle nose to table center	25 ~ 485 mm	25 ~ 485 mm
Spindle center to column front	150 ~ 670 mm	150 ~ 670 mm
Spindle speeds	60 ~ 4200 (60 HZ) , 50 ~ 3750 (50 HZ) rpm	60 ~ 4200 (60 HZ) , 50 ~ 3750 (50 HZ) rpm
Spindle taper	NT#40	NT#40
Spindle motor	5 HP	5 HP
Quill diameter / travel	Ø105 / 125 mm	Ø105 / 125 mm
Head swivel / tilting	90° / 45°	90° / 45°
Net weight	1500 kgs	1700 kgs



## FREJOTH VERTICAL TURRET MILLING MACHINES



LC-2V



LC-3G

### SPECIFICATIONS

	LC-2V	LC-2S	LC-3V	LC-4V	LC-3S	LC-3G
Travels - X / Y / Z travel	762(opt. 966) / 305 / 406 mm			790(opt. 890) / 415 / 390 mm		
Over arm travel	305 mm			360 mm		
Table size / loading cap.	1067(1270) x 230 mm / 200 kgs			1270 x 254 mm / 200 kgs		
Spindle nose to table surface	0 ~ 469 mm		135 ~ 525 mm	165 ~ 570 mm		135 ~ 525 mm
Spindle center to column front	171 ~ 476 mm		245 ~ 715 mm	125 ~ 595 mm		185 ~ 655 mm
Spindle taper	R8 / ISO30		R8 / ISO30	ISO40		
Spindle motor	2 HP (opt 3 HP)		2 HP (opt 3 HP)	3 HP	3 HP	5 HP
Spindle speed - rpm	var 50 - 4500	8 step 80 ~ 2760	var 50 - 4500	var 60 - 4500	16 step 75 - 3600	16 step 75 - 3600
Quill dia / travel	85.7 / 127 mm		85.7 / 127 mm	90 / 127 mm	90 / 127 mm	110 / 135 mm
Net weight	1010 kgs		1250 kgs	1300 kgs		

## FREJOTH VERTICAL TURRET MILLING MACHINES



LC-4S



LC-5G

### SPECIFICATIONS

	LC-4VN	LC-4S	LC-4G	LC-5V	LC-5S	LC-5G
Travels - X / Y / Z travel	800(920) / 415 / 460(435) mm			835(815) / 380 / 435 mm (powered)		
Over arm travel	470 mm			470 mm		
Table size / loading cap.	1300(1420) x 260 mm / 200 kgs			1300 x 300 mm		
Spindle nose to table surface	115 ~ 550 mm			115 ~ 550 mm	75 ~ 510 mm	75 ~ 510 mm
Spindle center to column front	355 ~ 825 mm		255 ~ 725 mm	355 ~ 825 mm		
Spindle taper	ISO40					
Spindle motor	3 HP		5 HP	3(5) HP	3(5) HP	5 HP
Spindle speed - rpm	var 60 - 4500		16 step 75 - 3600	var 60 - 4500	16 step 75 - 3600	
Quill dia / travel	90 / 127 mm		110 / 135 mm	90 / 127 mm		110 / 135 mm
Table rapid travel vertical motor	1.5 HP - 6P			1.5 HP - 6P		
Table longitudinal travel motor	1/0.5 HP - 4/8 P			DC servo - 4.5 Nm 1 HP - 4 P (2 HP - 4P / 8P)		
Table cross travel motor	DC servo - 4.5 Nm					
Net weight	2010 kgs			2010 kgs		

## MORTON HIGH PRECISION LATHES Heavy duty - 16 speeds



FCH-3300G

### SPECIFICATIONS

	FCH-3300G	FCH-4000G
Bed width	560 mm	
Swing over bed	860 mm	1020 mm
Swing over carriage	610 mm	770 mm
Swing over gap	1170 mm	1330 mm
Between centers	2050 / 3050 / 4050 / 5050 / 6050 / 7050 / 10050 mm	
Spindle speeds - 16 steps	4P - 12 ~ 1200 rpm / 6P - 8 ~ 800 rpm (6P - 6 ~ 600 rpm)	
Spindle motor	20 HP - 4 P (15 HP - 6 P)	
Spindle bore / nose	104 mm / A1 - 11 / D1 - 11	
Leadscrew dia. / pitch	48 mm dia. / 2TPI - P12	
Tailstock - quill diameter	100 mm (130 mm)	
Tailstock - quill travel / taper	280 mm / MT #6	
Machine net weight	4700 ~ 10400 kgs	5000 ~ 100700 kgs

## MORTON HEAVY DUTY PRECISION LATHE

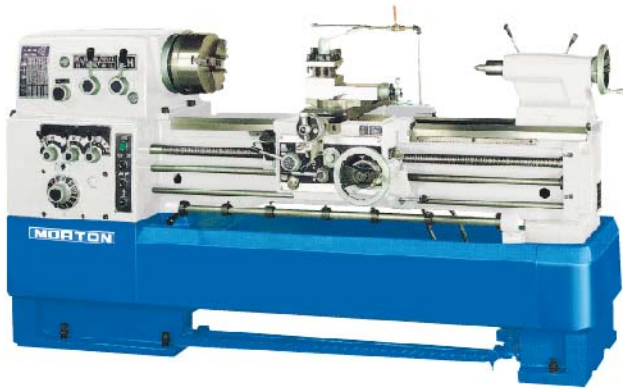


FEL-W2600

### SPECIFICATIONS

	FEL-W2600	FEL-W3000	FEL-W3300
Swing over bed / cross slide / gap	670 / 460 / 890 mm	770 / 560 / 990 mm	840 / 630 / 1060 mm
Bed width	460 mm (18")		
Between centers	1500 / 2000 / 3000 / 4000 / 5000 mm		
Tailstock - quill diameter / travel / taper	95 mm / 230 mm / MT#5		
Travel - cross / compound slide	385 mm / 230 mm	435 mm / 230 mm	
Spindle bore dia / nose	104 mm / A2 - 11 or D1 - 11	156 mm / A2 - 11 or D1 - 11	230 mm / A2 - 15
Spindle speeds 12 steps	15 ~ 1000 rpm	13 ~ 800 rpm	10 ~ 600 rpm
Spindle motor	standard 15 HP (optional 20 HP)		

## MORTON HIGH SPEED PRECISION LATHES



FCH-1600



FCH-1700

### SPECIFICATIONS

	FCH-1600	FCH-1700	FCH-2100
Bed width		300 mm	
Swing over bed	406 mm	432 mm	532 mm
Swing over carriage	238 mm	268 mm	368 mm
Swing over gap	580 mm	610 mm	710 mm
Between centers	767 / 1067 mm	767 / 1067 / 1667 mm	
Spindle speeds	8 steps / 70 ~ 1800 rpm	12 steps / 35 ~ 2000 rpm (78 mm bore 29 ~ 1650 rpm)	
Spindle motor		5 HP (7.5 HP option)	
Spindle bore / nose	51 mm - A1 / D1 - 6	58 mm - A1 / D1 - 6 (78 mm - A2 - 6 / D1 - 8)	
Leadscrew dia. / pitch		35 mm Dia x 4 TPI (P = 6 mm)	
Tailstock - quill diameter		60 mm diameter	
Tailstock - quill travel / taper		170 mm x MT #4	
Machine net weight	1450 / 1550 kgs	1500 / 1600 / 1800 kgs	1600 / 1700 / 1900 kgs

## MORTON HIGH SPEED PRECISION LATHES Medium Duty - 12 speeds



FCH-2200

### SPECIFICATIONS

	FCH-2200	FCH-2600	FCH-3000
Bed width		400 mm	
Swing over bed	560 mm	660 mm	760 mm
Swing over carriage	340 mm	445 mm	548 mm
Swing over gap	797 mm	892 mm	990 mm
Between centers	808 / 1443 / 2218 / 2968 / 3983 mm		
Spindle speeds	4P motor - 12 steps / 13 ~ 1200 rpm (Opt. 6P - 12 steps / 8 ~ 800 rpm)		
Spindle motor	10 HP - 4P (7.5 HP - 6P)		
Spindle bore / nose	86 mm - A1 - 8 / D1 - 8 (A2 - 8) 104 mm / D1 - 11		
Leadscrew dia. / pitch	45 mm diameter / 4TPI, P = 6 mm (2TPI, P = 12 mm)		
Tailstock - quill diameter	80 mm		
Tailstock - quill travel / taper	250 mm x MT #5		
Machine net weight	2300 ~ 3600 kgs	2400 ~ 3700 kgs	2600 ~ 3400 kgs

## MORTON OIL COUNTRY LATHE



FEL-3800

### SPECIFICATIONS

	FEL-3800	FEL-4200	FEL-4700	FEL-5500	FEL-6300
Swing over bed / cross slide / gap	960 / 650 / 1510 mm	1060 / 750 / 1610 mm	1190 / 830 / 1750 mm	1385 / 1030 / 1950 mm	1580 / 1230 / 2150 mm
Bed Width	560 mm (22")		800 mm (32")		
Between centers	2000 ~ 9000 mm (80 ~ 360")		2000 ~ 14000 mm (80 ~ 560")		
Tailstock - quill diameter / travel / taper	140 mm / 300 mm / MT#6		200 / 300 mm / MT#7 (opt rotary quill 290 mm dia)		
Travel - cross / compound slide	540 mm / 300 mm		780 mm / 350 mm		
Spindle bore dia / nose	156 mm / A2 - 11 / D1 - 11	230 / 260 mm / A2 - 15	310 / 360 mm / A2 - 20	530 mm / A2 - 28	
Spindle speeds 12 steps	9 ~ 600 rpm	6 ~ 400 rpm	5 ~ 300 rpm	3 ~ 230 rpm	
Spindle motor	25 HP (opt 30 HP)		30 HP (opt 40 HP)		

## MORTON HEAVY DUTY LATHE

Giant Heavy Duty

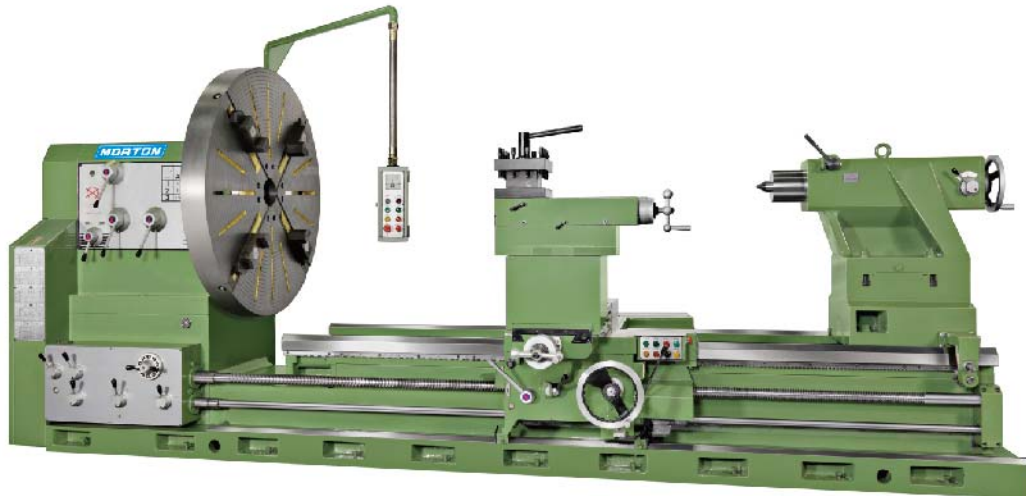


FEL-80120BH

### SPECIFICATIONS

	FEL-70BH	FEL-80BH	FEL-90BH	FEL-100BH
Swing over bed	1800 mm	2000 mm	2250 mm	2500 mm
Swing over cross slide - full length	1350 mm	1550 mm	1800 mm	2050 mm
Swing over cross slide - half length	1440 mm	1630 mm	1870 mm	2110 mm
Between centers	3000 ~ 12000 mm			
Spindle bore / nose	210 mm / A2 - 15 or A2 - 20			
Spindle speed	4 steps / 5 ~ 400 rpm			
Compound rest travel	X1 - 250 mm Z1 - 350 mm (auto feed)			
Cross travel	1250 mm full length / 510 mm half length			
Leadscrew	60 mm dia. x 2 TPI or 12 mm pitch			
Tool size	50 x 50 mm			
Main spindle motor	75 HP (75HP) + inverter			

## MORTON HEAVY DUTY PRECISION LATHE

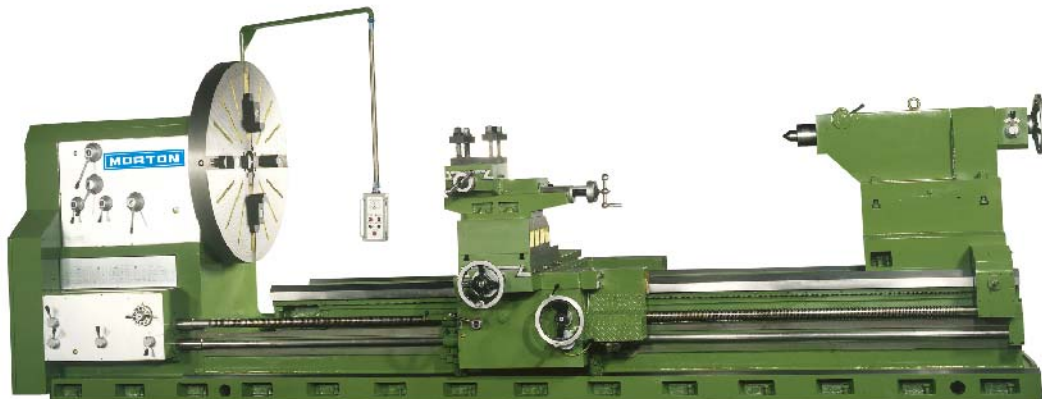


FEL-5900

### SPECIFICATIONS

	FEL-5900	FEL-6500	FEL-7100
Swing over bed / saddle / gap	Ø1500 / 1200 / 2050 mm	Ø1650 / 1350 / 2200 mm	Ø1800 / 1500 / 2350 mm
Bed width		850 mm (33")	
Between center		2000 ~ 12000 mm	
Spindle speed (12 steps)		2.5 ~ 250 (4 ~ 400) rpm	
Spindle motor		25 HP (30 HP , 40 HP)	
Spindle bore / nose / taper		Ø153 mm / A2 - 15 / MT#6	
Tailstock dia. / travel / taper		Ø180 mm / 300 mm / MT#6 (MT#7)	
Slide travel - cross / compound		950 mm / 420 mm	
Net weight - B.C-5000 mm		15400 kgs	

## MORTON HEAVY DUTY PRECISION LATHE



FEL-6700

### SPECIFICATIONS

	FEL-6700	FEL-7300	FEL-7900
Swing over bed / saddle / gap	Ø1700 / 1370 / 2250 mm	Ø1850 / 1520 / 2400 mm	Ø2000 / 1670 / 2550 mm
Bed width		1016 mm (40")	
Between center		2000 ~ 12000 mm	
Spindle speed (12 steps)		1.7 ~ 170 rpm (2.5 ~ 250) rpm	
Spindle motor		30 (40 , 50) HP	
Spindle bore / nose / taper		Ø153 mm / A2 - 15 / MT#7	
Tailstock dia. / travel / taper		Ø180 mm / 300 mm / MT#7	
Slide travel - cross / compound / top slide		1000 / 225 mm / 150 mm	
Net weight - B.C-5000 mm		21000 kgs	

## MORTON HEAVY DUTY PRECISION LATHE



FEL-3200P

### SPECIFICATIONS

	FEL-3200P	FEL-3600P	FEL-4000P
Swing over bed	Ø830 mm	Ø930 mm	Ø1030 mm
Swing over carriage	Ø600 mm	Ø700 mm	Ø800 mm
Swing over gap	Ø1120 mm	Ø1220 mm	Ø1320 mm
Width of bed	510 mm		
Between center	1320 ~ 8320 mm		
Spindle speed ( 12 steps )	15 - 1000 rpm (10 - 700 rpm)		15 - 1000 rpm (10 - 700 rpm , 12 - 600 rpm)
Spindle motor	15 (20 , 25) HP		
Spindle bore / nose / taper	Ø105 (153 mm) / A2 - 8 (A2-11) / MT5		Ø105 (153 mm , 230 mm) / A2 - 8 (A2 - 11 , A2 - 15) / MT5
Tailstock dia. / travel / taper	Ø105 mm / 260 mm / MT6		
Slide travel - cross / compound	475 / 230 mm		525 / 230 mm
Net weight for 3320 mm	6800 kgs		

## MORTON HEAVY DUTY PRECISION LATHE



FEL-2800F

### SPECIFICATIONS

	FEL-2800F	FEL-3200F	FEL-3600F
Swing over bed	Ø730 mm	Ø830 mm	Ø930 mm
Swing over carriage	Ø500 mm	Ø600 mm	Ø700 mm
Swing over gap	Ø1020 mm	Ø1120 mm	Ø1220 mm
Width of bed	460 mm		
Between center	1320 ~ 8320 mm		
Spindle speed ( 12 steps )	15 - 1000 rpm (10 - 700 rpm)		15 - 1000 rpm (10 - 700 rpm , 12 - 600 rpm)
Spindle motor	15 (20 , 25) HP		
Spindle bore / nose / taper	Ø105 (153 mm) / A2 - 8 (A2-11) / MT5		Ø105 (153 mm , 230 mm) / A2 - 8 (A2 - 11 , A2 - 15) / MT5
Tailstock dia. / travel / taper	Ø95 mm / 260 mm / MT5		
Slide travel - cross / compound	425 / 250 mm		475 / 250 mm
Net weight for 3320 mm	6600 kgs		

## MORTON HEAVY DUTY PRECISION LATHE



FEL-3600



FEL-4500

### SPECIFICATIONS

	FEL-3600	FEL-4000	FEL-4500	FEL-5100
Swing over bed	Ø920 mm	Ø1020 mm	Ø1160 mm	Ø1310 mm
Swing over carriage	Ø650 mm	Ø750 mm	Ø850 mm	Ø1000 mm
Swing over gap	Ø1400 mm	Ø1500 mm	Ø1700 mm	Ø1850 mm
Width of bed	560 mm		660 mm	
Between center	1500 ~ 10000 mm			
Spindle speed (12 steps)	3 ~ 300 rpm			
Spindle motor	15 (20) HP		20 (25) HP	
Spindle bore / nose / taper	Ø105 mm (153 mm) / A2 - 11 / MT#6		Ø153 (Ø230) mm / A2 - 11 (A2 - 15) / MT#6	
Tailstock dia. / travel / taper	Ø105 mm / 285 mm / MT#6		Ø125 mm / 340 mm / MT#6	
Slide travel - cross / compound	610 / 365 mm		635 / 420 mm	
Net weight for 3000 mm	8300 kgs		9700 kgs	

## MORTON HEAVY DUTY PRECISION LATHE



FEL-2680K



FEL-32120E

### SPECIFICATIONS

	FEL-2200K	FEL-2600K	FEL-2800E	FEL-3200E	FEL-3600E
Swing over bed	Ø560 mm	Ø660 mm	Ø730 mm	Ø830 mm	Ø930 mm
Swing over carriage	Ø350 mm	Ø450 mm	Ø500 mm	Ø600 mm	Ø700 mm
Swing over gap	Ø850 mm	Ø950 mm	Ø1000 mm	Ø1100 mm	Ø1200 mm
Width of bed	381 mm		460 mm		
Between center	1000 ~ 5000 mm		1000 ~ 7000 mm		
Spindle speed	20 ~ 1200 rpm (12 steps)		15 ~ 1000 rpm (12 steps)		
Spindle speed opt.	14 ~ 800 rpm (12 steps)		10 ~ 700 rpm (12 steps)		
Spindle motor	7.5 (10) HP		10 (15) HP		
Spindle bore / nose	Ø80 (105) mm / A2 - 8 (D1 - 8)		Ø80 (105) mm / A2 - 8 (D1 - 8) Ø105 (153) mm / A2 - 8 (D1 - 11, A2 - 11)		
Tailstock dia. / travel / taper	Ø75 mm / 180 mm / MT#5		Ø80 mm / 230 mm / MT#5		
Slide travel - cross / compound	365 / 230 mm		425 / 250 mm		
Net weight for 3000 mm	3450 kgs		4300 kgs		

## MORTON VARIABLE SPEED LATHE MACHINES - BELT DRIVE TYPE



FHL-2600G

### SPECIFICATIONS

	FHL-2600G
Swing over bed	660 mm (26")
Swing over carriage	440 mm (17 - 3 / 8")
Swing over gap	880 mm (34 - 5 / 8")
Width of bed	420 mm (16 - 1 / 2")
Between center	1350 mm (53.1"), 1840 mm (72.4"), 2910 mm (114.5"), 4250 mm (167.3")
Spindle speed	20 ~ 1200 rpm ( 12 steps )
Spindle motor	15 HP (11.25 kw) (20 HP Inverter)
Spindle bore / nose / taper	104 mm (4 - 1 / 11") / ASA A1 - 11 or D1 - 11 / 108 x 1 : 20
Tailstock dia. / travel / taper	77 mm (3 - 1 / 32") / 178 mm (7") / MT5
Slide travel - cross / compound	380 mm (15") / 230 mm (9")
Net weight	3550 / 3750 / 4350 / 4750 kgs

## MORTON AC ELECTRONIC INVERTER VARIABLE SPEED PRECISION LATHES



FHL-1780EVS



FHL-2400EVS

### SPECIFICATIONS

	FHL-1730EVS / 1740EVS / 1760EVS / 1780EVS	FHL-2040EVS / 2060EVS	FHL-2400EVS / 2900EVS / 3400EVS
Swing over bed	Ø430 mm	Ø500 mm	Ø600 / 740 / 870 mm
Swing over carriage	Ø245 mm	Ø280 mm	Ø380 / 520 / 590 mm
Swing over gap	Ø660 mm	Ø730 mm	Ø820 / 960 / 1100 mm
Width of bed	300 mm		420 mm
Between center	750 / 1000 / 1500 / 2000 mm	1000 / 1500 mm	1350 / 1840 / 2910 / 4250 mm
Spindle speed	20 ~ 2300 rpm (3 steps), Inverter		20 ~ 1200 rpm (4 steps), Inverter
Spindle motor	5 HP (7.5 HP inverter)	7.5 HP (10 HP inverter)	15 HP (20 HP inverter)
Spindle bore / nose / taper	Ø58 mm / D1 - 6 (A1 - 6) / MT#6		Ø104 mm / D1 - 11 (A1 - 11) / MT#5
Tailstock dia. / travel / taper	Ø58 mm / 150 mm / MT#4		Ø77 mm / 178 mm / MT#5
Slide travel - cross / compound	220 / 180 mm	250 / 180 mm	330 / 465 / 550 mm
Net weight	1500 / 1600 / 1700 / 2300 kgs	1700 / 2100 kgs	3750 / 3950 / 4550 / 4950 kgs / 3950 / 4150 / 4750 / 5150 kgs



## MORTON PRECISION HIGH SPEED LATHES



FHL-1700



FHL-2400

### SPECIFICATIONS

	FHL-1700	FHL-2000	FHL-2400	FHL-2900	FHL-3400
Bed Width	300 mm			420 mm	
Swing over bed	430 mm	500 mm	600 mm	740 mm	870 mm
Swing over carriage	245 mm	280 mm	380 mm	520 mm	590 mm
Swing over gap	660 mm	730 mm	820 mm	960 mm	1100 mm
Between centers	750 / 1000 / 1500 / 2000 mm	1000 / 1500 / 2000 mm	1350 / 1840 / 2910 / 4250 mm		
Spindle speeds	12 steps - 20 ~ 2000 rpm		12 steps - 20 ~ 1200 rpm		
Spindle motor	3.75 kw	5.63 kw	11.25 kw		
Spindle bore / nose	58 mm / D1 - 6		104 mm / D1 - 11		
Cross / top slide travels	220 / 180 mm	250 / 180 mm	330 / 230 mm	420 / 230 mm	550 / 230 mm
Tailstock - quill diameter	58 mm		77 mm		
Tailstock - quill travel / taper	150 mm / MT#4		178 mm / MT#5		
Machine net weight	1500 / 1600 / 1700 / 2300 kgs	1700 / 2100 / 2400 kgs	3750 / 3950 / 4550 / 4950 kgs	3950 / 4150 / 4750 / 5150 kgs	

## MORTON HIGH SPEED PRECISION LATHES



FHH-2100

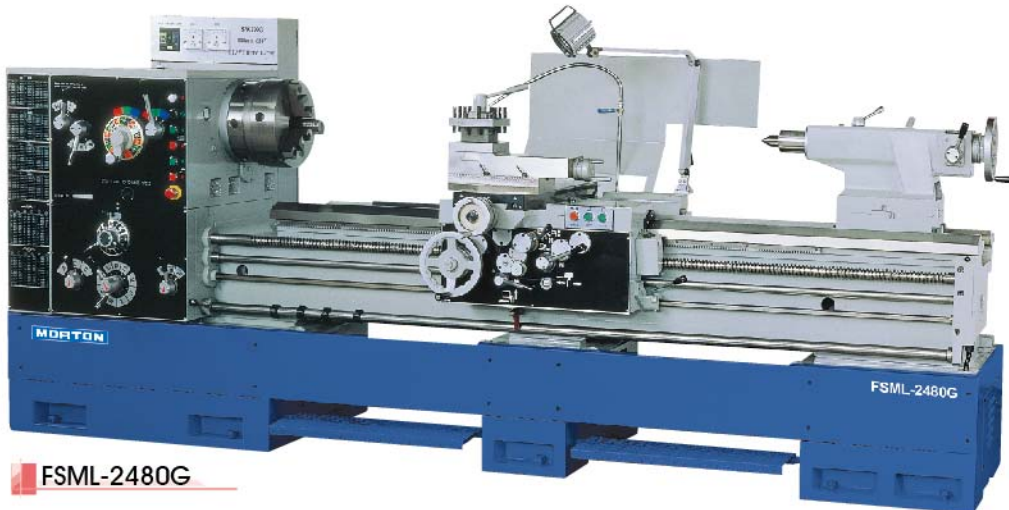


FHH-1700

### SPECIFICATIONS

	FHH-1800	FHH-2100	FHH-1700
Bed width	350 mm		300 mm
Swing over bed	460 mm	560 mm	434 mm
Swing over carriage	280 mm	390 mm	270 mm
Swing over gap	620 mm	730 mm	No Gap
Between centers	800 / 1100 / 1500 / 2000 mm		700 / 1000 / 1700 mm
Spindle bore / nose	80 mm / A1 - 8 or D1 - 8 (105 mm / A1 - 11 or D1 - 11)		54 mm / A1 - 6 or D1 - 6
Spindle speeds	80 mm bore - 12 speeds - 25 ~ 1600 rpm / 105 mm bore - 12 speeds - 20 ~ 1200 rpm		8 Step - 70 ~ 1800 rpm
Spindle motor	10 HP / 4P		3 HP / 4P
Leadscrew dia. / pitch	35 mm dia. x 4TPI or 6mm Pitch		
Tailstock - quill diameter	60 mm	70 mm	60 mm
Tailstock - quill travel / taper	175 mm / MT4	175 mm / MT5	165 mm x MT4
Machine net weight	1600 / 1700 / 1800 / 2000 kgs		1000 / 1100 / 1300 kgs

# MORTON HEAVY DUTY PRECISION LATHE WITH ELECTRO - MAGNETIC CLUTCH



**FSML-2480G**

- \*18 spindle speed, 10-1200rpm, with electro-magnetic brake
- \*Special thread: 11-1/2TPI, 13TPI, 13-1/2TPI, 19 TPI and with multiple thread.

## SPECIFICATIONS

	FSML-2480G	FSML-24120G	FSML-24160G	FSML-3080G	FSML-30120G	FSML-30160G
Swing over bed / saddle / gap	610 / 350 / 820 mm			760 / 500 / 970 mm		
Bed Width	485 mm (19")					
Between centers	2033 mm	3050 mm	4050 mm	2033 mm	3050 mm	4050 mm
Spindle bore / taper / nose	105 mm / MT#5 / D1 - 11					
Spindle speeds	18 steps - 10 - 1200 rpm (with magnetic brake)					
Travel - compound slide / cross slide	225 / 375 mm					
Tailstock - quill diameter / travel / taper	80 mm / 195 mm / MT#5					
Spindle motor	11 kw (15 HP)					
Net weight	3500 kgs	4000 kgs	4500 kgs	3800 kgs	4300 kgs	4800 kgs

# MORTON PRECISION ENGINE LATHES & AC INVERTER VARIABLE SPEED PRECISION LATHES



**FSML-1740H**



**FSML-2040HV**

## SPECIFICATIONS

	FSML-1740H / HV	FSML-1760H / HV	FSML-1780H / HV	FSML-2040H / HV	FSML-2060H / HV	FSML-2080H / HV
Swing over bed / saddle / gap	440 / 272 / 660 mm			510 / 342 / 730 mm		
Bed Width	330 mm					
Between centers	1000 mm	1500 mm	2000 mm	1000 mm	1500 mm	2000 mm
Spindle bore / taper / nose	86 mm / MT#5 / D1 - 8					
Spindle speeds	12 steps - 20 - 1800 rpm for H, 3 steps - 10 - 2000 rpm for HV					
Travel - compound slide / cross slide	130 / 260 mm					
Tailstock - quill diameter / taper / travel	75 mm / MT#5 / 150 mm					
Spindle motor	7.5 kw (10 HP)					
Net weight	1900 kgs	2000 kgs	2200 kgs	2000 kgs	2100 kgs	2300 kgs

## MORTON AC INVERTER VARIABLE SPEED PRECISION LATHES



FSML-1540



FSML-1740V

### SPECIFICATIONS

	FSML-1540 / V	FSML-1560 / V	FSML-1740 / V	FSML-1760 / V
Swing over bed / saddle / gap	380 mm (15")		434 mm (17")	
Bed Width	300 mm (12")			
Between centers	1000 / 1500 mm (40 / 60")			
Spindle bore / nose / taper	58 mm (2.25") / D1 - 6 / MT#6			
Spindle speeds	12 steps - 20 - 2000 rpm / V (Variable speed 3 steps 10 - 2000 rpm) with magnetic brake			
Travel - compound slide / cross slide	130 / 235 mm			
Tailstock - quill diameter / taper / travel	58 mm / MT#4 / 125 mm			
Spindle motor	5.7 kw (7.5 HP)			
Net weight	1400 kgs	1600 kgs	1500 kgs	1700 kgs

## MORTON AC ELECTRONIC INVERTER VARIABLE SPEED PRECISION LATHES



FSML-1340BV



FSML-1340V



FSML-1440V

### SPECIFICATIONS

	FSML-1224BV	FSML-1236BV	FSML-1340BV	FSML-1330V	FSML-1340V	FSML-1430V	FSML-1440V
Swing over bed	306 mm		330 mm		356 mm		
Swing over carriage	186 mm		210 mm		220 mm		
Swing over gap	445 mm		470 mm		515 mm		
Width of bed	190 mm						206 mm
Between center	610 mm	915 mm	1000 mm	750 mm	1000 mm	750 mm	1000 mm
Spindle speed	2 steps - 40 ~ 2000 rpm inf. Variable speed			3 steps 30 ~ 2200 rpm inf. Variable		2 steps 30 ~ 2200 rpm Variable speed	
Spindle motor	AC 1.47 kw, inverter			AC 2.2 kw, inverter			
Spindle bore / nose / taper	Ø40 mm / D1 - 4 / MT#5						Ø38 mm / D1 - 4 / MT#5
Tailstock dia. / travel / taper	Ø40 mm / 95 mm / MT#3						Ø45 mm / 110 mm / MT#3
Slide travel - cross / compound	168 / 92 mm		160.5 / 95 mm		167 / 101 mm		
Net weight	500 kgs	550 kgs	600 kgs	650 kgs	700 kgs	750 kgs	

## FREJOOTH PRECISION TOOL ROOM LATHES



ATL-618E



ATL-618EVS



AHR-68E

### SPECIFICATIONS

	ATL-618E	ATL-618EVS	AHR-68E
Spindle dia I.D. / O.D.		Ø55.5 mm	
Spindle nose I.D. / O.D.		5C (10°) / 4° taper	
Spindle speeds (variable)		50 ~ 4000 rpm	
Inverter spindle motor		3 HP	
Hole through spindle		31.75 mm (1-1/4")	
Bar stock diameter (5c collet)		Ø27 mm (Ø1-1/16")	
Distance between centers	457 mm		no tailstock
Swing over bed	280 mm		330 mm
Swing over carriage	230 mm		-
Swing over cross slide	152 mm		-
Carriage power feed range	8 ~ 178 mm / min		6 ~ 250 mm / min
Cross slide power feed range	5 ~ 102 mm / min		9 ~ 160 mm / min
Cross slide travel	152 mm		114 mm
Quick - action compound slide travel	2.5 mm		-
Feed Inverter	1 / 2 HP		-
Tailstock spindle travel	95 mm		no tailstock
Range of threads	0.05 ~ 6.55 mm (3.175 ~ 500 TPI)	0.275 ~ 2.7 mm (11 ~ 108 TPI)	0.05 ~ 6.55 mm (3.175 ~ 500 TPI)
Net weight / gross weight	800 / 900 kgs		800 / 900 kgs

## FREJOOTH PRECISION TOOL ROOM LATHES



ATS-27EVS



ATL-27EVS



AP-27EVS

### SPECIFICATIONS

	ATS-27EVS	ATL-27EVS	AP-27EVS
Spindle dia i.D. / O.D.		Ø55.5 mm	
Spindle nose i.D. / O.D.		5C (10°) / 4° taper	
Spindle speeds (variable)		50 ~ 4000 rpm	
Inverter spindle motor	3 HP		1 HP
Hole through spindle		31.75 mm (1 - 1/4")	
Bar stock diameter (5c collet)		Ø27 mm (Ø1 - 1 / 16")	
Distance between centers	-	380 mm	no tailstock
Swing over bed	229 mm	229 mm	229 mm
Cross slide travel	95 mm	-	-
Compound slide travel	X : 114 mm / Z : 140 mm		optional X : 114 mm / Z : 140 mm
Coolant pump	1 / 8 HP, 220V		optional
Tailstock spindle travel	95 mm		No. tailstock
Net weight / gross weight	500 / 600 kgs		300 / 370 kgs

## MORTON HIGH SPEED PRECISION LATHES



FEL-1440HG



FCL-1640G

### SPECIFICATIONS

	FEL-1440 / 1460HG	FEL-1640 / 1660HG	FCL-1640 / 1660G
Swing over bed	Ø360 mm	Ø410 mm	Ø410 mm
Swing over carriage	Ø212 mm	Ø262 mm	Ø262 mm
Swing over gap	Ø533 mm	Ø583 mm	Ø583 mm
Width of bed	260 mm	260 mm	260 mm
Between center	1000 / 1500 mm		1000 / 1500 mm
Spindle speed	70 ~ 1800 rpm (8 steps)		36 ~ 1800 rpm (12 steps)
Spindle speed opt.	40 ~ 2000 rpm (16 steps)		-
Spindle motor	5 HP 4P / 2.5 HP 8P		5 HP
Spindle bore / nose / taper	Ø52.5 mm / D1 - 6 / MT#6		Ø52.5 mm / D1 - 6 / MT#6
Tailstock dia. / travel / taper	Ø52 mm / 152 mm / MT#4		Ø52 mm / 152 mm / MT#4
Slide travel - cross / compound	220 / 130 mm		220 / 130 mm
Net weight	1350 / 1450 kgs	1400 / 1500 kgs	1500 / 1600 kgs

## MORTON HIGH SPEED PRECISION LATHES



FML-1740G



FEL-2160G

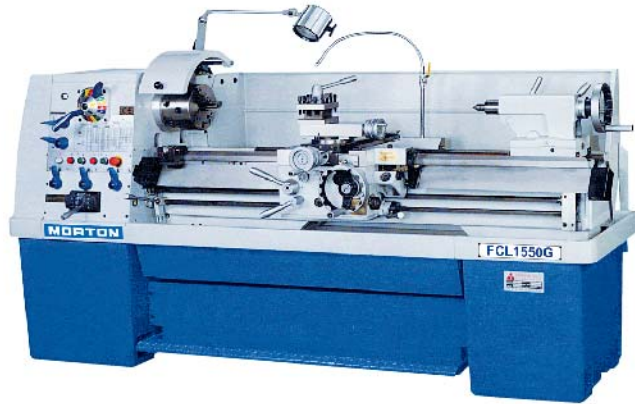
### SPECIFICATIONS

	FCL-1740G / 1760G	FML-1740G / 1760G	FML-2040G / 2060G	FEL-1840 / 1860G	FEL-2140/2160G
Swing over bed	Ø432 mm	Ø432 mm	Ø508 mm	Ø462 mm	Ø542 mm
Swing over carriage	Ø277 mm	Ø277 mm	Ø353 mm	Ø307 mm	Ø387 mm
Swing over gap	Ø622 mm	Ø622 mm	Ø698 mm	Ø650 mm	Ø730 mm
Width of bed	305 mm	305 mm	305 mm	305 mm	305 mm
Between center	1000 / 1500 mm	1000 / 1500 mm	1000 / 1500 mm	850 / 1350 mm	
Spindle speed	80 ~ 2000 rpm (12 steps)	36 ~ 1800 rpm (12 steps)		30 ~ 1500 rpm (12 steps)	
Spindle motor	AC 3.75 kw (5HP)	AC 5.5 kw (7.5 HP)		7.5 HP	10 HP
Spindle bore / nose / taper	Ø52.5 mm / D1-6 / MT#6		Ø80 mm / D1 - 6 / 1 / 19.18	Ø80 mm / D1 - 8 / 1 / 19.18	
Tailstock dia. / travel / taper	Ø59 mm / 127 mm / MT#4		Ø59 mm / 127 mm / MT#4	Ø68 mm / 153 mm / MT#4	
Slide travel - cross / compound	125 / 160 mm	235 / 160 mm	272 / 160 mm	272 / 160 mm	
Net weight	1600 / 1850 kgs	1700 / 1850 kgs	1750 / 1900 kgs	1750 / 1850 kgs	1750 / 1900 kgs

## MORTON HIGH SPEED PRECISION LATHES



FCL-1340G



FCL-1550G

### SPECIFICATIONS

	FCL-1330G / 1340G	FCL-1430 / 1440G	FCL-1550G
Swing over bed	Ø342 mm	Ø360 mm	Ø380 mm
Swing over carriage	Ø205 mm	Ø239 mm	Ø238 mm
Swing over gap	Ø512 mm (1340G only)	Ø532 mm (1440G only)	Ø610 mm
Width of bed	230 mm		280 mm
Between center	760 mm / 1000 mm		1250 mm
Spindle speed	80 ~ 2000 rpm (8 steps, 4P)		25 ~ 2000 rpm (16 steps)
Spindle speed opt.	50 ~ 2570 rpm (2 steps, 2P, 4P)		-
Spindle motor	3 HP / 4P, opt. 5 HP / 2P		7.5 HP
Spindle Bore / Nose / Taper	Ø40 mm / D1 - 4 / MT#5	Ø40 mm / D1 - 5 / MT#5	Ø56 mm / D1 - 6 / MT#6
Tailstock Dia. / Travel / Taper	Ø50 mm / 112 mm / MT#3		Ø59 mm / 127 mm / MT#4
Slide travel - Cross / Compound	180 / 100 mm		235 / 120 mm
Net weight	850 / 1000 kgs	870 / 1020 kgs	1450 kgs

## MORTON HIGH SPEED PRECISION LATHES



FCL-1860G



FCL-21120G

### SPECIFICATIONS

	FCL-1840 / 1860 / 1880G	FCL-2140 / 2160 / 2180 / 21120G
Swing over bed	Ø460 mm	Ø542 mm
Swing over carriage	Ø298 mm	Ø380 mm
Swing over gap	Ø710 mm	Ø790 mm
Width of bed	345 mm	
Between center	1000 / 1500 / 2000 mm	1000 / 1500 / 2000 / 3000 mm
Spindle speed	20 ~ 1600 rpm (16 steps)	
Spindle motor	10 HP	12.5 HP
Spindle Bore / Nose / Taper	Ø80 mm / D1 - 8 / MT#7	
Tailstock Dia. / Travel / Taper	Ø76 mm / 165 mm / MT#5	
Slide travel - Cross / Compound	272 / 137 mm	
Net weight	2000 / 2350 / 2700 kgs	2300 / 2650 / 3000 / 3700 kgs

## MORTON AC ELECTRONIC INVERTER VARIABLE SPEED PRECISION LATHES



FCL-1340EVS



FCL-1550EVS

### SPECIFICATIONS

	FCL-1330EVS / 1340EVS	FCL-1430EVS / 1440EVS	FCL-1550EVS
Swing over bed	Ø342 mm	Ø356 mm	Ø380 mm
Swing over carriage	Ø205 mm	Ø226 mm	Ø238 mm
Swing over gap	Ø512 mm (1340EVS only)	Ø528 mm (1440EVS only)	Ø610 mm
Width of bed	230 mm	230 mm	280 mm
Between center	760 mm / 1000 mm	760 mm / 1000 mm	1250 mm
Spindle speed	100 ~ 3000 rpm (2 steps)	100 ~ 3000 rpm (2 steps)	22 ~ 2500 rpm (4 steps)
Spindle motor	AC 2.2 kw (3 HP), Inverter	AC 2.2 kw (3 HP), Inverter	AC 5.5 kw (7.5 HP), Inverter
Spindle bore / nose / taper	Ø40 mm / D1 - 4 / MT#5	Ø42 mm / D1 - 5 / MT#5	Ø56 mm / D1 - 6 / MT#6
Tailstock dia. / travel / taper	Ø50 mm / 112 mm / MT#3	Ø50 mm / 112 mm / MT#3	Ø59 mm / 127 mm / MT#4
Slide travel - cross / compound	180 / 100 mm	180 / 100 mm	235 / 120 mm
Net weight	850 / 1000 kgs	850 / 1000 kgs	1450 kgs

## MORTON AC ELECTRONIC INVERTER VARIABLE SPEED PRECISION LATHES



FCL-1860EVS



FCL-2180EVS

### SPECIFICATIONS

	FCL-1840 / 1860 / 1880EVS	FCL-2140 / 2160 / 2180 / 21120EVS
Swing over bed	Ø460 mm	Ø542 mm
Swing over carriage	Ø298 mm	Ø380 mm
Swing over gap	Ø710 mm	Ø790 mm
Width of bed	345 mm	345 mm
Between center	1000 / 1500 / 2000 mm	1000 / 1500 / 2000 / 3000 mm
Spindle speed	18 ~ 1800 rpm (4 steps)	18 ~ 1800 rpm (4 steps)
Spindle motor	AC 9.4 kw (12.5 HP), Inverter	AC 9.4 kw (12.5 HP), Inverter
Spindle bore / nose / taper	Ø80 mm / D1 - 8 / MT#7	Ø80 mm / D1 - 8 / MT#7
Tailstock dia. / travel / taper	Ø76 mm / 165 mm / MT#5	Ø76 mm / 165 mm / MT#5
Slide travel - cross / compound	272 / 137 mm	272 / 137 mm
Net weight	2000 / 2350 / 2700 kgs	2300 / 2650 / 3000 / 3700 kgs

# MORTON AC ELECTRONIC INVERTER VARIABLE SPEED PRECISION LATHES



FEL-1640EVS



FML-1760EVS

## SPECIFICATIONS

	FEL-1440 / 1460EVS	FEL-1640 / 1660EVS	FCL-1740 / 1760EVS	FML-1740 / 1760EVS	FML-2040 / 2060EVS
Swing over bed	Ø360 mm	Ø410 mm	Ø432 mm	Ø432 mm	Ø508 mm
Swing over carriage	Ø212 mm	Ø262 mm	Ø277 mm	Ø277 mm	Ø353 mm
Swing over gap	Ø533 mm	Ø583 mm	Ø622 mm	Ø622 mm	Ø698 mm
Width of bed	260 mm	260 mm	305 mm	305 mm	305 mm
Between center	1000 / 1500 mm		1000 / 1500 mm	1000 / 1500 mm	
Spindle speed	20 ~ 2500 rpm (2 steps)		20 ~ 2500 rpm (2 steps)	30 ~ 2200 rpm (3 steps)	
Spindle speed opt.	25 ~ 3000 rpm (2 steps)		-	-	
Spindle motor	AC 3.7 kw (5 HP), inverter		AC 3.7 kw (5 HP), inverter	AC 5.5 kw (7.5 HP), inverter	
Spindle bore / nose / taper	Ø52.5 mm / D1 - 6 / MT#6		Ø52.5 mm / D1 - 6 / MT#6	Ø80 mm / D1 - 6 / 1 / 19, 18	
Tailstock dia. / travel / taper	Ø52 mm / 152 mm / MT#4		Ø59 mm / 127 mm / MT#4	Ø59 mm / 127 mm / MT#4	
Slide travel - cross / compound	220 / 130 mm		235 / 160 mm	235 / 160 mm	272 / 160 mm
Net weight	1350 / 1450 kgs	1400 / 1500 kgs	1600 / 1850 kgs	1700 / 1850 kgs	1750 / 1900 kgs

# SPEEDER CENTER HOLE GRINDING MACHINE



AHG-1510

## SPECIFICATIONS

		AHG-1510	AHG-1020	AHG-1015
Size of workpiece	Range of O.D.	5 ~ 125 mm	5 ~ 90 mm	5 ~ 100 mm
	Range of Length	50 ~ 1000 mm	50 ~ 2000 mm	50 ~ 1500 mm
	Max weight	100 kgs	100 kgs	100 kgs
Grinding capacity	Center hole angle	60 degree	60 degree	60 degree
	Dia. Of center hole	2 ~ 60 mm	2 ~ 60 mm	2 ~ 60 mm
	Planetary reciprocation	1.5 mm	1.5 mm	1.5 mm
Motor	for spindle	1/2 HP AC	1/2 HP AC	1/2 HP AC
	for Planetary reciprocation	1/5 HP AC	1/5 HP AC	1/5 HP AC
	for workpiece drive	1/2 HP AC	1/2 HP AC	1/2 HP AC
Grinding wheel spindle	Travel of spindle	150 mm	150 mm	150 mm
	Max. travel for one graduation of wheel	1 mm	1 mm	1 mm
	Travel for one graduation of wheel	0.01 mm	0.01 mm	0.01 mm
	Speed of spindle	20000 rpm	20000 rpm	20000 rpm
Grinding wheel dressing device	Travel of dressing diamond	40 mm	40 mm	40 mm
	Vertical travel for one revolution of wheel	1.5 mm	1.5 mm	1.5 mm
	Horizontal travel for one revolution of wheel	1.5 mm	1.5 mm	1.5 mm



## SPEEDER HIGH PRECISION SURFACE GRINDING MACHINE



OSG-1224AND



OSG-1632AND

### SPECIFICATIONS

	OSG-1224AND	OSG-1632AND
Table size	300 x 600 mm	400 x 800 mm
Max. Grinding lengthxwidth	650 x 340 mm	850 x 450 mm
Table surface to spindle center	600 mm - opt - 700 mm	
Vertical movement		
- handfeed per revolution	0.1 mm/MPG	0.1 mm/MPG
- handfeed per graduation	0.001 mm/MPG	
Cross movement - manual	340 mm	450 mm
cont. feed rate	1100 mm/min	1100 mm/min
increment cross feed	1 ~ 20 mm/min	
handfeed per revolution	5 mm	
handfeed per graduation	0.02 mm	
Longitudinal movement - manual	700 mm	900 mm
- hydraulic	650 mm	850 mm
Spindle speed - 50 / 60 HZ	1450 / 1750 rpm	
Grinding wheel size	355 x 38 x 127 mm	
Spindle motor	5 HP. opt. 7.5 HP	
Net weight	2350 kgs	3300 kgs

## SPEEDER HIGH PRECISION SURFACE GRINDING MACHINE



OSG-2040AND



OSG-2460AND

### SPECIFICATIONS

	OSG-2040/2060AND	OSG-2450/2460AND
Table size	500 x 1050 mm / 500 x 1550 mm	600 x 1250 mm / 600 x 1550 mm
Max. Grinding lengthxwidth	1050 x 500 mm / 1550 x 500 mm	1250 x 600 mm / 1500 x 600 mm
Spindle center to worktable surface	600 mm - opt - 700 mm	
Vertical movement - rapid feed	500 mm/min	
- handfeed per revolution	0.1 mm/MPG	
- handfeed per graduation	0.001 mm/MPG	
Cross movement - manual	575 mm	675 mm
cont. feed rate	1000 mm/min	
increment cross feed	1 ~ 20 mm/min	
handfeed per revolution	5 mm	
handfeed per graduation	0.02 mm	
Longitudinal feed - hydraulic	1100 / 1600 mm	1300 / 1600 mm
Spindle speed - 50 / 60 HZ	1450 / 1750 rpm	
Grinding wheel size	355 x 38 x 127 mm	406 x 50x 127 mm
Spindle motor	7.5 HP. Opt. 10 HP	10 HP
Net weight	5900 / 7100 kgs	6600 / 7500 kgs

## SPEEDER HORIZONTAL SPINDLE + ROTARY TABLE SURFACE GRINDING MACHINE



SHR-200



SHR-300



SHR-600



SHR-1000

### SPECIFICATIONS

	SHR-200	SHR-300	SHR-400	SHR-500	SHR-600	SHR-800	SHR-1000	SHR-1200
Rotary magnetic chuck diameter	200 mm	300 mm	400 mm	500 mm	600 mm	800 mm	1000 mm	1200 mm
Max. grinding radius	125 mm	175 mm	225 mm	275 mm	325 mm	400 mm	525 mm	625 mm
Dis. between spindle to table surface	250 mm	360 mm	450 mm	450 mm	450 mm	580 mm	700 mm	
Rotary magnetic chuck speed	20 ~ 250 rpm			10 ~ 150 rpm		1060 rpm	10 ~ 60 rpm	10 ~ 50 rpm
Rotary magnetic chuck power	400 w	750 w	1.5 kw	2 kw	3 kw	4.5 kw	7 kw	10 kw
Grinding spindle motor	2 HP	3 HP	5 HP		siemens V3 10 HP	15 HP	siemens V3 20 HP	
Grinding spindle speed (50 / 60 HZ)	3000 / 3600 rpm		1450 / 1750 rpm					
Auto down feed power	servo motor 400 W		servo motor 500 W			servo - 1 kw	1.5 kw	
Vertical downfeed by hand wheel per graduation	x1, x5, x10 MPG / 0.001, 0.005, 0.01 mm							
Grinding wheel size OD x W x ID	180 x 13 x 31.75 mm		355 x 38 x 127 mm			405 x 50 x 127 mm	500 x 50 x 203 mm	
Net weight	1200 kgs	1600 kgs	3200 kgs	3500 kgs	4600 kgs	7000 kgs	12500 kgs	14000 kgs

## SPEEDER VERTICAL SPINDLE + ROTARY TABLE SURFACE GRINDING MACHINE



SVR-600



SVR-1000

### SPECIFICATIONS

	SVR-600	SVR-1000
Rotary magnetic chuck diameter	600 mm	1000 mm
Max. grinding radius	325 mm	500 mm
Dis. between spindle to table surface	325 mm	400 mm
Rotary magnetic chuck speed	5 ~ 50 rpm	5 ~ 20 rpm
Rotary magnetic chuck power	3 kw	7 kw
Grinding spindle motor	15 / 20 HP	50 HP
Grinding spindle speed (50 / 60 HZ)	1450 / 1750 rpm	870 / 1175 rpm
Auto down feed power	1 KW	1.5 KW
Vertical downfeed by hand wheel per graduation	x1, x5, x10 by MPG / 0.001, 0.005, 0.01 mm	
Grinding wheel size OD x W x ID	150 x 50 x 25 mm x 8 segment	
Net weight	4800 kgs	13000 kgs

## FREJOTH High Precision Surface Grinder - Cantilever Type



ASG-4080HSR

### SPECIFICATIONS

		ASG-3260HSR ASG-4060HSR	ASG-3280HSR ASG-4080HSR	ASG-32120HSR ASG-40120HSR	ASG-32160HSR ASG-40160HSR
Grinding surface of table	mm	800 x 1500 1000 x 1500	800 x 2000 1000 x 2000	800 x 3000 1000 x 3000	800 x 4000 1000 x 4000
Max. grinding surface	mm	800 x 1500 1000 x 1500	800 x 2000 1000 x 2000	800 x 3000 1000 x 3000	800 x 4000 1000 x 4000
Max. distance center of spindle to table	mm	800 [Option : 1000]			700 [Option : 900]
Table speed approx.	M / min	3 ~ 25			
Auto. Cross feed increment approx.	mm	0.5 ~ 20			
Rapid power cross feed	mm / min	1050 (60HZ) / 900 (50HZ)			
Auto down feed	mm	0.001 ~ 0.999			
Wheel speed	R. P. M	1750 [60 HZ] / 1450 [50 HZ]			
Wheel dimension	mm	405 x 50 x 127 [Max. 405 x 75 x 127]			
Spindle motor	HP	10 [Option : 15]			
Machine net weight	Kgs	12800 13800	14300 15300	17300 18800	20300 21300

## FREJOTH High Precision Surface Grinder - Double Column Type



ASG-64120HSR

### SPECIFICATIONS

		ASG-4880HSR ASG-6480HSR	ASG-48120HSR ASG-64120HSR	ASG-48160HSR ASG-64160HSR	ASG-48200HSR ASG-64200HSR	ASG-48240HSR ASG-64240HSR
Grinding surface of table	mm	1200 x 2000 1600 x 2000	1200 x 3000 1600 x 3000	1200 x 4000 1600 x 4000	1200 x 5000 1600 x 5000	1200 x 6000 1600 x 6000
Max. grinding surface	mm	1200 x 2000 1600 x 2000	1200 x 3000 1600 x 3000	1200 x 4000 1600 x 4000	1200 x 5000 1600 x 5000	1200 x 6000 1600 x 6000
Max. distance center of spindle to table	mm	1000 [Option : 1200]		900 [Option : 1100]		
Table speed approx.	M / min	1 ~ 25				
Auto. Cross feed increment approx.	mm	0.1 ~ 40				
Rapid power cross feed	mm / min	900				
Auto down feed	mm	0.001 ~ 0.999				
Wheel speed	R. P. M	1100				
Wheel dimension	mm	508 x 76 x 203				
Spindle motor	HP	20 [Option : 30]				
Machine net weight	Kgs	20000 23000	24000 28000	28500 33000	33000 38000	37500 43000

## FREJOTH High Precision Surface Grinder - Saddle Type



### SPECIFICATIONS

		ASG-618M ASG-818M	ASG-618H / HS ASG-818H / HS	ASG-1020H / HS	ASG-1020/2A	ASG-1224/2A	ASG-1224HS	ASG-1632HS
Grinding surface of table	mm	150 x 450 200 x 450		250 x 500	250 x 500	300 x 600	300 x 600	400 x 800
Max. grinding surface	mm	150 x 450 200 x 450		250 x 500	250 x 500	300 x 600	300 x 600	400 x 800
Max. distance center of spindle to table	mm	450		600	500		600	650
Table speed approx.	M / min	manual	5 ~ 25		5 ~ 25		5 ~ 25	
Auto. Cross feed Increment approx.	mm	manual	manual (for H series) 0.1 ~ 12 (for HS series)		0.1 ~ 10		0.5 ~ 20	
Rapid power cross feed	mm / min	manual	manual (for H series) 1100 [60 HZ] / 900 [50 HZ] (for HS series)		60 HZ : 1100 50 HZ : 900		1100 [60 HZ] / 900 [50 HZ]	
Auto down feed	mm	0.001 ~ 0.999 [2 / rev. ; 0.005 / gra.] [Option]		0.001 ~ 0.999 [Option]		0.001 ~ 0.999 [2 / rev. ; 0.005 / gra.] [Option]		
Wheel speed	R. P. M	3500 [60 HZ] 2900 [50 HZ]		50 HZ : 2900 60 HZ : 3500	50 HZ : 1450 60 HZ : 1750	1750 [60 HZ] 1450 [50 HZ]		
Wheel dimension	mm	180 x 13 x 31.75 [Max. 200 x 20 x 31.75]		180 x 13 x 31.75	355 x 38 x 127	355 x 38 x 127 405 x 50 x 127		
Spindle motor	HP	2		3	5		5	
Machine net weight	Kgs	870 920	900 950	1350	1500	1750	1950	3320

## FREJOTH High Precision Surface Grinder - Column Type



### SPECIFICATIONS

		ASG-2040HSR ASG-2440HSR ASG-2840HSR	ASG-2060HSR ASG-2460HSR ASG-2860HSR	ASG-2080HSR ASG-2480HSR ASG-2880HSR
Grinding surface of table	mm	500 x 1000 600 x 1000 700 x 1000	500 x 1500 600 x 1500 700 x 1500	500 x 2000 600 x 2000 700 x 2000
Max. grinding surface	mm	500 x 1000 600 x 1000 700 x 1000	500 x 1500 600 x 1500 700 x 1500	500 x 2000 600 x 2000 700 x 2000
Max. distance center of spindle to table	mm	* 600 [Option : 800 & 1000]		
Table speed approx.	M / min	5 ~ 25		
Auto. Cross feed increment approx.	mm	0.5 ~ 20		
Rapid power cross feed	mm / min	1100 [60 HZ] / 900 [50 HZ]		
Auto down feed	mm	0.001 ~ 0.999 [Option]		
Wheel speed	R. P. M	1750 [60 HZ] / 1450 [50 HZ]		
Wheel dimension	mm	405 x 50 x 127		
Spindle motor	HP	10 [Option : 15]		
Machine net weight	Kgs	6000 6300 6600	7200 7500 7800	8400 8700 9000

## FREJOTH HIGH PRECISION HAND FEED SURFACE GRINDERS



F-612B



APSG-614T  
APSG-618B/T  
APSG-818B

### SPECIFICATIONS

	F-612B	ASG-614T	ASG/APSG-618T & 618B	ASG/APSG-818B
Table size	152 x 305 mm	150 x 352 mm	150 x 460 mm	200 x 450 mm
Max. grinding surface	170 x 320 mm	150 x 350 mm	150 x 450 mm	200 x 450 mm
Spindle center to table	280 mm	420 / 460 mm (opt.)	420 / 460 mm (opt.)	
Longitudinal travel ( manual )	320 mm	380 mm	480 mm	485 mm
Cross travel(manual)	170 mm	170 mm	176 mm	230 mm
Cross feed on hand wheel ( per rev. / gra. )	2 (0.02) mm	5 (0.02) mm	5 (0.02) mm	
Vertical feed on hand wheel ( per rev. / gra. )	1 (0.01) mm	1 (0.005) mm	1 (0.005) mm	
Vertical feed with M.P.G. ( opt. )	-	0.001 , 0.005 , 0.01	0.001 , 0.005 , 0.01	
Wheel size	180 x 13 x 31.75 mm	180 x 13 x 31.75 mm	180 x 13 x 31.75 mm	
Wheel speed ( 50 / 60 HZ )	2850 / 3450 rpm	2850 / 3450 rpm	2850 / 3450 rpm	
Spindle motor	0.75 HP	1.5 HP	1.5 HP	2 HP
Net weight	205 kgs	670 kgs	780 kgs	800 kgs

## FREJOTH HIGH PRECISION HYDRAULIC FEED / AUTOMATIC DOWNFEED SURFACE GRINDERS



ASG-618-1A / 2A / 3A  
ASG-820-1A / 2A / 3A



APSG-618-1A / 2A / 3A  
APSG-820-1A / 2A / 3A



APSG-618AD  
APSG-820AD

### SPECIFICATIONS

	ASG/APSG-618(1A/2A/3A)	ASG/APSG-820(1A/2A/3A)	APSG-618AD	APSG-820AD
Table size	150 x 457 mm	200 x 500 mm	150 x 457 mm	200 x 500 mm
Max. grinding surface	150 x 450 mm	200 x 500 mm	150 x 450 mm	200 x 500 mm
Spindle center to table	410 / 460 mm (opt.)			
Longitudinal travel ( manual )	485 mm	530 mm	485 mm	530 mm
Longitudinal travel ( hydraulic )	480 mm	508 mm	480 mm	508 mm
Cross travel ( manual )	180 mm	230 mm	180 mm	230 mm
Cross travel ( hydraulic )	170 mm	210 mm	170 mm	210 mm
Cross feed on hand wheel ( per rev. / gra. )	5 (0.02) mm		5 (0.02) mm	
Vertical feed on hand wheel ( per rev. / gra. )	1 (0.005) mm		1 (0.005) mm	
Vertical feed with M.P.G. ( opt. )	0.001 , 0.005 , 0.01		0.001 , 0.005 , 0.01	
Wheel size	180 x 13 x 31.75 mm		180 x 13 x 31.75 mm	
Wheel speed ( 50 / 60 HZ )	2850 / 3450 rpm		2850 / 3450 rpm	
Spindle motor	1.5 HP	2 HP	1.5 HP	2 HP
Net weight	850 kgs	920 kgs	850 kgs	920 kgs

## FREJOTH MONASET UNIVERSAL TOOL AND CUTTER GRINDER



ATC-MN2



ACM-A

### SPECIFICATIONS

	ATC-MN2	ACM-A
Workhead swing dia.		304 mm
Max / min collet work dia.		32 / 5 mm
Spiral angle		60 deg
Spindle speak to tailstock		152 mm
Slide / offset slide travel		130 / 100 mm
Front / rear of center		50 / 50 mm
Motor and speeds (work head)		1/4 HP - 440 rpm
Grinding wheel head diameter		100 mm
Slide / vertical slide / cross slide travel		110 / 240 / 170 mm
Upper / low center		110 / 130 mm
Motor and speeds (grinding wheel head)		1/2 HP - 4000 / 6000 / 8000 rpm
Net weight	860 kgs	1030 kgs

## FREJOTH UNIVERSAL TOOL AND CUTTER GRINDER



ATC-40M



ATC-60M

### SPECIFICATIONS

	ATC-40M	ATC-60M
Vertical movement of wheel head		250 mm
Dis between tailstock and workhead	580 mm	780 mm
Spiral taper		MT#5 NT50 (BT50 optional)
Table working range	135 x 940 mm	135 x 1140 mm
Wheel motor		1.5 HP (1.1 kw)
Longitudinal movement of table	400 mm	600 mm
Cross movement of saddle		250 mm
Net Weight	1160 kgs	1260 kgs

## SPEEDER TOOL AND CUTTER GRINDER



SPP-32N



SPP-600



SPP-25

### SPECIFICATIONS

	SPP-32N	SPP-600	SPP-25
Drills grinding capacity	drills 1.5 ~ 32 mm	all tools	endmill 6 ~ 25 mm
Table longitudinal traverses	120 mm	185 mm	50 mm
Table cross traverse	135 mm	120 mm	50 mm
Grinding head vertical traverse	-	140 mm	-
Grinding head swivel angle	360 deg.	360 deg.	-
Working table size	-	125 x 520 mm	-
Grinding wheel dimension	-	125 x 50 x 31.75 mm	-
Grinding head motor	3/4 HP	1/2 HP	1/2 HP
Grinding head speed	3600 rpm	3600 rpm	3600 rpm
Net weight	95 kgs	150 kgs	50 kgs

## SPEEDER TOOL AND CUTTER GRINDER



SPP-50



SPP-60N

### SPECIFICATIONS

	SPP-50	SPP-60N/80N/100
Drills grinding capacity	all tools	drill & tap
Table longitudinal traverses	230 mm	250 mm
Table cross traverse	180 mm	180 mm
Grinding head vertical traverse	120 mm	165 mm
Grinding head swivel angle	360 deg.	360 deg.
Working table size	620 x 190 mm	-
Grinding wheel dimension	125 x 50 x 31.75 mm	180 x 32/19 x 31.75 mm
Grinding head motor	3/4 HP	60N 1/2 HP. 80N / 100 1 HP
Grinding head speed	3600 rpm	3600 rpm
Net weight	260 kgs	270 / 310 / 330 kgs

## SPEEDER TOOL & CUTTER GRINDER



STC-357L



STC-357M



STC-357S

### SPECIFICATIONS

	STC-357L	STC-357M	STC-357S
Distance between tailstock center to tailstock collet to tailstock		560 mm (22") 380 mm (15") 394 mm (15-1/2")	
Table swivel - 3" per ft.		240 deg.	
Distance between chuck face and tailstock		356 mm (14")	
Table surface		133 x 692 mm (5-1/4" x 27-1/4")	
Sub-table		203 x 965 mm (8 x 38")	
Cross feed traverse		198 mm (7-3/4")	
Table traverse		360 mm (14")	
Vertical travel of column		178 mm (7")	
Wheel head swivel		360 deg.	
Spindle speed range - high speed grinders		60 Hz : 3450 ~ 18400 rpm, 50 Hz : 3380 ~ 16465 rpm	
Spindle speed range - heavy duty grinder (OD)		60 Hz : 1150 ~ 7760 rpm, 50 Hz : 1185 ~ 7695 rpm	
Max. dis.column to outside staright wheel	117 mm (4-5/8")	117 mm (4-5/8")	122 mm (4-1/16")
Dovetail side extended spindle 90 deg.			
Max. dis.column to outside staright wheel	294 mm (11-9/16")	294 mm (11-9/16")	-
Dovetail side extended spindle 90 deg.			
Max. I.D.depth,hole size 9/32"(7mm) to 2"(50mm)	-	32 mm (1-1/4")	-
Capacity with standard arbor			
Grinding wheel hole size	1-1/4"	5/8"	5/8"
Net weight	518 kgs	518 kgs	490 kgs

## SPEEDER TOOL & CUTTER GRINDER



STC-380



STC-450



STC-250



STC-270

### SPECIFICATIONS

	STC-270	STC-380	STC-450	STC-250
Swing over table	280 mm	280 mm	280 mm	208 mm
Table working area	130 x 550 mm	110 x 675 mm	120 x 700 mm	133 x 470 mm
Grinding wheel spindle speed		50 Hz-2850 rpm, 60 Hz-3450 rpm		
Grinding wheel spindle motor	1/3 HP	1/2 HP		1/3 HP
Table swivel	0°	45°	15°	0°
Longitudinal travel of table	200 mm	305 mm	420 mm	250 mm
Cross travel of table	150 mm	150 mm	100 mm	160 mm
Vertical travel of grinding wheel head	290 mm	160 mm	150 mm	190 mm
Diameter of grinding wheel		Saucer - 150 mm & Flaring cup - 125 mm		
Distance between center	270 mm	380 mm	405 mm	250 mm
Vertical tilting range wheel head	360°	30°	30°	360°
Net weight	160 kgs	320 kgs	220 kgs	125 kgs



## FREJOTH INTERNAL GRINDING MACHINE



AIG-150B



AIG-250

### SPECIFICATIONS

	AIG-150B	AIG-250
Grinding hole diameter-range	6 ~ 150 mm	50 ~ 250 mm
Max. Grinding length	200 mm	200 mm
Max. workpiece length	1000 mm	1000 mm
Swing over table	290 mm	450 mm
Max. Table stroke	500 mm	500 mm
Table speed	0 ~ 7.2 m/min. - Hydraulic stepless	
Table longitudinal feed travel of grinding wheel	150 mm - Auto / hyd. stepless	
Work spindle speed	60 ~ 400 rpm (inverter variable)	10 ~ 400 rpm (disco)
Headstock swing angle	Front = 12 deg. / Rear = 7 deg.	
Working spindle motor	1 HP / 6P	1 HP / 4 P (disco)
Hydraulic system motor	2 HP / 4P	
Grinding wheel spindle motor	2 HP / 2P	
Capacity of oil tank / coolant tank	60 / 40 L	
Net weight	2650 kgs	2950 kgs

## FREJOTH HYDRAULIC AUTO SIZING INTERNAL GRINDING MACHINE



AIG-150



AIG-150A

### SPECIFICATIONS

	AIG-150	AIG-150A
Grinding hole diameter-range	Ø6 ~ 150 mm dia.	
Max. Grinding length	150 mm	
Max. workpiece length	150 mm	400 mm
Swing over table	500 mm	520 mm
Max. Table stroke	500 mm	500 mm
Table speed	0 ~ 7.2 m/min. - Hydraulic stepless	
Table longitudinal feed travel of grinding wheel	150 mm - Automatic / Hydraulic Stepless	
Work spindle speed	Inverter Variable - 2 steps - A : 38 ~ 400 rpm / B : 100 ~ 950 rpm	
Headstock swing angle	Front = 20 deg. / Rear = 10 deg.	Front = 25 deg. / Rear = 7 deg.
Working spindle motor	1/2 HP / 6P	
Hydraulic system motor	2 HP / 4P	
Grinding wheel spindle motor	2 HP / 2P	
Capacity of oil tank / coolant tank	60 / 45 L	
Net weight	1850 kgs	2450 kgs

# SPEEDER CENTERLESS GRINDING MACHINE



SCG-12



SCG-18

## SPECIFICATIONS

	SCG-12	SCG-18	SCG-18A	SCG-18B
Standard work / special work rest	1 ~ 25 / 25 ~ 40 mm		1 ~ 50 / 40 ~ 100 mm	
Grinding wheel size - D x W x bore	305 x 150 x 120 mm	455 x 205 x 228.6 mm	455 x 255 x 228.6 mm	455 x 305 x 228.6 mm
Grinding wheel speed	1900 rpm		1500 rpm	
Grinding motor	7.5 HP	15 HP	15 HP	20 HP
Regulation wheel size - D x W x bore	205 x 150 x 90 mm	255 x 205 x 111.2 mm	255 x 255 x 111.2 mm	255 x 305 x 111.2 mm
Regulation wheel speed - standard	7 step - 20 ~ 337 rpm		10 step - 13 ~ 316 rpm	
- optional	Var. 10 ~ 300 rpm		Var. 10 ~ 250 rpm	
Regulation wheel motor	1 HP	2 HP	2 HP	5 HP
Var. speed - optional	2 HP	Servo motor - 4 HP	Servo motor - 4 HP	Servo motor - 5 HP
Regulation wheel feed on handwheel	4 mm/rev. 0.02 mm/gra.		3.5 mm/rev. 0.05 mm/gra.	
Regulation wheel micro feed on handwheel	-		0.1 mm/rev. 0.001 mm/gra.	
Regulation wheel tilt angle		Plus 5 deg. Minus - 3 degree.		
Regulation wheel swivel angle		Plus/minus 5 deg.		
Table feed on handwheel	7 mm/rev. 0.05 mm/gra.		9 mm/rev. 0.05 mm/gra.	
Table micro feed on handwheel	-		0.2 mm/rev. 0.001 mm/gra.	
Dressing handwheel	1.25 mm/rev. 0.01 mm/gra.		2 mm/rev. 0.01 mm/gra.	
Net weight	1600 kgs	2800 kgs	2900 kgs	3000 kgs

# SPEEDER CENTERLESS GRINDING MACHINE



SCG-20



SCG-24B

## SPECIFICATIONS

	SCG-20	SCG-24A	SCG-24B	SCG-24C
Standard work / special work rest	1 ~ 50 / 40 ~ 100 mm		2 ~ 60 / 50 ~ 150 mm	
Grinding wheel size - D x W x bore	510 x 205 x 254 mm	610 x 205 x 304.8 mm	610 x 255 x 304.8 mm	610 x 305 x 304.8 mm
Grinding wheel speed	1350 rpm		1050 rpm	
Grinding motor	20 HP	25 HP	30 HP	30 HP
Regulation wheel size - D x W x bore	305 x 205 x 127 mm	305 x 205 x 127 mm	305 x 255 x 127 mm	305 x 305 x 127 mm
Regulation wheel speed - standard	10 step - 13 ~ 316 rpm		variable speed - 10 ~ 250 rpm	
- optional	var. 10 ~ 250 rpm		-	
Regulation wheel motor	3 HP	4 HP servo motor	5 HP servo motor	5 HP servo motor
Var. speed - optional	servo motor - 4 HP			
Regulation wheel feed on handwheel	3.5 mm/rev. 0.05 mm/gra.		2.5 mm/rev. 0.01 mm/gra.	
Regulation wheel micro feed on handwheel	0.1 mm/rev. 0.001 mm/gra.		0.02 mm/rev. 0.001 mm/gra.	
Regulation wheel tilt angle	plus5 to minus 3		Plus 3 to minus 5 deg.	
Regulation wheel swivel angle	plus/minus 5 deg.		Plus/minus 1 deg.	
Table feed on handwheel	9 mm/rev. 0.05 mm/gra.		2.5 mm/rev. 0.01 mm/gra.	
Table micro feed on handwheel	0.2 mm/rev. 0.001 mm/gra.		0.02 mm/rev. 0.001 mm/gra.	
Dressing handwheel		2 mm/rev. 0.01 mm/gra.		
Net weight	3200 kgs	6500 kgs	6500 kgs	6500 kgs

# FREJOTH UNIVERSAL EXTERNAL GRINDING MACHINE



AEG-1124AGC



AEG-1248AGC

## SPECIFICATIONS

	AEG-1124 / 1130	AEG-1424 / 1430	AEG-1248	AEG-1548
Center height	135 mm	175 mm	150 mm	190 mm
Swing (grinding diameter)	270 mm	350 mm	300 mm	380 mm
centre distance (grinding length)	600 / 750 mm	600 / 750 mm	1200 mm	
standard grinding wheel dimension	405 x 32 ~ 50 x 152.4 mm		405 x 38 ~ 75 x 152.4 mm	
Grinding wheel speed	1650 / 1850 rpm		1650 / 1850 rpm	
Traverse length	250 mm		250 mm	
Motor - wheel spindle / workhead spindle	5 HP / 1/2 HP		5 HP / 1 HP (disco motor)	

## SPEEDER PRECISION DRILL SHARPENER / END MILL SPIRAL SHARPENER



SDG-32A



SDG-32B



SDG-32H



SDG-32C

## SPECIFICATIONS

	SDG-32A	SDG-32B	SDG-32H	SDG-32C
Grinding range	Ø3 ~ Ø32 mm	Ø3 ~ Ø32 mm	Ø3 ~ Ø32 mm	Ø3 ~ Ø32 mm
Front edge angle	40° ~ 180°	40° ~ 180°		
Back rake angle	0° ~ 18°	0° ~ 18°		
Grinding wheel motor	1 HP	1 HP	1 HP	1 HP
Grinding wheel rotational speed	4300 rpm	4300 rpm		
Cooling system motor	-	1/8 HP		
Net weight	154 kgs	216 kgs		
Grinding range			Ø3 ~ Ø32 mm	Ø3 ~ Ø32 mm
Grinding wheel motor			1 HP	1 HP
CBN grinding wheel			Ø150 x 31.75 x 21T mm Ø69 x 31.75 x 17T mm	Ø125 x 31.75 x 2.0T mm
Grinding length			-	15 ~ 200 mm
Wheel rotational speed			4300 rpm	4300 rpm
Net weight			158 kgs	141 kgs

## SPEEDER CIRCULAR KNIVES & SITTING KNIVES GRINDING MACHINE



SCV-500D



SCV-450A



SCV-450B

### SPECIFICATIONS

	SCV-500D	SCV-450A	SCV-450B
Grinding range / circular knife dia.	Ø 30 ~ 500 mm	Ø 30 ~ 500 mm	
Swivel angle	± 90°	± 90°	
C-axis cutter circumrotation speed	-	10 ~ 200 rpm (vari.)	
Knife rotational speed	175 rpm	-	
Z-axis motor	AC servo motor	-	
X-axis to and from	18 mm/min	-	
Actual grinding wheel diameter	Ø 120 ~ 200 mm	Ø 180 ~ 200 mm	Ø 125 mm
Grinding wheel inner diameter	Ø 31.75 mm	Ø 31.75 mm	
Grinding wheel motor	1.5 kw	1.5 kw	0.75 kw
Grinding wheel rotation speed	1000 ~ 4500 rpm	4200 rpm	
Cooling motor	0.13 kw	0.13 kw	
Installation power	2.5 kw	2 kw	1.5 kw
Net weight	1050 kgs	670 kgs	640 kgs

## SPEEDER CIRCULAR SAW BLADE CHIP BREAK MACHINE / CIRCULAR SAW BLADE CHAMFERING MACHINE



SBR-650



SBW-650

### SPECIFICATIONS

	SBR-650	SBW-650
Grinding range	Ø 140 ~ 650 mm	Ø 150 ~ 650 mm
Teeth pitch	Max. 25 mm	Max. 25 mm
Saw blade thickness	Max. 8 mm	Max. 8 mm
Grinding speed	15 ~ 50 teeth/min.	30 ~ 100 teeth/min.
Grinding wheel outer dia.	Ø 30 mm	Ø 125 mm
Grinding wheel inner dia.	Ø 6 mm	Ø 25 mm
Grinding wheel motor	370 W	300 W
Transmission motor	0.25 KW	0.18 KW
Cooling motor	0.09 KW	0.09 KW
Grinding wheel speed 50HZ / 60HZ	1000 ~ 40000 rpm	6600 rpm
Power supply	0.75 KW	0.75 KW
Net weight	264 kgs	288 kgs

## SPEEDER SAW BLADE SHARPENER / CARBIDE TIPPED SAW BLADE GRINDER



SB-300



SB-450



SB-500



SES-280

### SPECIFICATIONS

	SB-300	SB-450	SB-500	SES-280
Grinding range	Ø 65 ~ 300 mm	Ø 65 ~ 450 mm	Ø 65 ~ 500 mm	Grinding range 155 ~ 900 mm
Max. tooth pitch	25 mm Max.	25 mm Max.	25 mm Max.	Coolant pump 1/8 HP
Tooth depth	8 mm	-	-	Grinding wheel size Ø 150 mm
Sawblade thickness ( under )	8 mm	8 mm	8 mm	Grinding wheel speed 5000 rpm
Grinding speed	90 teeth/min	L:72-143 H:113-223 teeth/min	30 ~ 135 teeth/min	Grinding wheel motor 1 HP
Cutting angle	0 ~ 30°	0 ~ 30°	0 ~ 30°	Eccentric motor 40 W
Grinding wheel diameter	Ø 150 mm	Ø 150 mm	Ø 150 mm	Net weight 310 kgs
Grinding wheel speed 50 / 60HZ	3800 / 4500 rpm	3800 / 4500 rpm	3800 / 4500 rpm	
Grinding wheel motor	0.37 kw	0.37 kw	0.37 kw	
Transmission motor	0.37 kw	0.37 kw	0.37 kw	
Net weight	130 kgs	180 kgs	302 kgs	

## SPEEDER FRICTION SAW BLADE SHARPENER & CHIP BREAK MACHINE



SB-850



SB-1200



SB-650

### SPECIFICATIONS

	SB-850	SB-1200	SB-650
Grinding range	Ø 350 ~ 850 mm	Ø 450 ~ 1200 mm	Ø 250 ~ 650 mm
Teeth pitch	25 mm	25 mm	25 mm Max.
Saw blade thickness	12 mm	12 mm	12 mm Max.
Grinding speed	10 ~ 100 teeth/min	10 ~ 100 teeth/min	10 ~ 100 teeth/min
Cutting angle	-5 ~ +15°	-5 ~ +15°	-5 ~ +15°
Grinding wheel diameter	Ø 180 mm	Ø 180 mm	Ø 180 mm
Grinding wheel motor	0.75 kw	0.75 kw	0.75 kw
Transmission motor	0.37 kw	0.37 kw	0.37 kw
Grinding wheel speed 50 / 60 HZ	3800 / 4500 rpm	3800 / 4500 rpm	3800 / 4500 rpm
Net weight	259 kgs	285 kgs	240 kgs

# FREJOTH HEAVY DUTY ROLLER GRINDING MACHINES



ATH200

## SPECIFICATIONS

	ATH100	ATH125	ATH160	ATH200	ATH250	ATH300
Max. weight of work with steadies	25 ton	25 ton	40 ton	80 ton	85 ton	100 ton
Max. weight of work center to center	6 ton	10 ton	10 ton	10 ton	10 ton	10 ton
Min / Max. grinding diameter	1000 mm	1250 mm	1600 mm	3000 mm	2500 mm	3000 mm
Max. diameter of crown grinding	±5 mm dia	±5 mm dia	±5 mm dia	±5 mm dia	±5 mm dia	±5 mm dia
Distance between centers	3 ~ 10 meters	3 ~ 16 meters	3 ~ 16 meters	3 ~ 16 meters	3 ~ 16 meters	3 ~ 16 meters
Headstock	power of workdrive	75 ~ 100 kw	75 ~ 100 kw	75 ~ 100 kw	100 ~ 125 kw	125 ~ 145 kw
	work speeds	5 ~ 50 rpm	5 ~ 50 rpm	3 ~ 30 rpm	3 ~ 30 rpm	3 ~ 30 rpm
Wheel head	power of wheel drive	33.75 ~ 45 kw	33.75 ~ 45 kw	45 ~ 56.25 kw	56.5 ~ 75 kw	75 ~ 93.75 kw
	spindle speed	400 ~ 1200 rpm				
	traverse X axis	550 mm	780 mm	910 mm	910 mm	1500 mm
	Max. rapid feed rate	1500 mm/min				
	grinding wheel dimension	915 x 100 x 304.8 mm / 1060 x 150 x 508 mm				
	micro feed	0.001 mm				
Machine table	spindle lubrication system	combination of hydrodynamic and hydrostatic				
	guideway lubrication system	combination of hydrodynamic and hydrostatic				
Tailsstock	feed rate	25 ~ 4500 mm/min				
	quill travel	170 mm				
	rapid feed	1500 mm/min	1500 mm/min	1500 mm/min	1500 mm/min	1500 mm/min

# FREJOTH INDUSTRIAL BENCH GRINDER SERIES



ABG-C6/C8



ACN-C8



AGS-C62



AGS-C84

## SPECIFICATIONS

	ABG-C6	ABG-C8	ACN-C8	AGS-C62	AGS-C84
Grinder and wire brush			✓		
Grinder & belt sander				✓	✓
Motor (IN) kw	0.45	0.72	0.72	0.45	0.72
Phase	single and three phase available				
Full load RPM	2 pole 50 / 60 HZ 2850 / 3420 rpm				
Grinding wheel size	150 x 25 x 20 mm	200 x 25 x 20 mm	200 x 25 x 20 mm	150 x 25 x 20 mm	200 x 25 x 20 mm
ACN wire brush size			200 x 19 x 16 mm		
AGS belt sander size				50 x 1000 mm	100 x 1000 mm

## FREJOTH INDUSTRIAL BENCH GRINDER SERIES



ACN-8



AGS-10



ABG-12

### SPECIFICATIONS

	ABG-6	ABG-8	ABG-10 / 2P	ABG-10 / 4P	ABG-12
Grinder and wire brush		ACN - 8	ACN - 10		
Buffer			PR - 10		
Grinder & belt sander	AGS - 62	AGS - 84	AGS - 10		
Motor (IN) kw	0.25	0.45	1	0.8	1.85
Phase	single and three phase available				3 phase only
Full load RPM	2 pole 50 / 60 HZ 2850 / 3450 rpm, 4 pole 50 / 60 HZ - 1420 / 1720 rpm				
Grinding wheel size (ABG)	150 x 25 x 20 mm	200 x 25 x 20 mm	250 x 38 x 25.4 mm		300 x 50 x 25.4 mm
ACN wire brush size (ACN)		200 x 19 x 16 mm	250 x 25 x 25.4 mm		
AGS belt sander size (AGS)	50 x 1000 mm	100 x 1000 mm	100 x 1150 mm		
PR buffer	225 x 25 x 25 mm				

## FREJOTH BELT SANDING MACHINES - METAL WORKING



GS-448



GS-459

### SPECIFICATIONS

	GS-448	GS-459
Motor (IN) kw	1.0	1.85
Belt size	100 x 1220 mm	100 x 1500 mm
Belt speed 50 / 60HZ	19 m / sec	25 m / sec
Grinding surface	320 x 100 mm	405 x 100 mm
Contact wheel	-	-
Dust collector motor		1/2 HP
Dust collector dust hose size	125 mm (5") or 100(4") x 2	
Collector capacity	750 CFM	750 CFM
All sander with stand	B1 as option	standard



**SA-1300**  
90°~144° (6~13 mm)  
118°~135° (2~6 mm)



**SA-2000**  
90°~144° (6~20 mm)  
118°~135° (2~6 mm)



**SA-2500**  
90°~144° (13~26 mm)  
118°~135° (27~30 mm)

**SPECIFICATIONS**

	SA-1300	SA-2000	SA-2500
Grinding capacity	3 ~ 13 mm	3 ~ 20 mm	13 ~ 26 mm
Speeds	5300 rpm		
Motor	Single AC110V / 220V 50~60 Hz		
Net / Gross weight	10 kgs	16 kgs	26 kgs
Collet type	ER 20	ER 25	ER 40
Grinding wheel	CBN #200	CBN #200	CBN #140



**U2**



**SBM 20/50/80**

**SPECIFICATIONS**

	U2		SBM 20	SBM 50	SBM 80
Max. collet capacity	18 mm	Grinding capacity	2 ~ 20 mm	20 ~ 50 mm	20 ~ 80 mm
Max. grinding dia.	25 mm	Spindle speed	10000 rpm	6000 rpm	4500 rpm
Taper angle	0 ~ 180 deg.	Base dimension	360 x 220 mm	600 x 280 mm	620 x 280 mm
Relief angle	0 ~ 45 deg.	Volts	110V / 240V		
Negative angle	0 ~ 26 deg.	Net weight	18 kgs	31 kgs	32 kgs
Grinding spindle speeds	3600 rpm				
Cup grinding wheel	100 x 50 x 20 mm				



# SPEEDER CHIP-BREAKER SLOT GRINDING MACHINE / SAW BLADE GRINDING MACHINE



SGS-1



SG-1

## SPECIFICATIONS

	SGS-1	SG-1
Saw blade diameter	70 ~ 450 mm	50 ~ 450 mm
Pitch range	25 mm (max.)	25 mm (max.)
Wheel diameter	15 ~ 30 mm	75 ~ 150 mm
Wheel inner diameter	6 mm	25 mm
Wheel motor	-	0.55 kw
Pneumatic pressure requirement	5 kg/cm <sup>2</sup>	-
Total electric power	0.375 kw	1 kw
Gross weight	160 kgs	130 kgs
Dimension (W x H x D)	75 x 127 x 90 cm	75 x 122 x 66 cm

# SPEEDER PLASMA SAW TEETH REMOVER / CBN WHEEL DRESSING MACHINE / CBN AUTOMATIC CHAMFERING MACHINE



SPC-500



SCD-1520



SSC-600

## SPECIFICATIONS

	SPC-500
Capacity of removed	140 ~ 500 mm
Thickness of removed	1 ~ 10 mm
Driving motor	60 w/1Ø
Rotating speed	2 ~ 3 rpm
Work operating pressure	4 ~ 6 kg/cm <sup>2</sup>
Total electric power	10.5 kw
Gross weight	231 kgs
Dimension (W x H x D)	78 x 95 x 150 cm

## SPECIFICATIONS

	SCD-1520
Capacity of CBN wheel	130 ~ 200 mm
Thickness of CBN wheel	1.2 ~ 12 mm
Wheel inner diameter	32 mm
Wheel motor	0.375 kw/4p
Wheel rotating speed	600 ~ 1500 rpm
Total electric power	0.5 kw
Gross weight	192 kgs
Dimension (W x H x D)	69 x 142 x 64 cm

## SPECIFICATIONS

	SSC-600
Saw blade diameter	80 ~ 600 mm
Wheel diameter	200 mm
Wheel inner diameter	32 mm
Bevel angle of chamfering	45°, 30°
Back rake angle	15 ~ 60 teeth/min
Wheel rotating speed	3000 rpm
Total electric power	3 kw
Gross weight	700 kgs
Dimension (W x H x D)	103 x 158 x 110 cm



UPW-75



UPW-50

**SPECIFICATIONS**

	UPW-75	UPW-50
Rolling range of workpieces	10 ~ 75 mm diameter	6 ~ 50 mm diameter
Axial pitch - ISO threads	1.0P ~ 10.0P	1.0P ~ 6.35P
Length of thread rolling	Plunge rolling in feed - 148 mm	
Roller spindle speeds	variable - 20 ~ 50 rpm	
Thread rolling die.	dia. x bore	200 x 70 mm
	length x keyway	35 / 70 / 100 / 150 mm x 14 x 7 mm
Dis. Of rolling spindle	275 ~ 195 mm	180 x 54 mm
		35 / 70 / 100 / 150 mm x 14 x 7 mm
Output - pcs / min.	4 ~ 20 pcs / min.	
Swivel of roll - axis	±6°	±7°
Main motor	25 HP	15 HP
Hydraulic motor	7.5 HP	5 HP
Max. rolling pressure	60 Tons	40 Tons
Net weight	6000 kgs	3250 kgs
Heavier type	UPW - 75A / UPW - 50A are available on required	



UPW-40



UPW-30



UPW-16

**SPECIFICATIONS**

	UPW-40	UPW-30	UPW-16
Rolling range of workpieces	6 ~ 40 mm diameter	5 ~ 30 mm diameter	2 ~ 16 mm diameter
Axial pitch - ISO threads	0.8P ~ 4.0P	0.8P ~ 3.5P	0.4P ~ 2.0P
Plunge rolling (In feed)	148 mm	70 mm	40 mm
Roller spindle speeds	20 / 35 / 50 / 70 rpm	variable - 30 ~ 65 rpm	variable - 30 ~ 65 rpm
Thread rolling die.	dia. x bore	150 mm x 54 mm	
	length x keyway	35 / 70 / 100 / 150 mm x 10 x 5 mm	35 / 70 mm x 10 x 5 mm
Dis. Of rolling spindle	125 ~ 200 mm	142 ~ 185 mm	90 ~ 120 mm
Output - pcs / min.	4 ~ 20 pcs / min.	4 ~ 20 pcs / min.	8 ~ 30 pcs / min.
Swivel of roll - axis	±4°	±7°	±6°
Main motor	10 HP	5 HP	3 HP
Hydraulic motor	5 HP	3 HP	2 HP
Max. rolling pressure	27 Tons	17 Tons	6 Tons
Net weight	2300 kgs	1220 kgs	600 kgs

## morgon RADIAL DRILLING MACHINES



FRD-750S/900S



FRD-1100S



FRD-1280H

### SPECIFICATIONS

	FRD-750S	FRD-900S	FRD-1100S	FRD-1280H
Drilling cap. - steel / cast iron	38 / 50 mm		50 / 60 mm	
Tapping cap. - steel / cast iron	M25 / M32		M30 / M38	
Boring cap. - steel / cast iron	75 / 105 mm		85 / 120 mm	
Spindle stroke	200 mm		250 mm	
Horizontal travel of headstock	500 mm	650 mm	810 mm	920 mm
Column diameter	Ø210 mm	Ø210 mm	Ø300 mm	Ø300 mm
Base size	1280 x 640 x 150 mm	1435 x 640 x 150 mm	1800 x 800 x 170 mm	1800 x 800 x 170 mm
Table size	550 x 405 x 315 mm	550 x 405 x 315 mm	650 x 500 x 410 mm	650 x 500 x 410 mm
Spindle center to column surface	min. 290 mm/max. 765 mm	min. 290 mm/max. 910 mm	min. 330 mm/max. 1150 mm	min. 330 mm/max. 1250 mm
Spindle nose to base	min. 282 mm/max 1110 mm		min. 290 mm/max 1210 mm	
Spindle speed	88 ~ 1500 rpm , (6 steps)		44 ~ 1500 rpm , (12 steps)	
Spindle taper	MT#4		MT#4	
Spindle motor	2 HP		3 HP (4P / 8P)	
Net weight	1100 kgs	1170 kgs	2000 kgs	2050 kgs

## morgon RADIAL DRILLING MACHINES



FRD-1300H



FRD-1700H



FRD-2000H

### SPECIFICATIONS

	FRD-1300H	FRD-1700H	FRD-2000H	FRD-2500H
Drilling cap. - steel / cast iron	55 / 66 mm	60 / 70 mm	85 / 105 mm	85 / 105 mm
Tapping cap. - steel / cast iron	M50 / M60	M50 / M60	M65 / M75	M65 / M75
Boring cap. - steel / cast iron	100 / 160 mm	126 / 180 mm	150 / 200 mm	150 / 200 mm
Spindle stroke	250 mm	250 mm	400 mm	400 mm
Horizontal travel of headstock	925 mm	1300 mm	1530 mm	2030 mm
Column diameter	Ø300 mm	Ø336 mm	Ø480 mm	Ø480 mm
Base size	1800 x 800 x 170 mm	2360 x 940 x 230 mm	2900 x 1200 x 250 mm	3400 x 1200 x 250 mm
Table size	650 x 500 x 410 mm	800 x 540 x 400 mm	800 x 540 x 400 equal x 2pcs	
Spindle center to column surface	min. 330 mm/max. 1260 mm	min. 360 mm/max. 1650 mm	min. 420 mm/max. 2000 mm	min. 420 mm/max. 2500 mm
Spindle nose to base	min. 290 mm/max. 1210 mm	min. 344 mm/max. 1410 mm	min. 560 mm / max. 1800 mm	
Spindle speed	44 ~ 1500 rpm , (12 steps)	30 ~ 1500 rpm , (12 steps)	H.L Variable speed by inverter 20 - 1300 rpm	
Spindle taper	MT#5	MT#5	MT#6	
Spindle motor	5 HP (4P / 8P)	7.5 HP (4P / 12P)	10 HP (OPT.15)	
Net weight	2150 kgs	3150 kgs	7100 kgs	7700 kgs

## morgon RADIAL DRILLING MACHINES



FRD-T1100



FRD-T1230



FRD-C1250H

### SPECIFICATIONS

	FRD-T1100	FRD-T1230	FRD-C1250H	FRD-C1600H
Drilling cap. - steel / cast iron	42 / 55 mm		50 / 60 mm	
Tapping cap. - steel / cast iron	25 / 38 mm		40 / 50 mm	
Spindle stroke	240 mm	270 mm	270 mm	
Horizontal travel of headstock	850 mm	880 mm	970 mm	1320 mm
Base size	1720 x 715 x 185 mm		1830 x 785 x 185 mm	2550 x 970 x 200 mm
Table size	635 x 520 x 415 mm		635 x 520 x 420 mm	630 x 500 x 500 mm
Spindle center to column surface	270 ~ 1120 mm	330 ~ 1230 mm	305 ~ 1275 mm	330 ~ 1650 mm
Spindle nose to base	480 ~ 1280 mm	467 ~ 1360 mm	438 ~ 1330 mm	465 ~ 1405 mm
Spindle speed (60 HZ)	44 ~ 1500 rpm , (12 steps)		56 ~ 1450 rpm , (12 steps)	
Spindle taper	MT#4		MT#5	
Spindle motor	3 HP (2 speed motor)		5 HP (2 speed motor)	
Net weight	1800 kgs	2100 kgs	2300 kgs	3300 kgs

## morgon RADIAL DRILLING MACHINES



FRD-1600H



FRD-C2000H



FRD-C2500

### SPECIFICATIONS

	FRD-1600H	FRD-C2000H	FRD-C2500
Drilling cap. - steel / cast iron	65 / 70 mm	65 / 70 mm	80 / 100 mm
Tapping cap. - steel / cast iron	50 / 60 mm	50 / 60 mm	65 / 75 mm
Spindle stroke	370 mm	370 mm	450 mm
Horizontal travel of headstock	1110 mm	1510 mm	2000 mm
Base size	2470 x 1030 x 200 mm	2920 x 1120 x 260 mm	3520 x 1400 x 320 mm
Table size	700 x 500 x 400 mm	1000 x 800 x 500 mm	1000 x 800 x 560 mm
Spindle center to column surface	440 ~ 1550 mm	440 ~ 2060 mm	500 ~ 2500 mm
Spindle nose to base	380 ~ 1640 mm	395 ~ 1950 mm	550 ~ 2000 mm
Spindle speed (60 HZ)	35 ~ 1890 rpm , (12 steps)	35 ~ 1890 rpm , (12 steps)	16 ~ 1250 rpm , (16 steps)
Spindle taper	MT#5	MT#5	MT#6
Spindle motor	7-1/2 HP	7-1/2 HP	10 HP
Net weight	4250 kgs	5600 kgs	11000 kgs

## morgon GEAR TYPE FULLY AUTOMATIC TAPPING MACHINE



MTM-08V



MTM-16V



MTM-32V

### SPECIFICATIONS

	MTM-08V	MTM-16V	MTM-32V
Tapping capacity	1 ~ 10 mm	5 ~ 16 mm	8 ~ 32 mm
Spindle travel	45 mm	65 mm	65 mm
Column diameter	Ø52 mm	Ø85 mm	Ø95 mm
Swing	330 mm	430 mm	460 mm
Table size	230 x 225 mm	340 x 340 mm	380 x 340 mm
Base size	415 x 300 mm	580 x 425 mm	600 x 480 mm
Spindle speed 60HZ	740 ~ 1670 mm (3 steps)	190 ~ 620 mm (3 steps)	60 ~ 240 mm (3 steps)
Spindle taper	JT2	MT#2	MT#3
Spindle motor - 3PH	1/2 HP (4P)	1 HP (6P)	2 HP (6P)
Net weight	97 kgs	200 kgs	250 kgs

## morgon HORIZONTAL GEAR TYPE FULL AUTOMATIC TAPPING MACHINE



MTM-08H



MTM-16H



MTM-32H

### SPECIFICATIONS

	MTM-08H	MTM-16H	MTM-32H
Tapping capacity	1 ~ 10 mm	5 ~ 16 mm	8 ~ 32 mm
Spindle stroke	45 mm	65 mm	65 mm
Height of center	165 mm	220 mm	235 mm
Table size	130 x 175 mm , x 4 - Ø9	144 x 220 mm , x 4 - Ø14	175 x 235 mm , x 4 - Ø16
Foundation area	165 x 205 mm	180 x 260 mm	215 x 282 mm
Spindle speed 60HZ	740 ~ 1670 mm (3 steps)	190 ~ 620 mm (3 steps)	60 ~ 240 mm (3 steps)
Spindle taper	JT2	MT#2	MT#3
Spindle motor - 3PH	1/2 HP (4P)	1 HP (6P)	2 HP (6P)
Net weight	50 kgs	103 kgs	125 kgs

## morgon AIR / ELECTRIC TAPPING MACHINE



AQ-12



AT-12/II



EMAT-32

### SPECIFICATIONS

	AQ-12	AT-12/II	EMAT-32
Type	AIR	AIR	ELECTRIC
For tap	M3 - M12	M3 - M12	M3 - M32
Speed (RPM)	400	400	0-300 / 0-60
Work range	MAX. 950 mm, min. 100 mm	MAX. 1900 mm, min. 200 mm	MAX. 1900 mm, min. 200 mm
Electric motor	-	-	0.75 kw, 220V / 1-PH
Weight (kg)	16	23	65

## morgon HYDRAULIC / ELECTRIC TAPPING MACHINE



HMT-32



HMT-42



DMT-24

### SPECIFICATIONS

	HMT-32	HMT-42	DMT-24
Type	HYDRAULIC	HYDRAULIC	ELECTRIC
For tap	M4 - M32	M4 - M42	M3 - M24
Speed (RPM)	0-500 / 0-105	0-400 / 0-75	0-300 / 0-110
Work range	MAX. 1900 mm, min. 200 mm	MAX. 1900 mm, min. 200 mm	MAX. 1500 mm, min. 200 mm
Electric motor	3 HP, 220 / 380V, 3-PH	3 HP, 220 / 380V, 3-PH	0.6 kw, 220V / 1-PH
Hydraulic pressure	100 kgs/cm <sup>2</sup>	100 kgs/cm <sup>2</sup>	-
Weight (kg)	400	400	35

## morgon AIR TORSIONAL TAPPING HAND TOOL



ATH-12-3



ATR-12-3

### SPECIFICATIONS

	ATH-12-3	ATR-12-3
For tap	M2 - M12	M2 - M12
Speed (RPM)	250	400
Spindle type	TH1 / B12	TH1 / B12
Max. Air consumption (Nm <sup>3</sup> /min)	0.4	0.4
Weight (kg)	4	4

## morgon VARIABLE SPEED DRILLING MACHINE



### SPECIFICATIONS

	MDP-25VS	MDP-32EV	MDP-40VSF
Drilling cap. - steel / castiron	25 / 32 mm	Steel : 32-MT#3 , 40-MT#4 (option)	40 / 45 mm
Tapping cap. - steel	16 mm	19 mm	24 mm
Spindle travel	150 mm	150 mm	150 mm
Column diameter	92 mm	115 mm	115 mm
Swing	408 mm	530 mm	530 mm
Base size	590 x 390 mm	685 x 485 mm	685 x 485 mm
Table size	460 x 360 mm	560 x 470 mm	560 x 470 mm
Spindle nose to base	1100 mm	1180 mm	1140 mm
Spindle nose to table	680 mm	690 mm	650 mm
Spindle speed	150 ~ 3000 rpm	65 ~ 2000 rpm (2 steps)	65 ~ 2000 rpm (2 steps)
Spindle taper	MT#3	MT#3 (#4)	MT#4
Spindle motor	2 HP	2 HP	2 HP
Net weight	220 kgs	340 kgs	385 kgs

## morgon VARIABLE SPEED DRILLING MACHINE



### SPECIFICATIONS

	DP-918VAD	DP-932V	DPV-F13	DP-F13	DPV-F32	DPV-B13	DP-B13	
Drilling cap. - steel	32 mm		13 mm		32 mm		13 mm	
Spindle travel	150 mm		150 mm		150 mm		150 mm	
Column diameter	92 mm	115 mm	75 mm		115 mm	75 mm		
Swing	480 mm	530 mm	384 mm		530 mm	384 mm		
Base size	590 x 395 mm	685 x 485 mm	525 x 362 mm		685 x 485 mm		-	
Table size	400 x 500 mm	560 x 470 mm	356 x 455 mm		560 x 470 mm		530 x 362 mm	
Spindle nose to base	1150 mm	1200 mm	1170 mm		1180 mm		-	
Spindle nose to table	735 mm	690 mm	680 mm		690 mm		470 mm	
Spindle speed	4P: 150 ~ 2500 rpm	4P: 300 ~ 2000 rpm	400 ~ 5000 rpm (variable)	400 ~ 5000 rpm (6 speeds)	300 ~ 2000 rpm (4P) , 150 ~ 1000 rpm (8P)(opt)	400 ~ 5000 rpm (variable)	400 ~ 5000 rpm (6 speeds)	
Spindle taper	MT3#		MT#2		MT#3		MT#2	
Spindle motor	2 HP		1 HP		2 HP		1 HP	
Net weight	265 kgs	295 kgs	140 kgs	127 kgs	295 kgs	110 kgs	97 kgs	

## morgon INVERTER VARIABLE MILL / DRILL MACHINE



### SPECIFICATIONS

	MD-30BV	MD-930
Drilling capacity - steel	30 mm	MT3# 32 mm MT4# 40 mm (Optional)
Spindle taper	MT3# or R8	MT3# (Standard) MT4# (Optional)
Swing	276 mm	510 mm
Spindle travel	150 mm	150 mm
Quill diameter	75 mm	75 mm
Column diameter	95 mm	115 mm
Spindle nose to table	500 mm	460 mm
Table size (L x W)	730 x 210 mm	730 x 210 mm
Base size (L x W)	605 x 400 mm	670 x 400 mm
Spindle speed	150 ~ 2500 rpm	High:245 ~ 2000 rpm Low:65 ~ 540 rpm
Motor	2 HP / 3 PH	2 HP
Net weight - machine	240 kg	285 kgs

## morgon VARIABLE SPEED DRILL PRESS



MK-16VS



MK-16VSF



MK-20VS



MK-20VSF

### SPECIFICATIONS

	MK-16VS	MK-16VSF	MK-20VS	MK-20VSF
Max. Drillings capacity	16 mm	16 mm	20 mm	20 mm
Spindle taper	MT2 / JT3, MT2 / B18, MT2 / JT6, MT2 / JT33, MT2 / B16	MT2 / JT3, MT2 / B18, MT2 / JT6, MT2 / JT33, MT2 / B16	MT3 / JT3, MT3 / JT4, MT3 / B18, MT3 / B22	MT3 / JT3, MT3 / JT4, MT3 / B18, MT3 / B22
Max. Spindle stroke	85 mm	85 mm	85 mm	85 mm
Swing	382 mm	382 mm	382 mm	382 mm
Speed of spindle	350 ~ 2100 rpm	350 ~ 2100 rpm	190 ~ 1900 rpm	190 ~ 1900 rpm
Diameter of column	80 mm	80 mm	80 mm	80 mm
Max. Distance from spindle to table	470 mm	700 mm	450 mm	680 mm
Max. Distance from spindle to base	650 mm	1220 mm	630 mm	1200 mm
Overall height	1060 mm	1650 mm	1060 mm	1650 mm
Size of table	round	320 mm	320 mm	320 mm
	T - slot	290 x 290 mm	290 x 290 mm	350 x 250 mm
Motor	1 HP (0.75 kw)	1 HP (0.75 kw)	3 HP (2.3 kw)	3 HP (2.3 kw)
Net weight	72 Kgs	77 Kgs	95 Kgs	102 Kgs



## morgon HIGH SPEED DRILLING MACHINE



MD-13/13F



MD-16/16F



MD-18/18F



MD-25



MD-32

### SPECIFICATIONS

	MD-13/13F	MD-16/16F	MD-18/18F	MD-25	MD-32
Max. drilling capacity	16 mm	16 mm	20 mm	32 mm	32 mm
Spindle taper	MT #2	MT #2	MT #2	MT #3	MT #4
Chuck size	16 mm	16 mm	16 mm	16 mm	19 mm
Spindle stroke	85 mm	85 mm	85 mm	118 mm	118 mm
Spindle speeds	50 Hz(16S)180 ~ 2700 rpm	50 Hz(12S) 290 ~ 2330 rpm		50 Hz(12S) 145 ~ 2530 rpm	
Dis. Spindle nose to table	470 / 725 mm	470 / 700 mm	460 / 775 mm	665 mm	635 mm
Dis. Spindle nose to base	640 / 1235 mm	650 / 1220 mm	638 / 1270 mm	1175 mm	1145 mm
Table size - T - slot	278 x 285 mm	290 x 290 mm	290 x 290 mm	475 x 410 mm	475 x 410 mm
Motor	1 / 3 HP	1 / 3 HP	1 / 2 HP	3 / 4 HP	1 - 1/2 HP
Net weight	53 / 60 kgs	60 / 70 kgs	69 / 74.2 kgs	130.7 kgs	130.7 kgs

## morgon RADIAL DRILL PRESS



MD-13T



MD-16TS

### SPECIFICATIONS

	MD-13T	MD-16TS
Swing	915 mm	1215 mm
Max. drilling capacity	13 mm	16 mm
Spindle taper	JT6 , B16	MT #2
Chuck size	13 mm	16 mm
Spindle stroke	85 mm	80 mm
Spindle speeds	50 HZ : 5 steps 515 ~ 2580 rpm	50 HZ : 9 steps 190 ~ 2800 rpm
Head tilting	45 deg	
Throat	120 ~ 460 mm	500 ~ 740 mm
Table size	235 x 215 mm	500 x 530 mm
Motor	1 / 3 HP	3 / 4 HP
Net weight	40 kgs	230 kgs

## MORGON HEAVY DUTY INDUSTRIAL PRECISION DRILLING MACHINES - EUROPEAN TYPE



UMD-30



UMD-30P



UMD-32D



UMD-32DP

### SPECIFICATIONS

	UMD-30	UMD-30P	UMD-32D	UMD-32DP
Drilling ( steel ) cap.	Ø30 mm	Ø30 mm	Ø34 mm	Ø34 mm
Spindle stroke	125 mm	125 mm	125 mm	125 mm
Column diameter	Ø92 mm	Ø92 mm	Ø92 mm	Ø92 mm
Quill diameter	Ø62 mm	Ø62 mm	Ø62 mm	Ø62 mm
Swing	418 mm	418 mm	450 mm	450 mm
Table size	285 x 395 mm	285 x 395 mm	350 x 350 mm	285 x 395 mm
Base size	560 x 410 mm	560 x 420 x 140 mm	500 x 330 mm	560 x 420 x 140 mm
Spindle speed	138 ~ 2960 rpm (18 steps)	138 ~ 2960 rpm (18 steps)	120 ~ 2000 rpm (18 steps)	120 ~ 2000 rpm (18 steps)
Spindle taper	MT#3	MT#3	MT#4	MT#4
Spindle motor	1 HP (4P / 8P)	1 HP (4P / 8P)	1.5 HP (4P / 8P)	1.5 HP (4P / 8P)
Net weight	186 kgs	216 kgs	148 kgs	194 kgs

## MORGON HEAVY DUTY INDUSTRIAL PRECISION DRILLING MACHINES - EUROPEAN TYPE



UMD-16SA



UMD-19S



UMD-19SF



UMD-25SFD

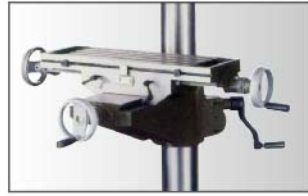


UMD-25SFC

### SPECIFICATIONS

	UMD-16SA	UMD-19S	UMD-19SF	UMD-25SFD	UMD-25SFC
Drilling ( steel ) cap.	Ø16 mm		Ø20 mm		Ø25 mm
Spindle stroke	80 mm		80 mm		125 mm
Column diameter	Ø80 mm		Ø80 mm		Ø92 mm
Quill diameter	Ø47 mm		Ø52 mm		Ø62 mm
Swing	360 mm		360 mm		450 mm
Table size	280 x 280 mm	280 x 280 mm		350 x 350 mm	
Base size	505 x 305 mm	470 x 280 mm	500 x 330 mm	580 x 330 mm	500 x 330 mm
Spindle speed	360 ~ 2830 rpm (12 steps)	250 ~ 3000 rpm (10 steps)		240 ~ 2000 rpm (9 steps)	120 ~ 2000 rpm (18 steps)
Spindle taper	MT#2	MT#2		MT#3	MT#3
Spindle motor	1/2 HP / 1 HP	1/2 HP		1 HP	1 HP
Net weight	67 kgs	80 kgs	92 kgs	142.5 kgs	154 kgs

## morgon MILL / DRILL SCANDINAVIAN STYLE MACHINES



■ Cross Table

■ MD-205S / 205SF  
MD-205C / 205CF



■ Cross Table

■ MD-43S / 43C  
MD-43SF / 43CF

S=Square Table / C=Cross Table  
SF=Square Table+Power Down Feed  
0.08~0.12~0.16~0.22mm per/rev.  
CF=Cross Table+Power Down Feed  
0.08~0.12~0.16~0.22mm per/rev.

### SPECIFICATIONS

	MD-205S/205SF		MD-205C/205CF		MD-43S/43SF		MD43C/43CF	
Drilling cap. ( steel )	32 mm		32 mm		32 mm	36 mm (MT4)	32 mm	36 mm (MT4)
spindle stroke	150 mm	107 mm	105 mm	107 mm	150 mm	107 mm	150 mm	107 mm
Column diameter	Ø100 mm				Ø120 mm		Ø120 mm	
Table size	505 x 405 mm		585 x 190 mm		505 x 405 mm		600 x 300 mm	
T-slot ( width x pitch )	16 x 26 mm		14 x 24 mm		16 x 26 mm		14 x 24 mm	
spindle center to column	284 mm		284 mm		350 mm		350 mm	
Spindle nose to table	915 mm		780 mm		950 mm		800 mm	
Spindle nose to base	1262 mm				1300 mm			
Spindle speed	90 ~ 3580 rpm (2 speeds)				90 ~ 3580 rpm (2 speeds)			
Spindle taper	MT#3				MT#3 (optional MT#4)			
Spindle motor	1.5 HP : 3Ø				2 HP : 3Ø			
Net weight	200 / 215 kgs		230 / 245 kgs		240 / 255 kgs		260 / 275 kgs	

## morgon PRECISION DRILLING MACHING - GEAR TYPE



■ MGD-700VS



■ MGD-700V



■ MGD-S600A/S600B

### SPECIFICATIONS

	MGD-700VS/700V	MGD-S600A	MGD-S600B
Drilling cap. - steel / cast iron	50 / 60 mm	38 / 50 mm	38 / 50 mm
Spindle stroke	190 mm	168 mm	168 mm
Column diameter	Ø160 mm	Ø139.7 mm	Ø139.7 mm
Base size	870 x 510 mm	406 x 419 mm	406 x 419 mm
Table size	600 x 450 mm	Ø400 mm	406 x 508 mm
Table rotation on column	360°	360°	360°
Spindle center to column surface	350 mm	305 mm	305 mm
Spindle nose to table	780 mm	826 mm	826 mm
Spindle nose to base	1240 mm	1194 mm	1194 mm
Spindle speed	100 ~ 1000 rpm (inf.)	80 ~ 950 rpm , (8 steps)	80 ~ 950 rpm , (8 steps)
Spindle taper	MT#4	MT#4	MT#4
Spindle motor	5 HP	1.5 (2.2) HP	1.5 (2.2) HP
Spindle down feeds	0.09 / 0.16 / 0.28 mm (3 steps)	0.102 / 0.1778 mm (2 steps)	0.102 / 0.1778 mm (2 steps)
Net weight	680 / 650 kgs	250 kgs	250 kgs

## MORGON MILL / DRILL GEAR HEAD TYPE MACHINES



MD-40/40N2F



MD-40HC  
MD-40HS



MD-40C2F  
MD-40S2F



MD-46SF

### SPECIFICATIONS

	MD-40/40N2F	MD-40HC/HS/C2F/ S2F	MD-46SF
Drilling / face mill / end mill cap. ( steel )	40 / 100 / 20 mm	40 / 100 / 20 mm	40 / 100 / 25 mm
Tapping cap. ( optional )	20 mm	20 mm	22 mm
Longitudinal travel	460 mm	380 mm - 380 mm -	-
Cross travel	230 mm	180 mm - 180 mm -	-
Spindle stroke	130 / 107 mm	130 mm 107 mm	107 mm
Column diameter	Ø115 mm	Ø115 mm	Ø115 mm
Table size	730 x 210 mm	585 x 190 mm (cross)	555 x 495 mm
		555 x 495 mm (square)	
T-slot ( width x pitch )	16 x 26 mm	14 x 24 (16 x 26) mm	16 x 26 mm
Spindle speed	65 ~ 1550 rpm (6 steps)	65 ~ 1550 rpm (6 steps)	65 ~ 1550 rpm (6 steps)
Spindle speed ( optional )	65 ~ 3100 rpm (12 steps)	65 ~ 3100 rpm (12 steps)	65 ~ 3100 rpm (12 steps)
Spindle taper	MT#3 or R8	MT#3 or R8	MT#4
Spindle motor	1 HP : 3Ø / 1.5 HP : 1Ø	1 HP : 3Ø / 1.5 HP : 1Ø	1.5 HP
Net weight	270 kgs	280 / 270 / 295 / 285 kgs	310 kgs

## MORGON MILL / DRILL GEAR HEAD TYPE MACHINES



S: Square Table  
C: Cross Table

MD-500S  
MD-500C



optional

MD-35

### SPECIFICATIONS

	MD-500S/500C	MD-35
Drilling / face mill / end mill cap. ( steel )	50 / 100 / 25 mm	32 / 76 / 20 mm
Tapping cap. ( optional )	33 mm	16 mm
Longitudinal travel	- 460 mm	Travel of spindle head 380 mm
Spindle stroke	200 mm	Cross travel 380 mm
Column diameter	Ø180 mm	Table size 550 x 500 mm
Table size	600 x 600 mm 820 x 240 mm (swivel)	Spindle stroke 130 mm
Spindle speed	60 ~ 1810 rpm (6 steps)	Spindle speed 340 ~ 3000 rpm
T slot (width x pitch)	22 x 35 16 x 26	Spindle speed ( optional ) 170 ~ 3000 rpm
Spindle taper	MT#4	spindle taper MT#3
Spindle motor	4 HP : 3Ø	Spindle motor 1.5 HP
Net weight	750 kgs	Net weight 250 kgs

## morgon AC INVERTER VARIABLE SPEED DRILLING MACHINE



MD-402VS/MD-402VPF

### SPECIFICATIONS

	MD-402VS/MD-402VPF
Drill / face mill / end mill cap. (steel)	32 / 76 / 20 mm
Tapping cap. (optional)	20 mm
Max. spindle nose to table	780 mm
Spindle travel	165 mm (PF=107 mm)
Column diameter	Ø115 mm
Table size	555 x 495 mm
Number of power fownfeed	3 (0.12-0.18-0.25 per/rev.)
T-slot (width x pitch)	16 x 26 mm
Spindle speed	0 ~ 2000 rpm
Spindle taper	MT#3
Spindle motor	1-1/2 HP
N.W. / G.W.	280 / 310 kgs

## morgon MILL / DRILL GEAR HEAD TYPE MACHINES



Stand is optional

MD-45  
MD-45N2F



Stand is optional

MD-45N2F+DRO (3 axis)

### SPECIFICATIONS

	MD-45	MD-45N2F	MD-45N2F+DRO
Drilling / face mill / end mill cap. ( steel )		40 / 100 / 20 mm	
Tapping cap. ( optional )		20 mm	
Longitudinal travel		520 mm	
Cross travel		210 mm	
Spindle stroke	130 mm	107 mm	130 mm
Column diameter		-	
Table size		820 x 240 mm	
T-slot ( width x pitch )		16 x 26 mm	
Spindle speed		65 ~ 1550 rpm	
Spindle speed ( optional )		65 ~ 3100 rpm	
Spindle taper		MT3 or R8	
Spindle motor		1 HP : 3Ø / 1.5HP : 1Ø	
Net weight		330 kgs	

## MORGON MILL / DRILL BELT TYPE MACHINES



optional

MD-25



optional

MD-31



optional

MD-31N2F

### SPECIFICATIONS

	MD-25	MD-31	MD-31N2F
Drilling / face mill / end mill cap. ( steel )	25 / 76 / 20 mm	32 / 76 / 20 mm	32 / 76 / 20 mm
Tapping cap. ( optional )	16 mm	16 mm	16 mm
Longitudinal travel	380 mm	460 mm	460 mm
Cross travel	150 mm	190 mm	190 mm
Spindle stroke	95 mm	130 mm	107 mm
Column diameter	Ø92 mm	Ø115 mm	Ø115 mm
Table size	585 x 190 mm	730 x 210 mm	730 x 210 mm
T-slot ( width x No. X pitch )	14 x 4 x 24 mm	16 x 4 x 26 mm	16 x 4 x 26 mm
Spindle speed	110 ~ 2580 rpm (12 steps)	150 ~ 3000 rpm (12 steps)	150 ~ 3000 rpm , (12 steps)
Spindle speed ( optional )	-	75 ~ 3000 rpm (24 steps)	75 ~ 3000 rpm (24 steps)
Spindle taper	MT#3 or R8	MT#3 or R8	MT#3 or R8
Spindle motor	3/4 HP	1.5 HP	1.5 HP
Net weight	160 kgs	230 kgs	230 kgs

## MORGON MILL / DRILL BELT TYPE MACHINES



MD-400S2F  
MD-400C2F



MD-400HC - cross table  
MD-400HS - square table



MD-19



MD-19V

HS=Square Table / HC=Cross Table

S2F=Square Table+Spindle Power Down Feed 0.12~0.18~0.25mm per/rev.

C2F=Cross Table+Spindle Power Down Feed 0.12~0.18~0.25mm per/rev.

### SPECIFICATIONS

	MD-400HC/HS/C2F/S2F	MD-19/19V
Drilling / face mill / end mill cap. ( steel )	32 / 76 / 20 mm	28 mm
Tapping cap. ( optional )	16 mm	16 mm
Longitudinal travel	380 mm	-
Cross travel	180 mm	-
Spindle stroke	130 mm	107 mm
Column diameter	Ø115 mm	Ø100 mm
Table size	cross: 585 x 190 mm / square: 555 x 495 mm	420 x 470 mm
T-slot ( width x pitch )	cross: 14 x 24 mm / square: 16 x 26 mm	14 x 24 mm
Spindle speed	150 ~ 3000 rpm (12 steps)	140 ~ 2600 rpm   Low:0 ~ 385 rpm High:385 ~ 2000 rpm
Spindle taper	MT#3 or R8	MT#3
Spindle motor	1.5 HP	1 HP
Net weight	280 / 270 / 295 / 285 kgs	200 kgs
Spindle speed (optional)	75 ~ 300 rpm (24 steps)	-

## morgon DRILLING MACHINE TURRET TYPE



MTD-12



MTD-12B



MTD-16B

### SPECIFICATIONS

		MTD-12	MTD-12B	MTD-16B
Drilling / Tapping capacity	Mild steel	12 mm / M10	12 mm / M12	16 mm / M14
	Cast iron	14 mm / M12	14 mm / M14	18 mm / M16
Max. drilling depth	150 mm			
Spindle taper	Tr 20 or TM 22 with ER20			
Spindle motor	2 speed 0.75 / 0.4 kw		2 speed 1.5 / 0.7 kw	
Table size	535 x 400 mm		800 x 600 mm	1170 x 760 mm
Spindle nose to table surface top	275 ~ 645 mm		200 ~ 575 mm	200 ~ 575 mm
Table head stroke	370 mm			
Net weight	400 kgs		700 kgs	900 kgs

## morgon CNC DRILLING MACHINE TURRET TYPE



MTD-12A



MTD-16A



MTD-200A



MTD-200AR

### SPECIFICATIONS

		MTD-12A	MTD-16A	MTD-200A	MTD-200AR
Drilling / Tapping capacity	Mild steel	12 mm / M12	16 mm / M14	16 mm / M14	16 mm / M14
	Cast iron	14 mm / M14	18 mm / M16	18 mm / M16	18 mm / M16
Max. drilling depth	150 mm				
Cutting feedrate (mm / min)	10000				
Spindle taper	Tr 20 or TM 22 with ER20				
Spindle motor	2 speed 1.5 / 0.7 kw				
Table size	800 x 600 mm		1170 x 760 mm		
Spindle nose to table surface top	275 ~ 648 mm		200 ~ 575 mm		
Saddle seat travel	370 mm				
Net weight	800 kgs		900 kgs	1100 kgs	1500 kgs

## morgon MILL / DRILL BELT & GEAR DRIVE TYPE MACHINE



MD-450G



MD-500G

### SPECIFICATIONS

	MD-450G	MD-500G
Drilling / Face mill cap. (steel)	76 mm	76 mm
Tapping cap. - steel	20 mm	25 mm
Longitudinal travel	430 mm	530 mm
Cross travel	285 mm	350 mm
Spindle travel	120 mm	120 mm
Column diameter	75 mm	75 mm
Table size	730 x 210 mm	820 x 240 mm
T-slot	16 mm	16 mm
Spindle speed	60 ~ 1500 rpm (60 HZ)	60 ~ 3000 rpm (60 HZ)
Spindle taper	MT#3 or R8	MT#3 or R8
Spindle motor	1 HP	1.5 HP
Net weight (without stand)	400 kgs	650 kgs

## morgon MILL / DRILL GEAR HEAD TYPE MACHINES



MD-400G



MD-400GS



MD-400GCT

### SPECIFICATIONS

	MD-400G	MD-400GS	MD-400GCT
Drilling cap. - cast iron / steel	40 / 32 mm	40 / 32 mm	40 / 32 mm
Spindle stroke	120 mm	120 mm	120 mm
Column diameter	110 mm	115 mm	115 mm
Swing	550 mm	550 mm	550 mm
Table size	730 x 210 mm	410 x 450 mm	585 x 190 mm
Spindle nose to base	-	1100 mm	-
Spindle nose to table	480 mm	700 mm	580 mm
Spindle speed	60 ~ 1500 rpm (4P)	60 ~ 1500 rpm (4P)	60 ~ 1500 rpm (4P)
Spindle taper	MT#3 or R8	MT#3 or R8	MT#3 or R8
Spindle motor	1 HP	1 HP	1 HP
Net weight	310 kgs	290 kgs	325 kgs



## morgon DRILLING MACHINE-UPRIGHT TYPE



MD-650



MD-50/800



MD-530FS



MD-530

### SPECIFICATIONS

		MD-650	MD-50/800	MD-530FS	MD-530
Swing		650	530	530	530
Drilling / Tapping capacity	Mild steel	55 mm / M33	40 mm / M25	40 mm / M25	40 mm / M25
	Cast iron	60 mm / M40	50 mm / M32	50 mm / M32	50 mm / M32
Boring capacity mild steel / cast iron		120 / 140 mm	100 / 110 mm	80 / 100 mm	-
Spindle stroke auto / manual		200 / 230 mm	170 / 180 mm	170 / 180 mm	170 / 180 mm
Auto feed number and range		No.6 - 0.05 ~ 0.40 mm/min	No.3 - 0.08 / 0.16 / 0.26 mm/min		
Spindle taper		MT#5	MT#4	MT#4	MT#4
Spindle speed		60 HZ - 64 ~ 1250 rpm	60 HZ - 52 ~ 1710 rpm	60 HZ - 52 ~ 1710 rpm	60 HZ - 90 ~ 1515 rpm
Spindle motor		2.2 kw / 4P	1.5 kw / 4/8P	1.5 kw / 4/8P	1.5 kw / 4P
Table size / RD - SQ		570 mm - 650 x 570 mm	- / 800 x 500 mm	510 mm - 560 x 460 mm	
Spindle nose to table surface top		37 ~ 667 mm	260 ~ 640 mm	10 ~ 710 mm	
Table vertical travels		400 mm	380 mm	520 mm	
Base		540 x 1080 mm	870 x 900 mm	460 x 810 mm	
Net weight		900 kgs	800 kgs	650 kgs	550 kgs

## morgon CNC DRILLING MACHINE-UPRIGHT TYPE



MD-800A



MD-800S



MD-650/1000

### SPECIFICATIONS

		MD-800A	MD-800S	MD-650/1000
Drilling / Tapping capacity	Mild steel	25 mm / M20	25 mm / M20	55 mm / M33
	Cast iron	30 mm / M24	30 mm / M24	60 mm / M40
Boring capacity	Mild steel	80 mm	80 mm	120 mm
	Cast iron	100 mm	100 mm	140 mm
Drilling depth		180 mm	200 mm	230 mm
Cutting feedrate (mm/min)		10 ~ 3000 mm/min	10 ~ 3000 mm/min	10 ~ 4000 mm/min
Spindle taper		MT#4	MT#4	MT#5
Spindle motor		AC servo motor 2.0 kw	AC servo motor 3.0 kw	AC servo motor 4.4 kw
Table size		800 x 800 mm	800 x 800 mm	1000 x 1000 mm
Spindle nose to table surface top		270 ~ 640 mm	270 ~ 640 mm	430 ~ 805 mm
Net weight		1000 kgs	1000 kgs	1500 kgs

## FREJOTH HIGH EFFICIENCY FULLY AUTOMATIC BAND SAWS

Double column Type



FHBS-300HA



FHBS-4036HA



FHBS-5046HA

### SPECIFICATIONS

	FHBS-300HA	FHBS-4036HA	FHBS-5046HA
Cutting capacity	● 300 mm ■ 300 x 300 mm	● 360 mm ■ 360 x 400 mm	● 460 mm ■ 460 x 500 mm
Blade size	34 x 1.1 x 3920 mm	34 x 1.1 x 4570 mm	41 x 1.3 x 5450 mm
Blade speeds		30 ~ 85 M / min	
Blade motor	5 HP (3.75 Kw)	5 HP (3.75 Kw)	7.5 HP (5.7 Kw)
Hydraulic motor	1 HP (0.75 Kw)	1 HP (0.75 Kw)	2 HP (1.5 Kw)
Hydraulic tank	40 L	50 L	60 L
Coolant tank	80 L	80 L	100 L
Table height	755 mm	755 mm	850 mm
Bundle cutting	145 ~ 230 x 30 ~ 130 mm	180 ~ 280 x 50 ~ 160 mm	195 ~ 310 x 120 ~ 230 mm
Cut of length	Over 10 mm	Over 10 mm	Over 10 mm
Feed stroke	400 mm	400 mm	500 mm
Min. No. material detecting	32 mm	32 mm	32 mm
Min. residual work length	100 mm	100 mm	120 mm
Net weight	1560 kgs	1680 kgs	3090 kgs

## FREJOTH HIGH EFFICIENCY FULLY AUTOMATIC BAND SAWS

Double column type



FHBS-6056HA



FHBS-7062HA



FHBS-1080HA

### SPECIFICATIONS

	FHBS-6056HA	FHBS-7062HA	FHBS-1080HA
Cutting capacity	● 560 mm ■ 560 x 600 mm	● 620 mm ■ 620 x 700 mm	● 800 mm ■ 800 x 1000 mm
Blade size	54 x 1.6 x 6600 mm	54 x 1.6 x 7600 mm	67 x 1.6 x 8800 mm
Blade speeds	30 ~ 85 mpm	20 ~ 80 mpm	20 ~ 80 mpm
Blade motor	10 HP (7.5 Kw)	10 HP (7.5 Kw)	15 HP (11 Kw)
Hydraulic motor	3 HP (2.2 Kw)	3 HP (2.2 Kw)	3 HP (2.2 Kw)
Hydraulic tank	90 L	80 L	100 L
Coolant tank	120 L	140 L	140 L
Table height	810 mm	650 mm	680 mm
Bundle cutting (W x H)	230 ~ 400 x 120 ~ 270 mm	N / A	N / A
Cut of length	Over 10 mm	Over 12 mm	Over 12 mm
Feeding stroke	500 mm	500 mm	400 mm
Min. No. material detecting	110 mm	200 mm	300 mm
Min. residual work length	120 mm	80 mm	80 mm
Machine net weight	4500 kgs	7000 kgs	9500 kgs



FHBS-5542SA



FHBS-5046SA



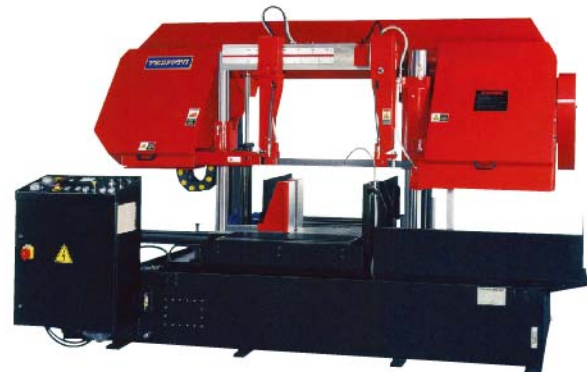
FHBS-6056SA

## SPECIFICATIONS

	FHBS-5542SA	FHBS-5046SA	FHBS-6056SA
Cutting capacity	● 420 mm ■ 420 x 550 mm	● 460 mm ■ 460 x 500 mm	● 560 mm ■ 560 x 600 mm
Blade size	41 x 1.3 x 5500 mm	41 x 1.3 x 5450 mm	54 x 1.6 x 6600 mm
Blade speeds	15 ~ 85 M / min	30 ~ 85 M / min	
Blade motor	7.5 HP	7.5 HP	10 HP
Hydraulic motor	2 HP	2 HP	2 HP
Hydraulic tank	70 Liters	60 Liters	80 Liters
Coolant tank	110 Liters	85 Liters	120 Liters
Table height	800 mm	820 mm	680 mm
Machine net weight	2450 kgs	2300 kgs	3710 kgs



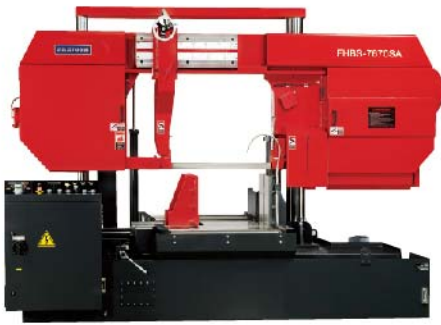
FHBS-7055SA



FHBS-7655SA

## SPECIFICATIONS

	FHBS-7055SA	FHBS-7655SA
Cutting capacity	● 550 mm ■ 550 x 700 mm	● 550 mm ■ 550 x 760 mm
Blade size	41 x 1.3 x 6280 mm	54 x 1.6 x 6800 mm
Blade speeds	15 ~ 85 M / min	
Blade motor	7.5 HP	10 HP
Hydraulic motor	2 HP	2 HP
Hydraulic tank	70 Liters	80 Liters
Coolant tank	110 Liters	120 Liters
Table height	800 mm	680 mm
Machine net weight	2750 kgs	3710 kgs



FHBS-7670SA



FHBS-1180SAT



FHBS-1100SA

## SPECIFICATIONS

	FHBS-7670SA	FHBS-800SA/800SAT	FHBS-1180SAT	FHBS-1100SA/1100SAT
Cutting capacity	● 700 mm ■ 700 x 760 mm	● 800 mm ■ 800 x 800 mm	● 800 mm ■ 800 x 1100 mm	● 1100 mm ■ 1100 x 1100 mm
Blade size	54 x 1.6 x 7200 mm	54 x 1.6 x 8300 mm	67 x 1.6 x 9400 mm	67 x 1.6 x 9800 mm
Blade speeds	20 ~ 80 M / min	20 ~ 85 M / min	20 ~ 85 M / min	20 ~ 85 M / min
Blade motor	10 HP (7.5 Kw)	10 HP (7.5 Kw)	10 HP (7.5 Kw)	15 HP (11.2 Kw)
Hydraulic motor	2 HP (1.75 Kw)	3 HP (2.2 Kw)	3 HP (2.2 Kw)	5 HP (3.7 Kw)
Hydraulic tank	70 L	90 L	90 L	90 L
Coolant tank	110 L	160 L	160 L	160 L
Table height	670 mm	620 mm	620 mm	620 mm
Vise minimum clamping	-	270 mm	530 mm	270 mm / 300 mm
Machine net weight	3850 kgs	5800 kgs / 7300 kgs	8100 kgs	7600 kgs / 10300 kgs



FHBS-1311SAT



FHBS-1300SAT



FHBS-1713SAT

## SPECIFICATIONS

	FHBS-1311SAT	FHBS-1300SAT	FHBS-1713SAT
Cutting capacity	● 1100 mm ■ 1100 x 1300 mm	● 1300 mm ■ 1100 x 1300 mm	● 1300 mm ■ 1300 x 1700 mm
Blade size	80 x 1.6 x 9800 mm	80 x 1.6 x 12300 mm	80 x 1.6 x 13000 mm
Blade speeds	20 ~ 85 M / min	15 ~ 75 M / min	30 ~ 85 M / min
Blade motor	15 HP (11.2 Kw)	20 HP (15 Kw)	20 HP (15 Kw)
Hydraulic motor	5 HP (3.7 Kw)	5 HP (3.7 Kw)	5 HP (3.7 Kw)
Hydraulic tank	90 L	100 L	100 L
Coolant tank	160 L	140 L	120 L
Table height	620 mm	680 mm	720 mm
Vise minimum clamping	520 mm	570 mm	620 mm
Machine net weight	11300 kgs	18410 kgs	19500 kgs

## FREJOTH MITER CUTTING BAND SAW FULLY AUTOMATIC



FHBS-WS1318FA



FHBS-WS1824FA

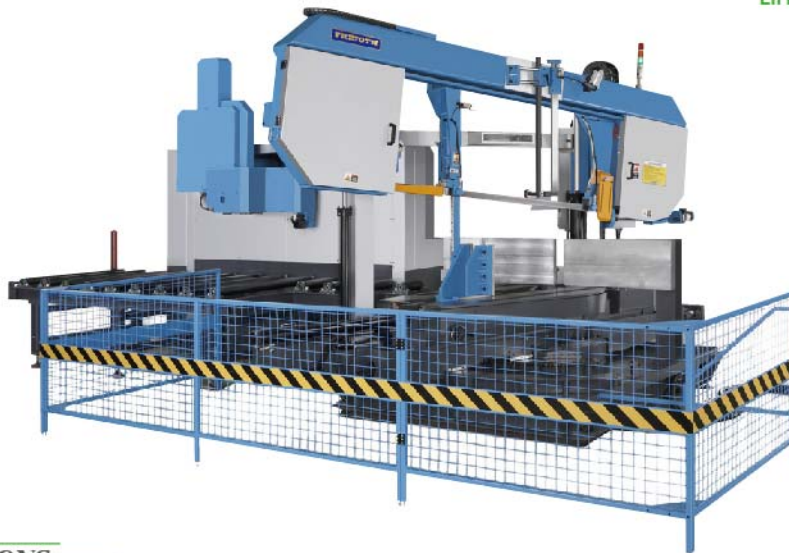
### SPECIFICATIONS

		FHBS-WS1318FA				FHBS-WS1824FA	
Cutting capacity	90°	● 330 mm	■ 330 x 410 mm	Cutting capacity	90°	● 460 mm	■ 380 x 600 mm
	R 45°	● 280 mm	■ 330 x 260 mm		R 45°	● 380 mm	■ 380 x 380 mm
Blade size	27 x 0.9 x 4130 mm			Blade size	41 x 1.3 x 5330 mm		
Blade speed (60 HZ)	25 ~ 85 MPM			Blade speed	20 ~ 85 MPM (inverter)		
Blade motor	5 HP			Blade motor	5 HP		
Hydraulic motor	1/2 HP			Hydraulic motor	1 HP		
Coolant motor	1/8 HP			Coolant motor	1/6 HP		
Table height	820 mm			Hydraulic tank	15 L		
Single stroke	700 mm			Coolant tank	55 L		
Bundle cutting (H x W)	300 x 410 mm			Single stroke	700 mm		
Minimum cutting length	8 mm			Packing size	2750 X 2270 X 1950 mm		
Packing size	2280 x 2190 x 1730 mm			Table height	925 mm		
N.W. / G.W.	1400 / 1668 kgs			N.W / G.W	2150 kgs / 2465 kgs		

FAE-No hydraulic vertical presses for bundle cutting.  
-with chip collecting drawer.

## FREJOTH DOUBLE MITER FULLY-AUTO BANDSAW

Linear guides and Servo Feeding



FHBS-WL650DFA

### SPECIFICATIONS

		FHBS-WL650DFA	
Cutting capacity	90°	● 650 mm	■ 650 x 1100 mm
	R 45°	● 650 mm	■ 650 x 650 mm
	L 45°	● 650 mm	■ 650 x 650 mm
	L 60°	● 650 mm	■ 650 x 400 mm
Blade size	54 x 1.6 x 8700 mm		
Blade speeds	30 ~ 110 MPM		
Blade motor	10 HP		
Hydraulic motor	3 HP		
Coolant motor	1/4 HP		
Packing size	4550 x 2270 x 2560 mm		
N.W.	5200 kgs		

## FREJOTH DOUBLE MITER CUTTING BAND SAW - Semi Automatic



FHBS-331 DSA/DAE



FHBS-460 DSAE



FHBS-460 DSA

### SPECIFICATIONS

	FHBS-331 DSA/DAE	FHBS-460 DSAE	FHBS-460 DSA
Cutting capacity	90° ● 331 mm ■ 320 x 485 mm ■ 260 x 510 mm	● 460 mm ■ 440 x 600 mm	● 460 mm ■ 440 x 600 mm
	R / L 45° ● 315 mm ■ 315 x 315 mm	● 445 mm ■ 445 x 445 mm	● 445 mm ■ 445 x 445 mm
	R / L 60° ● 215 mm ■ 195 x 315 mm	● 295 mm ■ 295 x 295 mm	● 295 mm ■ 295 x 295 mm
Blade Motor	3 HP ( 2.2 kw )	5 HP	5 HP ( 3.7 kw ) x 4P
Blade size	34 x 1.1 x 4180 mm	41 x 1.3 x 5330 mm	41 x 1.3 x 5330 mm
Blade speeds	50 HZ 26 ~ 80 MPM / 60 HZ 32 ~ 96 MPM	60 HZ 32 ~ 96 MPM	60 HZ 32 ~ 96 MPM
Hydraulic tank	12 L	15 L	15 Liters
Coolant tank	52 L	55 L	55 Liters
Packing size	2310 x 1060 x 1500 mm	2810 x 1130 x 1870 mm	2830 x 1140 x 1860 mm
N.W. / G.W.	850 / 1000 kg	1310 / 1470 kg	1320 / 1500 kgs

## FREJOTH DOUBLE MITER CUTTING BANDSAW / SEMI - AUTO



FHBS-460 DSAP



FHBS-WL460 DSAR/DSA

### SPECIFICATIONS

	FHBS-460 DSAP	FHBS-WL460 DSAR/DSA
Capacity	90° ● 460 mm ■ 440 x 600 mm	● 460 mm ■ 440 x 820 mm
	R / L 45° ● 445 mm ■ 445 x 445 mm	● 460 mm ■ 420 x 550 mm
	R60° ● 295 mm ■ 295 x 295 mm	● 350 mm ■ 460 x 280 mm
Blade motor	5 HP	5 HP
Hydraulic motor	1 HP	2 HP
Blade size	41 x 1.3 x 5330 mm	41 x 1.3 x 6185 mm
Blade speed	60 HZ 32 ~ 96 MPM (106 ~ 317 fpm)	30 ~ 85 MPM
Hydraulic tank	15 L	-
Coolant tank	55 L	-
Table height	890 mm	760 mm
Packing size	2940 x 1670 x 1830 mm	3610 x 1690 x 2150 mm
N.W. / G.W	1670 / 1830 kg	2100 kg

\* DSA - manual angle cut & manual vise movement.

## FREJOTH MITER CUTTING BAND SAWS



FHBS-WS20-manual



FHBS-WS20SA/SAV-semi-auto

### SPECIFICATIONS

		FHBS-WS20	FHBS-WS20SA/FHBS-WS20SAV
Capacity	90°	● 330 mm ■ 330 x 460 mm	● 330 mm ■ 330 x 460 mm
	R / L45°	● 305 mm ■ 330 x 270 mm	● 305 mm ■ 330 x 270 mm
	R 60°	● 215 mm ■ 315 x 195 mm	● 215 mm ■ 315 x 195 mm
Blade motor		3 HP (2.2 kw) x 4P	3 HP (2.2 kw) x 4P
Coolant motor		1/6 HP (0.12 kw)	1/6 HP (0.12 kw)
Blade size		34 x 1.1 x 4130 mm	34 x 1.1 x 4130 mm
Blade speeds (60 Hz)		21 ~ 93 mpm	21 ~ 93 mpm
coolant tank		55 Liters	55 Liters
Packing size		2270 x 900 x 1670 mm	2270 x 900 x 1670 mm
N.W. / G.W.		814 kgs / 920 kgs	834 / 940 kgs (SA) / 990 / 1090 kgs (SAV)

\* SA - manual locking vise ; SAV - hydraulic vise.

## FREJOTH MITER CUTTING BAND SAWS



FHBS-W1318S-manual



FHBS-W1318SSA/SSAV-semi-auto



FHBS-W1824SSA-semi-auto

### SPECIFICATIONS

		FHBS-W1318S	FHBS-W1318SSA/SSAV	FHBS-W1824SSA
Cutting capacity	90°	● 330 mm ■ 330 x 450 mm	● 330 mm ■ 330 x 450 mm	● 460 mm ■ 380 x 610 mm
	R 45°	● 280 mm ■ 330 x 280 mm	● 280 mm ■ 330 x 280 mm	● 380 mm ■ 380 mm
	R 60°	● 160 mm ■ 250 x 160 mm	● 160 mm ■ 250 x 160 mm	● 260 mm ■ 260 mm
Blade motor		3 HP (2.2 kw)	3 HP (2.2 kw)	5 HP (3.74 kw)
Coolant motor		1/8 HP (0.1 kw)	1/8 HP (0.1 kw)	1/6 HP (0.12 kw)
Blade size		27 x 0.9 x 4130 mm	27 x 0.9 x 4130 mm	41 x 1.3 x 5330 mm
Blade speeds (60 HZ)		28 / 41 / 60 / 78 MPM	SSA : 28 / 42 / 60 / 78 MPM, SSAV : 27 ~ 78 MPM	20 ~ 85 MPM
Coolant tank		30 Liters	30 Liters	55 Liters
Packing size		2110 x 940 x 1595 mm	2240 x 940 x 1595 mm	table height 800 mm
		1665 x 850 x 600 mm	1665 x 850 x 600 mm	2850 x 1150 x 2170 mm
N.W. / G.W.		850 / 970 kgs	890 / 1030 kgs	1420 / 1670 kgs



FHBS-WL500FA1



FHBS-WL500FA2

## SPECIFICATIONS

	FHBS-WL500FA1	FHBS-WL500FA2
Cutting capacity	● 500 mm ■ 500 x 500 mm ■ 500 x 600 mm	
Blade size	41 x 1.3 x 6060 mm	
Blade speeds	30 ~ 105 MPM	
Blade motor	7.5 HP	
Table height	830 mm	
Single stroke	700 mm	1200 mm
Packing size	3160 x 2300 x 2220 mm	
N.W. / G.W.	4200 / 4560 kg	3750 (Body) + 1200 (Roller) / 4045 (Body) + 1365 (Roller) kgs

# FREJOTH MITER CUTTING BAND SAW - Semi Automatic



FHBS-530DSA



FHBS-WL650DSA

## SPECIFICATIONS

	FHBS-530DSA	FHBS-WL650DSA	
Cutting capacity	90° ● 530 mm ■ 530 x 530 mm ■ 335 x 700 mm	Capacity	90° ● 650 mm ■ 650 x 1100 mm
	45° ● 490 mm ■ 435 x 435 mm ■ 300 x 500 mm		R 45° ● 650 mm ■ 650 x 650 mm
	60° ● 335 mm ■ 320 x 320 mm ■ 305 x 400 mm		L 45° ● 650 mm ■ 650 x 650 mm
	L 45° ● 480 mm ■ 435 x 435 mm ■ 300 x 480 mm		L 60° ● 650 mm ■ 650 x 400 mm
	L 60° ● 335 mm ■ 320 x 320 mm ■ 305 x 400 mm		
Blade size	41 x 1.3 x 6030 mm		
Blade speed	20 ~ 85 mpm ( By Motor Inverter )		
Blade motor	7.5 HP AC		
Hydraulic motor	1 HP		
Coolant motor	1/6 HP x 150 L		
Bundle cutting (H x W)	90 ~ 300 x 200 ~ 420 mm		
Packing size	3302 x 1135 x 2034 mm		
N.W. / G.W.	1880 / 2040 kgs	5200 kgs	



## FREJOTH COLUMN TYPE BAND SAWS - Semi Automatic



FHBS-H360A



FHBS-H510A

### SPECIFICATIONS

\* Rack & Hydraulic vise

FHBS-H360A		FHBS-H510A	
Cutting capacity 90°	● 360 mm ■ 360 x 360 mm ■ 360 x 560 mm	Capacity 90°	● 510 mm ■ 510 mm ■ 510 x 720 mm
Blade motor	5 HP (3.7 kw)	Blade size	41 x 1.3 x 5840 mm
Pump motor	1 HP (0.75 kw)	Blade speed	20 ~ 100 MPM by Motor inverter
Blade size	34 x 1.1 x 4880 mm	Blade motor	7.5 HP AC motor
Blade speed 60HZ	20 ~ 85 MPM	Hydraulic motor	1 HP
Table height	742 mm	Coolant motor	1/6 HP
Hydraulic tank	20 Liter	Packing size	2725 x 1110 x 2160 mm (L x W x H)
Coolant tank	90 Liter	Table height	740 mm
Packing size	2500 x 680 x 1715 mm	N.W / G.W.	1660 kgs / 1867 kgs
N.W. / G.W.	1030 kgs / 1140 kgs		

## FREJOTH HIGH EFFICIENCY FULLY AUTOMATIC BAND SAWS

Pivot Type



FHBS-250AE



FHBS-330AE

### SPECIFICATIONS

FHBS-250AE		FHBS-330AE	
Cutting capacity	● 250 mm ■ 250 x 300 mm	● 330 mm ■ 330 x 330 mm	
Blade size	27 x 0.9 x 3505 mm	34 x 1.1 x 4100 mm	
Blade speeds	30 ~ 85 M / min		
Blade motor	3 HP (2.25 Kw)	5 HP (3.75 Kw)	
Hydraulic motor	1 HP (0.75 Kw)	1 HP (0.75 Kw)	
Hydraulic tank	30 L	40 L	
Coolant tank	40 L	60 L	
Table height	750 mm	760 mm	
Bundle cutting (W x H)	150 ~ 250 x 100 ~ 130 mm	150 ~ 250 x 120 ~ 200 mm	
Cut of length	Over 10 mm	Over 10 mm	
Feed stroke	400 mm	400 mm	
Min. No. material detecting	32 mm	32 mm	
Min. residual work length	110 mm	110 mm	
Net weight	1430 kgs	1540 kgs	

## FREJOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-V310R-manual



FHBS-V310AR-semi-auto

### SPECIFICATIONS

		FHBS-V310R	FHBS-V310AR
Capacity (H x W)	90°	● 250 mm ■ 240 x 240 mm ■ 210 x 310 mm	● 250 mm ■ 240 x 240 mm ■ 210 x 310 mm
	45°	● 200 mm ■ 180 x 180 mm ■ 140 x 200 mm	● 200 mm ■ 180 x 180 mm ■ 140 x 200 mm
	60°	● 120 mm ■ 120 x 120 mm	● 120 mm ■ 120 x 120 mm
	L45°	● 160 mm ■ 150 x 150 mm ■ 75 x 210 mm	● 160 mm ■ 150 x 150 mm ■ 75 x 210 mm
Blade size	27 x 0.9 x 2725 mm		27 x 0.9 x 2725 mm
Blade motor	1.5 HP		1.5 HP
Blade speeds	20 ~ 85 mpm		20 ~ 85 mpm
Hydraulic motor	-		1/2 HP
Coolant motor	32W		32W
Packing size	1676 x 749 x 1054 mm		1702 x 749 x 1575 mm
N.W. / G.W.	330 kg / 370 kg		430 kg / 490 kg

## FREJOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-V350DS-manual



FHBS-V350DSA-semi-auto



FHBS-V350AR-semi-auto

### SPECIFICATIONS

		FHBS-V350DS	FHBS-V350DSA	FHBS-V350AR
Capacity (H x W)	90°	● 270 mm ■ 260 x 260 mm ■ 220 x 350 mm	● 270 mm ■ 260 x 260 mm ■ 220 x 350 mm	● 270 mm ■ 260 x 260 mm ■ 220 x 350 mm
	45°	● 240 mm ■ 220 x 220 mm ■ 160 x 240 mm	● 240 mm ■ 220 x 220 mm ■ 160 x 240 mm	● 240 mm ■ 220 x 220 mm ■ 160 x 240 mm
	60°	● 160 mm ■ 150 x 150 mm	● 160 mm ■ 150 x 150 mm	● 160 mm ■ 150 x 150 mm
	L45°	● 210 mm ■ 180 x 180 mm ■ 180 x 180 mm	● 210 mm ■ 180 x 180 mm ■ 180 x 180 mm	● 210 mm ■ 180 x 180 mm
Blade size	27 x 0.9 x 3160 mm		27 x 0.9 x 3160 mm	27 x 0.9 x 3160 mm
Blade speed	20 ~ 85 mpm		20 ~ 85 mpm (Variable speeds)	20 ~ 85 mpm
Blade motor	1.5kw (2 HP)		1.5kw (2 HP) AC motor	1.5kw (2 HP)
Hydraulic motor	-		1/2 HP	-
Coolant motor	50W		50W	32W
Packing size	1841 x 749 x 1092 mm		1880 x 749 x 1715 mm	1830 x 780 x 1662 mm
N.W. / G.W.	360 kg / 410 kg		460 kg / 530 kg	415 kg / 465 kg

## FREJOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-V210SH



FHBS-V260SH

### SPECIFICATIONS

	FHBS-V210SH			FHBS-V260SH		
Capacity (H x W)	90°	● 170 mm ■ 170 x 170 mm ■■ 95 x 210 mm	● 227 mm ■ 220 x 220 mm ■■ 110 x 260 mm			
	45°	● 120 mm ■ 110 x 110 mm	● 150 mm ■ 145 x 145 mm ■■ 125 x 200 mm			
	60°	● 70 mm ■ 60 x 60 mm	● 90 mm ■ 85 x 85 mm			
Blade size	20 x 0.9 x 2110 mm			27 x 0.9 x 2460 mm		
Blade speed	20 ~ 85 mpm (Variable speeds)			20 ~ 85 mpm (Variable speeds)		
Blade motor	0.75 kw (1 HP) AC Motor			1.1kw (1.5 HP) AC Motor		
Coolant motor	32W			32W		
Packing size	1160 x 570 x 830 mm			1549 x 737 x 921 mm		
N.W. / G.W.	150 kg / 170 kg			216 kg / 250 kg		

## FREJOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-V275DSA-semi-auto



FHBS-V310DS-manual



FHBS-V310DSA-semi-auto

### SPECIFICATIONS

	FHBS-V275DS/V275DSA			FHBS-V310DS			FHBS-V310DSA		
Capacity (H x W)	90°	● 227 mm ■ 220 x 220 mm ■■ 110 x 260 mm	● 250 mm ■ 240 x 240 mm ■■ 210 x 310 mm	● 250 mm ■ 240 x 240 mm ■■ 210 x 310 mm					
	45°	● 150 mm ■ 145 x 145 mm ■■ 125 x 200 mm	● 200 mm ■ 180 x 180 mm ■■ 140 x 200 mm	● 200 mm ■ 180 x 180 mm ■■ 140 x 200 mm					
	60°	● 90 mm ■ 85 x 85 mm	● 120 mm ■ 120 x 120 mm	● 120 mm ■ 120 x 120 mm					
	L45°	● 110 mm ■ 110 x 110 mm ■■ 110 x 160 mm	● 150 mm ■ 150 x 150 mm ■■ 90 x 170 mm	● 150 mm ■ 150 x 150 mm ■■ 90 x 170 mm					
Blade size	27 x 0.9 x 2460 mm			27 x 0.9 x 2725 mm			27 x 0.9 x 2725 mm		
Blade speed	20 ~ 85 mpm (Variable speeds)			20 ~ 85 mpm			20 ~ 85 mpm		
Blade motor	1.1kw (1.5 HP) AC motor			1.1kw (1.5 HP)			1.1kw (1.5 HP)		
Hydraulic motor	1/2 HP			-			-		
Coolant motor	32W			50W			50W		
Packing size	1549 x 737 x 1045 mm			1676 x 749 x 1045 mm			1702 x 749 x 1575 mm		
N.W. / G.W.	315 kg / 360 kg			310 kg / 360 kg			410 kg / 480 kg		

## FREJOOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-E310AR



FHBS-E310DSA

### SPECIFICATIONS

		FHBS-E310AR	FHBS-E310DSA
Capacity (H x W) (Dual Miter Cutting)	90°	● 250 mm ■ 240 x 240 mm ■ 210 x 310 mm	● 250 mm ■ 240 x 240 mm ■ 210 x 310 mm
	45°	● 200 mm ■ 180 x 180 mm ■ 140 x 200 mm	● 200 mm ■ 180 x 180 mm ■ 140 x 200 mm
	60°	● 120 mm ■ 120 x 120 mm	● 120 mm ■ 95 x 95 mm ■ 95 x 120 mm
	L45°	● 160 mm ■ 150 x 150 mm ■ 75 x 210 mm	● 150 mm ■ 150 x 150 mm ■ 90 x 170 mm
Blade motor	1.5 HP 50 HZ		1.5 HP (1.1 kw) 4 POLE 1430 RPM
Blade size	27 x 0.9 x 2725 mm		27 x 0.9 x 2725 mm
Hydraulic motor	36 / 72 mpm		50 HZ 4P 72 m/min ; 8P 36 m/min
Blade speeds (2 speeds)	1/2 HP		1/2 HP
Coolant motor	32W		50W
Packing size	1702 x 749 x 1575 mm		1702 x 749 x 1575 mm
N.W. / G.W.	430 kg / 490 kg		410 kg / 480 kg

## FREJOOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-E350DSA



FHBS-E350AR

### SPECIFICATIONS

		FHBS-E350DSA	FHBS-E350AR
Capacity (H x W) (Dual Miter Cutting)	90°	● 270 mm ■ 260 x 260 mm ■ 220 x 350 mm	● 270 mm ■ 260 x 260 mm ■ 220 x 350 mm
	45°	● 240 mm ■ 220 x 220 mm ■ 160 x 240 mm	● 240 mm ■ 220 x 220 mm ■ 160 x 240 mm
	60°	● 160 mm ■ 150 x 150 mm	● 160 mm ■ 150 x 150 mm
	L45°	● 210 mm ■ 180 x 180 mm	● 210 mm ■ 180 x 180 mm
Blade motor	2 HP (1.5 kw) 4 POLE 1430 RPM		2 HP (1.5 kw)
Blade size	27 x 0.9 x 3160 mm		27 x 0.9 x 3160 mm
Blade speeds (2 speeds)	50 HZ 4P 72 m/min ; 8P 36 m/min		50 HZ 4P 72 m/min ; 8P 36 m/min
Hydraulic motor	1/2 HP		1/2 HP
Coolant motor	50W		32W
Packing size	1880 x 749 x 1715 mm		2310 x 1200 x 1960 mm
N.W. / G.W.	460 kg / 530 kg		420 kg / 477 kg

## FREJOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-E310DS-manual



FHBS-E310R-manual

### SPECIFICATIONS

		FHBS-E310DS			FHBS-E310R		
Capacity (H x W) (Dual Miter Cutting)	90°	● 250 mm	■ 240 x 240 mm	■ 210 x 310 mm	● 250 mm	■ 240 x 240 mm	■ 210 x 310 mm
	45°	● 200 mm	■ 180 x 180 mm	■ 140 x 200 mm	● 200 mm	■ 180 x 180 mm	■ 140 x 200 mm
	60°	● 120 mm	■ 95 x 95 mm	■ 95 x 120 mm	● 120 mm	■ 120 x 120 mm	
	L45°	● 150 mm	■ 150 x 150 mm	■ 90 x 170 mm	● 160 mm	■ 150 x 150 mm	■ 75 x 210 mm
Blade motor	1.5 HP (1.1 kw) 4 POLE 1430 RPM			1.5 HP 50 HZ			
Blade size	27 x 0.9 x 2725 mm			27 x 0.9 x 2725 mm			
Blade speeds (2 speeds)	50 HZ 4P 72 m/min ; 8P 36 m/min			36 / 72 mpm			
Coolant motor	50W			32W			
Packing size	1676 x 749 x 1054 kg			1676 x 749 x 1054 mm			
N.W. / G.W.	310 kg / 360 kg			330 kg / 370 kg			

## FREJOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-E350DS-manual



FHBS-E270DSA-semi-auto

### SPECIFICATIONS

		FHBS-E350DS			FHBS-E270DSA		
Capacity (H x W) (Dual Miter Cutting)	90°	● 270 mm	■ 260 x 260 mm	■ 220 x 350 mm	● 227 mm	■ 220 x 220 mm	■ 110 x 260 mm
	45°	● 240 mm	■ 220 x 220 mm	■ 160 x 240 mm	● 150 mm	■ 145 x 145 mm	■ 125 x 200 mm
	60°	● 160 mm	■ 150 x 150 mm		● 90 mm	■ 85 x 85 mm	
	L45°	● 210 mm	■ 180 x 180 mm		● 110 mm	■ 110 x 110 mm	■ 110 x 160 mm
Blade motor	2 HP (1.5 kw) 4 POLE 1430 RPM			1.5 HP (1.1 kw) 4 POLE 1430 RPM			
Blade size	27 x 0.9 x 3160 mm			27 x 0.9 x 2460 mm			
Blade speeds (2 speeds)	50 HZ 4P 72 m/min ; 8P 36 m/min			50 HZ 4P 72 m/min ; 8P 36 m/min			
Coolant motor	50W			50W			
Packing size	1841 x 749 x 1092 mm			1575 x 737 x 1575 mm			
N.W. / G.W.	360 kg / 410 kg			380 kg / 450 kg			

## FREJOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-E210S/SH



FHBS-E260S/SH

### SPECIFICATIONS

		FHBS-E210S/SH			FHBS-E260S/SH		
Capacity (H x W)	90°	● 170 mm	■ 170 x 170 mm	■ 95 x 210 mm	● 227 mm	■ 220 x 220 mm	■ 110 x 260 mm
	45°	● 120 mm	■ 110 x 110 mm		● 150 mm	■ 145 x 145 mm	■ 125 x 200 mm
	60°	● 70 mm	■ 60 x 60 mm		● 90 mm	■ 85 x 85 mm	
Motor		1 HP (0.75 kw) 4 POLE 1430 RPM			1.5 HP (1.1 kw) 4 POLE 1430 RPM		
Blade size		20 x 0.9 x 2110 mm			27 x 0.9 x 2460 mm		
Blade speeds (2 Speeds)		50 HZ 4P 90 m/min ; 8P 45 m/min			50 HZ 4P 72 m/min ; 8P 36 m/min		
Coolant motor		32W			32W		
Packing size		1156 x 572 x 826 mm			1549 x 737 x 921 mm		
N.W. / G.W.		156 kg / 170 kg			216 kg / 250 kg		

## FREJOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-E270DS



FHBS-E275DS

### SPECIFICATIONS

		FHBS-E270DS			FHBS-E275DS		
Capacity (H x W) (Dual Miter Cutting)	90°	● 227 mm	■ 220 x 220 mm	■ 110 x 260 mm	● 227 mm	■ 220 x 220 mm	■ 110 x 260 mm
	45°	● 150 mm	■ 145 x 145 mm	■ 125 x 200 mm	● 150 mm	■ 145 x 145 mm	■ 125 x 200 mm
	60°	● 90 mm	■ 85 x 85 mm		● 90 mm	■ 85 x 85 mm	
	L45°	● 110 mm	■ 110 x 110 mm	■ 110 x 160 mm	● 110 mm	■ 110 x 110 mm	■ 110 x 160 mm
Motor		1.5 HP (1.1 kw) 4 POLE 1430 RPM			1.5 HP (1.1 kw)		
Blade size		27 x 0.9 x 2460 mm			27 x 0.9 x 2460 mm		
Blade speeds (2 speeds)		50 HZ 4P 72 m/min ; 8P 36 m/min			50 HZ 4P 72 mpm ; 8P 36 mpm		
Coolant motor		32W			32W		
Table height					890 mm		
Packing size		1549 x 737 x 1054 mm			1549 x 737 x 1054 mm		
N.W. / G.W.		280 kg / 330 kg			315 kg / 360 kg		

## SPEEDER PIVOT TYPE BANDSAW



SBS-SS4033NC

### SPECIFICATIONS

		SBS-SS3028NC	SBS-SS3028A	SBS-SS4033NC	SBS-SS4033A
Cutting capacity	●	10 ~ 280 mm		10 ~ 330 mm	
	■	W10 x H10 ~ W300 x H280 mm		W10 x H10 ~ W400 x H330 mm	
Bundle cutting	Max.	W250 x H100 mm		W370 x H170 mm	
	Min.	W165 x H15 mm		W165 x H50 mm	
	Size	3820 x 34 x 1.1 mm		4242 x 34 x 1.1 mm	
Saw blade	Speed			16 ~ 85 m/min	
	Tension			Hydraulic	
	Saw blade			3.7 KW	
Motors output	Hydraulic pump			0.75 KW	
	Coolant pump			0.2 KW	
	Hydraulic			60 L	
Tanks	Coolant	80 L		90 L	
	Feeding length (single / multiple)			400 / 3600 mm	
Working height			700 mm		
Dimension (W x L x H)	2130 x 1990 x 1260 mm				2300 x 2060 x 1330 mm
Net weight	1720 kgs				1920 kgs

## FREJOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-K350DSA



FHBS-K500DSA/DSA1

### SPECIFICATIONS

		FHBS-K350DSA	FHBS-K500DSA/DSA1
Cutting (H x W) (Dual Miter Cutting)	90°	● 270 mm ■ 260 x 260 mm ■ 220 x 350 mm	90° ● 350 mm ■ 330 x 330 mm ■ 180 x 500 mm
	R45°	● 240 mm ■ 220 x 220 mm	45° ● 300 mm ■ 300 x 300 mm ■ 200 x 330 mm
	R60°	● 160 mm ■ 150 x 150 mm	60° ● 180 mm ■ 100 x 100 mm ■ 100 x 190 mm
	L45°	● 210 mm ■ 180 x 180 mm	L45° ● 280 mm ■ 200 x 200 mm ■ 160 x 280 mm
	Capacity (H x W)		
Blade size	27 x 0.9 x 3160 mm		34 x 1.1 x 3880 mm
Blade speed	50 HZ 4P 68 mpm ; 8P 34 mpm		20 ~ 85 mpm
Blade motor	2 HP (1.5 kw)		3 HP
Hydraulic motor	1/2 HP		1 HP
Coolant motor	50W		50W
Table height	885 mm		885 mm
Packing size	1950 x 750 x 1660 mm		2180 x 910 x 1780 mm
N.W. / G.W.	450 kg / 506 kg		677 kg / 757 kg

## FREJOOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-K210SH



FHBS-K275SH

### SPECIFICATIONS

		FHBS-K210SH(AC) / FHBS-DK210SH(DC)			FHBS-K275SH(AC) / FHBS-DK275SH(DC)		
Capacity (H x W)	90°	● 170 mm	■ 170 x 170 mm	■ 95 x 210 mm	● 225 mm	■ 195 mm	■ 120 x 245 mm
	45°	● 120 mm	■ 110 x 110 mm		● 150 mm	■ 150 mm	■ 135 x 200 mm
	60°	● 70 mm	■ 60 x 60 mm		● 90 mm	■ 85 mm	
Blade size		20 x 0.9 x 2110 mm			27 x 0.9 x 2460 mm		
Blade speed	DC	20 ~ 85 mpm Variable speed			20 ~ 85 mpm Variable speed		
	AC	50 HZ 4P/90 8P/45 mpm			50 HZ 4P/72 8P/36 mpm		
Blade motor	DC	1.5 HP (110V 220V)			2 HP (110V 220V)		
	AC	1 HP			1.5 HP		
Coolant motor		32 W			32 W		
Packing size		1160 x 570 x 830 mm			1505 x 685 x 930 mm		
N.W. / G.W.		150 kg / 170 kg			195 kg / 222 kg		

## FREJOOTH HORIZONTAL BAND SAW - EURO TYPE



FHBS-K285DS/DSA



FHBS-K310AR



FHBS-K310DS/DSA

### SPECIFICATIONS

		FHBS-K285DS/DSA			FHBS-K310AR			FHBS-K310DS/DSA		
Capacity (H x W)	90°	● 250 mm	■ 240 x 240 mm	■ 200 x 285 mm	● 250 mm	■ 240 x 240 mm	■ 210 x 310 mm	● 250 mm	■ 240 x 240 mm	■ 210 x 310 mm
	45°	● 200 mm	■ 180 x 180 mm	■ 140 x 180 mm	● 200 mm	■ 180 x 180 mm	■ 140 x 200 mm	● 200 mm	■ 180 x 180 mm	■ 140 x 200 mm
	60°	● 120 mm	■ 95 x 95 mm	■ 95 x 110 mm	● 120 mm	■ 120 x 120 mm		● 120 mm	■ 120 x 120 mm	
	L45°	● 150 mm	■ 140 x 140 mm	■ 90 x 150 mm	● 160 mm	■ 150 x 150 mm	■ 210 x 75 mm	● 150 mm	■ 150 x 150 mm	■ 90 x 170 mm
Blade size		27 x 0.9 x 2685 mm			27 x 0.9 x 2725 mm			27 x 0.9 x 2725 mm		
Blade speed		50 HZ 4P 72 mpm ; 8P 36 mpm			4P / 72 mpm 8P / 36 mpm			4P / 72 mpm 8P / 36 mpm		
Blade motor		1.5 HP (1.1kw)			1.5 HP 50 HZ			1.5 HP (1.1kw)		
Hydraulic motor		-			1/2 HP			-		
Coolant motor		32W			32W			32W		
Packing size		1676 x 749 x 1054 mm			1702 x 749 x 1575 mm			1676 x 749 x 1054 mm		
N.W. / G.W.		310 kg / 360 kg			430 kg / 490 kg			310 kg / 360 kg		



## FREJOTH METAL CUTTING BANDSAW



FHBS-1318DSV



FHBS-1318DS

### SPECIFICATIONS

		FHBS-1318DSV	FHBS-1318DS
Cutting capacity	90°	● 330 mm ■ 330 x 450 mm	● 330 mm ■ 330 x 450 mm
	45°	● 280 mm ■ 330 x 280 mm	● 275 mm ■ 330 x 280 mm
	60°	● 220 mm ■ 220 x 175 mm	● 220 mm ■ 220 x 175 mm
Type	semi-auto, swivel head, variable speed, hydraulic vise, swiveling control box		semi-auto, swivel head, variable speed
Motor	2 HP		2 HP
Blade size	27 x 0.9 x 3810 mm		27 x 0.9 x 3810 mm
Blade speeds	25 ~ 85 MPM		25 ~ 85 MPM
Container loads	5 SETS / 20' 11 SETS / 40'		5 SETS / 20' 11 SETS / 40'
Packing size	2040 x 1100 x 1500 mm		2040 x 1100 x 1500 mm
N.W. / G.W.	594 / 650 kgs		594 / 650 kgs

## FREJOTH METAL CUTTING BANDSAW



FHBS-350SA



FHBS-350SSA

### SPECIFICATIONS

		FHBS-350SA	FHBS-350SSA
Cutting capacity	90°	● 350 mm ■ 350 x 750 mm ■ 250 x 800 mm	● 350 mm ■ 350 x 750 mm ■ 250 x 800 mm
	45°	● 300 mm ■ 330 x 300 mm	● 350 mm ■ 350 x 430 mm
Type	semi-auto, variable speed		semi-auto, variable speed, swiveling vise
Motor	5 HP		5 HP
Blade size	41 x 1.3 x 4710 mm		41 x 1.3 x 4710 mm
Blade speeds	27 ~ 79 MPM		27 ~ 79 MPM
Packing size	2600 x 960 x 1670 mm		2600 x 960 x 1670 mm
N.W. / G.W.	840 / 953 kgs		860 / 973 kgs

## FREJOTH 10" METAL CUTTING BAND SAW - SEMI - AUTO



FHBS-250SSA



FHBS-250SSAV

### SPECIFICATIONS

		FHBS-250SSA	FHBS-250SSAV
Cutting capacity	90°	● 250 mm ■ 250 x 385 mm ■ 230 x 400 mm	● 250 mm ■ 250 x 385 mm ■ 230 x 400 mm
	45°	● 215 mm ■ 250 x 215 mm	● 215 mm ■ 250 x 215 mm
Type		swivel head, variable speed	swivel head, variable speed, hydraulic vise, swiveling control box
Motor		2 HP	2 HP
Blade size		27 x 0.9 x 3300 mm	27 x 0.9 x 3300 mm
Blade speeds		25 ~ 75 MPM (82 ~ 259 FPM)	25 ~ 75 MPM (82 ~ 259 FPM)
Container loads		14 sets / 20'	14 sets / 20'
Packing size		1905 x 775 x 1117 mm	1905 x 775 x 1117 mm
N.W. / G.W.		485 / 550 kgs	500 / 565 kgs

## FREJOTH 13" METAL CUTTING BAND SAWS



FHBS-330A



FHBS-330SA



FHBS-330SSAV

### SPECIFICATIONS

		FHBS-330A/330V	FHBS-330SA	FHBS-330SSAV
Cutting capacity	90°	● 330 mm ■ 330 x 480 mm ■ 225 x 530 mm	● 330 mm ■ 330 x 480 mm ■ 225 x 530 mm	● 330 mm ■ 330 x 480 mm ■ 225 x 530 mm
	45°	● 255 mm ■ 280 x 255 mm	● 255 mm ■ 280 x 255 mm	● 275 mm ■ 300 x 275 mm
Type		manual, 4 speed (330A) variable speed (330V)	semi-auto, variable speed manual vise	semi-auto, variable speed hydraulic vise, swiveling control box
Motor		3 HP	3 HP	3 HP
Blade size		34 x 1.1 x 4100 mm	34 x 1.1 x 4100 mm	34 x 1.1 x 4100 mm
Blade speeds		A : 28 / 40 / 56 / 78 MPM, V : 24 ~ 79 MPM	20 ~ 80 MPM (66 ~ 264 fpm)	20 ~ 80 MPM (66 ~ 264 FPM)
Container loads		7 sets / 20' 14 sets / 40'	7 sets / 20' 15 sets / 40'	6 sets / 20' 13 sets / 40'
Packing size		2223 x 775 x 1512 mm	2284 x 889 x 1499 mm	2286 x 935 x 1499 mm
N.W. / G.W.		600 / 690 kgs	600 kgs / 690 kgs	750 kgs / 860 kgs

## FREJOTH 9" METAL CUTTING BAND SAWS



FHBS-918SSA



FHBS-918HA



FHBS-918HAV

### SPECIFICATIONS

	FHBS-918SSA	FHBS-918HA	FHBS-918HAV
Cutting capacity	90° ● 225 mm ■ 225 x 430mm ■ 150 x 450 mm	● 225 mm ■ 225 x 430mm ■ 150 x 450 mm	● 225 mm ■ 225 x 430 mm ■ 150 x 450 mm
	45° ● 225 mm ■ 225 x 295 mm	● 225 mm ■ 225 x 295 mm	● 225 mm ■ 225 x 295 mm
Type	semi-auto, swivel head, variable speed	semi-auto, variable speed, manual vise	semi-auto, hydraulic vise, variable speed
Motor	2 HP	2 HP	2 HP
Blade size	27 x 0.9 x 3345 mm	27 x 0.9 x 3345 mm	27 x 0.9 x 3345 mm
Blade speeds	25 ~ 75 MPM (82 ~ 259 FPM)	25 ~ 75 MPM (82 ~ 259 FPM)	25 ~ 75 MPM (82 ~ 259 FPM)
Container loads	18 sets / 20' 38 sets / 40'	18 sets / 20' 38 sets / 40'	18 sets / 20'
Packing size	1930 x 750 x 1080 mm	1930 x 750 x 1080 mm	1930 x 750 x 1080 mm
N.W. / G.W.	480 / 550 kgs	480 / 550 kgs	480 / 550 kgs

## FREJOTH 10" METAL CUTTING BAND SAWS



FHBS-250V



FHBS-250S



FHBS-250A

### SPECIFICATIONS

	FHBS-250V	FHBS-250S	FHBS-250A
Cutting capacity	90° ● 250 mm ■ 250 x 415 mm ■ 200 x 450 mm	● 250 mm ■ 250 x 385 mm ■ 230 x 400 mm	● 250 mm ■ 250 x 415 mm ■ 200 x 450 mm
	45° ● 190 mm ■ 250 x 190 mm	● 215 mm ■ 250 x 215 mm	● 190 mm ■ 250 x 190 mm
Type	manual, variable speed	manual, swivel head, variable speed	manual, 4 speed
Motor	2 HP	2 HP	2 HP
Blade size	27 x 0.9 x 3300 mm	27 x 0.9 x 3300 mm	27 x 0.9 x 3300 mm
Blade speeds	25 ~ 75 MPM (82 ~ 259 FPM)	25 ~ 75 MPM (82 ~ 259 FPM)	step pulley 25 / 40 / 51 / 71 MPM
Container loads	14 sets / 20'	14 sets / 20'	26 sets / 20' 54 sets / 40'
Packing size	1880 x 750 x 1117 mm	1880 x 750 x 1117 mm	1745 x 567 x 1080 mm
N.W. / G.W.	320 / 360 kgs	425 / 490 kgs	320 / 360 kgs

## FREJOTH 8" METAL CUTTING BAND SAWS - MANUAL



FHBS-812



Magnetic switch

FHBS-812B1

### SPECIFICATIONS

		FHBS-812/812A/G	FHBS-812B/812B1
Cutting capacity	90°	● 200 mm ■ 200 x 240 mm ■ 90 x 305 mm	● 200 mm ■ 200 x 240 mm ■ 55 x 300 mm
	45°	● 105 mm ■ 100 x 140 mm	● 105 mm ■ 55 x 300 mm
Type		toggle switch (812), magnetic switch (812A) gear transmission (812G)	magnetic switch (812B) toggle switch (812 B1)
Motor		1 HP 4P 1720 rpm	1 HP 4P 1720 rpm
Blade size		19 x 0.9 x 2360 mm	19 x 0.9 x 2360 mm
Blade speeds		step pulley 22 / 33 / 45 / 65 MPM	22 / 33 / 45 / 65MPM
Container loads		36 sets / 20'	42 sets / 20' 88 sets / 40'
Packing size		1295 x 483 x 1100 mm	1280 x 480 x 1070 mm
N.W. / G.W.		149 / 169 kgs	143 kgs / 163 kgs

## FREJOTH 9" METAL CUTTING BAND SAW - MANUAL



FHBS-916A



FHBS-916V



FHBS-918S

### SPECIFICATIONS

		FHBS-916A	FHBS-916V	FHBS-918S
Cutting capacity	90°	● 225 mm ■ 225 x 345 mm ■ 35 x 400 mm	● 225 mm ■ 225 x 345 mm ■ 35 x 400 mm	● 225 mm ■ 225 x 430mm ■ 150 x 450 mm
	45°	● 165 mm ■ 225 x 165 mm	● 165 mm ■ 225 x 165 mm	● 225 mm ■ 225 x 295 mm
Type		manual, 4 speed	manual, variable speed	manual, swivel head and variable speed
Motor		1.5 HP	1.5 HP	2 HP
Blade size		27 x 0.9 x 3035 mm	27 x 0.9 x 3035 mm	27 x 0.9 x 3345 mm
Blade speeds		25 / 40 / 51 / 71 MPM(82 / 132 / 170 / 235 FPM)	25 ~ 75 MPM (82 ~ 259 FPM)	25 ~ 75 MPM (82 ~ 259 FPM)
Container loads		26 sets / 20' 54 sets / 40'	18 sets / 20' 38 sets / 40'	18 sets / 20' 38 sets / 40'
Packing size		1727 x 749 x 1092 mm	1803 x 749 x 1092 mm	1930 x 750 x 1080 mm
N.W. / G.W.		285 / 320 kgs	285 kgs / 320 kgs	420 / 485 kgs

## FREJOTH 7" METAL CUTTING BAND SAWS - MANUAL



FHBS-712/712A



FHBS-712G



FHBS-712SG

### SPECIFICATIONS

		FHBS-712/712A	FHBS-712G	FHBS-712SG
Cutting capacity	90°	● 180 mm ■ 180 x 280 mm ■ 65 x 300 mm	● 180 mm ■ 180 x 280 mm ■ 65 x 300 mm	● 180 mm ■ 180 x 260 mm ■ 55 x 280 mm
	45°	● 110 mm ■ 180 x 110 mm	● 110 mm ■ 180 x 110 mm	● 105 mm ■ 120 x 105 mm
Type		toggle switch (712), magnetic switch (712 A)	gear transmission, magnetic switch	swivel head, gear transmission
Motor		1 HP	1 HP	1 HP
Blade size		19 x 0.9 x 2360 mm	19 x 0.9 x 2360 mm	19 x 0.9 x 2360 mm
Blade speeds	50 HZ	step pulley 22 / 33 / 45 / 65 MPM	39 / 66 / 82 MPM	39 / 66 / 82 MPM
Container loads		42 sets / 20' 88 sets / 40'	42 sets / 20' 88 sets / 40'	34 sets / 20' 56 sets / 40'
Packing size		1280 x 450 x 1030 mm	1280 x 450 x 1060 mm	1280 x 570 x 1060 mm
N.W. / G.W.		133 / 146 kgs	139 / 153 kgs	189 / 208 kgs

## FREJOTH 7" METAL CUTTING BAND SAWS - MANUAL



FHBS-712SB



FHBS-712C



FHBS-180DS

### SPECIFICATIONS

		FHBS-712SB	FHBS-712C			FHBS-180DS
Cutting capacity	90°	● 180 mm ■ 180 x 260 mm ■ 55 x 280 mm	● 180 mm ■ 180 x 280 mm ■ 65 x 300 mm	Cutting capacity	90°	● 180 mm ■ 165 x 230 mm
	45°	● 105 mm ■ 120 x 105 mm	● 110 mm ■ 180 x 110 mm		45°	● 130 mm ■ 165 x 70 mm
Type		swivel head, magnetic switch	CE standard	R60°	● 140 mm ■ 140 x 150 mm	● 100 mm ■ 90 x 100 mm
Motor		1 HP	1 HP	Type	brushless motor, variable speed, dual angle	
Blade size		19 x 0.9 x 2360 mm	19 x 0.9 x 2360 mm	Motor	1 HP	
Blade speeds	50 HZ	step pulley 22 / 33 / 45 / 65 MPM	step pulley 22 / 33 / 45 / 65 MPM	Blade size	19 x 0.9 x 2285 mm	
Container loads		34 sets / 20' 56 sets / 40'	42 sets / 20' 88 sets / 40'	Blade speeds	35 ~ 85 MPM	
Packing size		1280 x 570 x 1060 mm	1280 x 450 x 1030 mm	Packing size	1258 x 585 x 1296 mm	
N.W. / G.W.		181 / 200 kgs	138 kgs / 151 kgs	N.W. / G.W.	116 / 145 kgs	

## FREJOOTH BAND SAWS - PORTABLE TYPE



FHBS-100S



FHBS-125DV1



FHBS-127DV

### SPECIFICATIONS

FHBS-100S		FHBS-125DV/DV1		FHBS-127DV/DV1	
Cutting capacity	90°	● 100 mm ■ 100 x 150 mm	Cutting capacity	90°	● 125 mm ■ 120 x 120 mm
	45°	● 85 mm ■ 85 x 100 mm		45°	● 70 mm ■ 120 x 70 mm
Motor (DC)	1 / 2 HP		60°	● 35 mm ■ 65 x 35 mm	● 125 mm ■ 120 x 120 mm
Blade size	13 x 0.65 x 1470 mm		Motor (DC)	300 W	
Blade speeds	50 HZ / 4P 45 MPM		Blade size	13 x 0.65 x 1440 mm	
	60 HZ / 4P 54 MPM		Blade speeds	23 ~ 75 mpm	
Container loads	240 sets / 20'		Packing size	730 x 383 x 475 mm	
Packing size	724 x 381 x 458 mm		N.W. / G.W.	22 kg / 25 kgs	
N.W. / G.W.	23 / 27 kgs		DV & DV1 Difference	1. Emergency stop button 2. Cut off limit switch 3. Manual / Controlled descent cutting mode 4. Spring setting for manual or auto	

## FREJOOTH BAND SAWS - PORTABLE TYPE



FHBS-153DV3

- DC blade motor.
- Variable blade speed.
- Miter cutting 0°~ 60°.
- On/off and trigger switch.



FHBS-153DV1



### SPECIFICATIONS

FHBS-153DV3		FHBS-153DV1	
Capacity (HxW)	90°	● 153 mm ■ 153 x 175 mm	● 153 mm ■ 153 x 175 mm
	45°	● 90 mm ■ 100 x 90 mm	● 90 mm ■ 100 x 90 mm
	60°	● 65 mm ■ 65 x 70 mm	● 65 mm ■ 65 x 70 mm
Blade Motor (DC)	375 W		375 W
Blade Size	13 x 0.9 x 1785 mm		13 x 0.9 x 1440 mm
Blade Speeds	35 ~ 85 mpm		35 ~ 85 mpm
Packing Size	900 x 457 x 530 mm		950 x 460 x 570 mm
N.W. / G.W.	60 kgs / 66 kgs		55 kgs / 62 kgs

## FREJOTH 6" MITER CUTTING BANDSAW

- Light and easy for moving.
- Equipped with handle and wheels.
- Manual / Controlled descent cutting mode.
- Cut off limit switch.
- Blade variable speed (35 ~ 85 mpm).
- Emergency stop button.



FHBS-153DV3

- Coolant system.
- Blade variable speed (35 ~ 85 mpm).
- Manual / Controlled descent cutting mode.
- Miter cutting 0°~ 60°.
- Cut off limit switch.
- Emergency stop button.



FHBS-153DVC

### SPECIFICATIONS

		FHBS-153DV3		FHBS-153DVC	
Capacity (HxW)	90°	● 153 mm	■ 153 x 175 mm	● 125 mm	■ 153 x 160 mm
	45°	● 110 mm	■ 120 x 110 mm	● 110 mm	■ 120 x 110 mm
	60°	● 70 mm	■ 68 x 70 mm	● 70 mm	■ 68 x 70 mm
Blade Motor (DC)	375 W				
Blade Size	13 x 0.65 x 1785 mm				
Blade Speed	35 ~ 85 mpm				
Packing size	900 x 457 x 530 mm		950 x 650 x 570 mm		
N.W.	38 kg		Machine: 38 kg		Stand: 32 kg

\*Floor stand is an optional accessory.

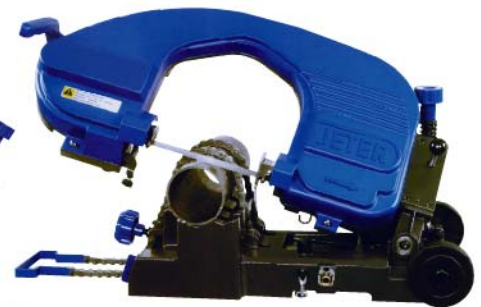
## FREJOTH 7" MOVABLE TYPE BANDSAW



FHBS-180SL



FHBS-JA6F-vise type

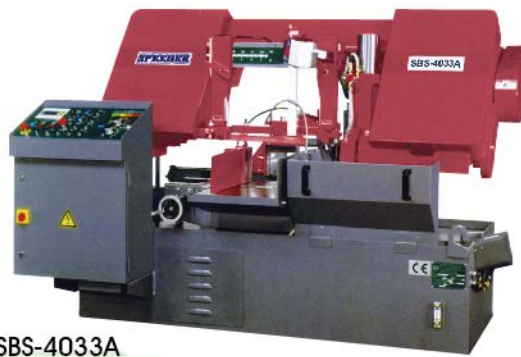


FHBS-JC6F-chain type

### SPECIFICATIONS

		FHBS-180SL		FHBS-JA6F		FHBS-JC6F		
Cutting capacity	90°	● 180 mm	■ 165 x 230 mm	● 180 mm	■ 150 mm	● 180 mm	■ 150 mm	
	45°	● 140 mm	■ 165 x 140 mm	● 80 mm	■ 80 mm	-	-	
Motor (DC)	1 HP							
Blade size	19 x 0.9 x 2285 mm							
Blade speed	35 ~ 85 mpm							
Packing size	1320 x 400 x 610 mm							
N.W. / G.W.	60 kg / 69 kg							
Cutting capacity	90°	● 180 mm	■ 150 mm	● 180 mm	■ 150 mm	● 180 mm	■ 150 mm	
	45°	● 80 mm	■ 80 mm	● 80 mm	■ 80 mm	-	-	
Blade size	13 x 0.65 x 1642 mm							
Blade speed	50 HZ	40 mpm					40 mpm	
	60 HZ	48 mpm					48 mpm	
Motor	420W							
Packing size	1030 x 500 x 470 mm							
N.W. / G.W.	44 kgs / 47 kgs		39 kgs / 43 kgs					

## SPEEDER FULLY AUTOMATIC HYDRAULIC BANDSAW



SBS-4033A

### SPECIFICATIONS

		SBS-3028A	SBS-4033A	SBS-4242A	SBS-5046A	SBS-5650A
Cutting capacity	●	10 ~ 280 mm	10 ~ 330 mm	10 ~ 420 mm	10 ~ 460 mm	10 ~ 500 mm
	■	W10 x H10 ~ W300 x H280 mm	W10 x H10 ~ W400 x H330 mm	W10 x H10 ~ W420 x H420 mm	W10 x H10 ~ W510 x H460 mm	W10 x H10 ~ W560 x H500 mm
Bundle cutting	Max.	W250 x H100 mm	W370 x H170 mm	W370 x H200 mm	W480 x H240 mm	W480 x H260 mm
	Min.	W165 x H15 mm	W165 x H50 mm	W165 x H80 mm	W240 x H80 mm	W240 x H80 mm
Saw blade	Size	3820 x 34 x 1.1 mm	4242 x 34 x 1.1 mm	4880 x 41 x 1.3 mm	5300 x 41 x 1.3 mm	5450 x 41 x 1.3 mm
	Speed	16 ~ 85 m/min				
Motors output	Tension	Hydraulic				
	Saw blade	3.7 KW	3.7 KW	5.5 KW	5.5 KW	5.5 KW
	Hydraulic pump	0.75 KW	0.75 KW	1.5 KW	1.5 KW	1.5 KW
	Coolant pump	0.2 KW				
Tanks	Hydraulic	60 L	60 L	85 L	85 L	85 L
	Coolant	80 L	90 L	100 L	110 L	110 L
Feeding length (single / multiple)		400 / 3600 mm	500 / 4500 mm	500 / 4500 mm	500 / 4500 mm	500 / 4500 mm
Working height		700 mm	700 mm	700 mm	750 mm	750 mm
Dimension (W x L x H)		2100 x 1900 x 1300 mm	2250 x 2195 x 1400 mm	2450 x 2235 x 1665 mm	2580 x 2240 x 1800 mm	2630 x 2260 x 1820 mm
Net weight		1750 kgs	2000 kgs	2500 kgs	2850 kgs	3000 kgs

## SPEEDER FULLY AUTOMATIC HYDRAULIC BANDSAW



SBS-6056A

### SPECIFICATIONS

		SBS-6056A	SBS-6260A	SBS-8056A	SBS-8070A	SBS-1080A
Cutting capacity	●	10 ~ 560 mm	10 ~ 600 mm	10 ~ 560 mm	100 ~ 700 mm	200 ~ 800 mm
	■	W10 x H10 ~ W610 x H560 mm	W10 x H10 ~ W620 x H600 mm	W10 x H10 ~ W800 x H560 mm	W100 x H100 ~ W800 x H700 mm	W200 x H25 ~ W1000 x H800 mm
Bundle cutting	Max.	NA	W480 x H440 mm	NA	NA	NA
	Min.		W260 x H360 mm			
Saw blade	Size	6600 x 54 x 1.6 mm	6560 x 41 x 1.3 mm	7000 x 54 x 1.6 mm	8000 x 54 x 1.6 mm	8000 x 67 x 1.6 mm
	Speed	16 ~ 85 m/min				
Motors output	Tension	Hydraulic				
	Saw blade	7.5 KW	5.5 KW	7.5 KW	11.2 KW	11.2 KW
	Hydraulic pump	2.2 KW	1.5 KW	2.2 KW	2.2 KW	2.2 KW
	Coolant pump	0.2 KW				
Tanks	Hydraulic	130 L	95 L	130 L	135 L	130 L
	Coolant	140 L	150 L	140 L	230 L	240 L
Feeding length (single / multiple)		400 / 3600 mm	400 / 3600 mm	400 / 3600 mm	400 / 3600 mm	400 / 3600 mm
Working height		850 mm	800 mm	850 mm	800 mm	830 mm
Dimension (W x L x H)		3210 x 2135 x 2160 mm	3210 x 2130 x 2030 mm	3410 x 2135 x 2160 mm	3910 x 2140 x 2300 mm	4350 x 2390 x 2750 mm
Net weight		4500 kgs	3800 kgs	4850 kgs	7100 kgs	11500 kgs



## SPEEDER SEMI - AUTOMATIC BANDSAW



SBS-8056SA

### SPECIFICATIONS

		SBS-3028SA	SBS-4033SA	SBS-5650SA
Cutting capacity	●	10 ~ 280 mm	10 ~ 330 mm	10 ~ 550 mm
	■	W10 x H10 ~ W300 x H280 mm	W10 x H10 ~ W400 x H330 mm	W10 x H10 ~ W560 x H500 mm
Bundle cutting	Max.	W250 x H100 mm	W370 x H170 mm	W480 x H240 mm
	Min.	W165 x H15 mm	W165 x H50 mm	W240 x H80 mm
Saw blade	Size	3820 x 34 x 1.1 mm	4242 x 34 x 1.1 mm	5450 x 41 x 1.3 mm
	Speed	20, 35, 50, 65, 80 m/min	20, 35, 50, 65, 80 m/min	20, 35, 50, 65, 80 m/min
Motors output	Tension	Hydraulic		
	Saw blade	3.7 KW	3.7 KW	5.5 KW
	Hydraulic pump	0.75 KW	0.75 KW	1.5 KW
	Coolant pump	0.2 KW		
Tanks	Hydraulic	60 L	60 L	85 L
	Coolant	75 L	80 L	110 L
Working height		700 mm	700 mm	750 mm
Dimension (W x L x H)		2110 x 1210 x 1520 mm	2240 x 1210 x 1550 mm	2890 x 1550 x 1800 mm
Net weight		1200 kgs	1650 kgs	2600 kgs

## SPEEDER SEMI - AUTOMATIC BANDSAW



SBS-1713SA

### SPECIFICATIONS

		SBS-8056SA	SBS-1080SA	SBS-1100SA	SBS-1713SA
Cutting capacity	●	10 ~ 560 mm	560 ~ 800 mm	550 ~ 1100 mm	695 ~ 1300 mm
	■	W10 x H10 ~ W800 x H560 mm	W560 x H25 ~ W1000 x H800 mm	W550 x H25 ~ W1100 x H1100 mm	W695 x H25 ~ W1700 x H1300 mm
Bundle cutting	Max.	W480 x H280 mm	NA		
	Min.	W260 x H160 mm	NA		
Saw blade	Size	6800 x 54 x 1.6 mm	8800 x 67 x 1.6 mm	10000 x 67 x 1.6 mm	13000 x 80 x 1.6 mm
	Speed	16 ~ 85 m/min (INV.)	16 ~ 85 m/min (INV.)	15 ~ 80 m/min (INV.)	12 ~ 75 m/min (INV.)
Motors output	Tension	Hydraulic			
	Saw blade	7.5 KW	11.2 KW	11.2 KW	15 KW
	Hydraulic pump	2.2 KW	2.2 KW	2.2 KW	3.7 KW
	Coolant pump	0.2 KW			
Tanks	Hydraulic	120 L	85 L	90 L	165 L
	Coolant	140 L	220 L	200 L	280 L
Working height		850 mm	720 mm	680 mm	680 mm
Dimension (W x L x H)		3300 x 1950 x 2000 mm	4350 x 2160 x 2650 mm	4600 x 2400 x 3250 mm	6200 x 2800 x 3800 mm
Net weight		3800 kgs	11000 kgs	14000 kgs	21000 kgs

## SPEEDER LIGHT DUTY BAND SAWS



SBS-916S - Step pulley  
SBS-916SV - Variable Speed



SBS-1018S - Step pulley  
SBS-1018SV - Variable Speed

### SPECIFICATIONS

		SBS-916S/916SV	SBS-1018S/1018SV
Cutting capacity	0°	● 229 mm ■ 406 x 127 mm	● 254 mm ■ 127 x 468 mm
	45°	● 229 mm ■ 241 x 203 mm	● 150 mm ■ 175 x 239 mm
Motor		1.5 HP	2 HP
Blade size		27 x 0.9 x 2910 mm	27 x 0.9 x 3090 mm
Blade speeds	60 Hz	35 / 60 / 88 / 115 Mt / min , Var. Speed 22 ~ 95 Mt / min	35 / 60 / 88 / 115 Mt / min , Var. Speed 22 ~ 95 Mt / min
	50 Hz	29 / 50 / 73 / 96 Mt / min , Var. Speed 18 ~ 78 Mt / min	29 / 50 / 73 / 96 Mt / min , Var. Speed 18 ~ 78 Mt / min
Packing size		1700 x 625 x 1235 mm (SKD 1680 x 485 x 145 mm)	1790 x 670 x 1155 mm (SKD 1790 x 560 x 1055 mm)
N.W. / G.W.		280 / 310 kgs	320 / 350 kgs

## SPEEDER HEAVY DUTY / SEMI - AUTO BANDSAWS



SBS-1018SRV - One Way Swivel  
- Tru-Lock Vise



SBS-335SRV - Manual-One Way Swivel  
SBS-335SRVA - Semi-Auto Saw Bow Lifting

### SPECIFICATIONS

		SBS-1018SRV	SBS-335SRV/335SRVA
Cutting capacity	0°	● 254 mm ■ 254 x 430 mm	● 330 mm ■ 305 x 305 mm ■ 127 x 483 mm
	45°	● 240 mm ■ 220 x 240 mm	● 305 mm ■ 280 x 280 mm ■ 229 x 305 mm
Motor		2 HP	3 HP
Blade size		27 x 0.9 x 3090 mm	27 x 0.9 x 3810 mm
Blade speeds	60 Hz	22 ~ 95 Mt / min	36 ~ 96 Mt / min
	50 Hz	18 ~ 78 Mt / min	30 ~ 80 Mt / min
Packing size		1790 x 740 x 1145 mm (SKD 1790 x 715 x 1050 mm)	2085 x 825 x 1420 mm
N.W. / G.W.		380 / 420 kgs	450 / 490 kgs

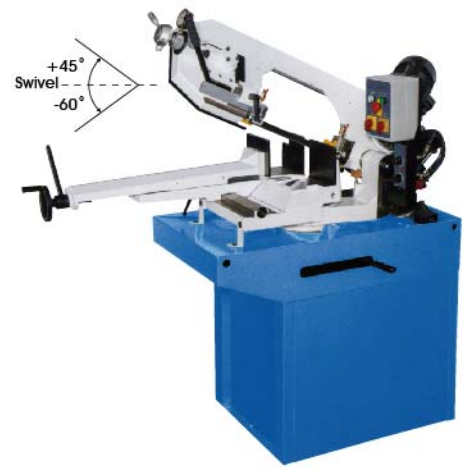
## SPEEDER BAND SAWS - EUROPEAN TYPE



**SBS-270S** - Gear Drive  
- One Way Swivel



**SBS-270** - Gear Drive  
- One Way Swivel  
**SBS-270V** - Gear Drive  
- One Way Swivel  
- Variable Speeds



**SBS-270DR/DRAA/DRV**

### SPECIFICATIONS

	SBS-270S	SBS-270 / 270V	SBS-270DR / 270DRV / 270DRAA
Cutting capacity	0°	● 225 mm ■ 200 x 200 mm ■ 240 x 160 mm	● 225 mm ■ 200 x 200 mm ■ 240 x 160 mm
	-45°	● 160 mm ■ 140 x 140 mm ■ 155 x 115 mm	● 160 mm ■ 140 x 140 mm ■ 155 x 115 mm
	-60°	● 90 mm ■ 90 x 90 mm ■ 90 x 100 mm	● 90 mm ■ 90 x 90 mm ■ 90 x 100 mm
Motor	1.5 HP	1.5 HP	1.5 HP (1Ø or 3Ø)
Blade size	27 x 0.9 x 2450 mm	27 x 0.9 x 2450 mm	27 x 0.9 x 2450 mm
Blade speeds	3Ø	60 HZ / 42 ~ 84 Mt / min 50 HZ / 35 ~ 70 Mt / min	60 HZ / 42 ~ 84 Mt / min 50 HZ / 35 ~ 70 Mt / min
	1Ø	60 HZ / 106 Mt / min 50 HZ / 88 Mt / min	60 HZ / 106 Mt / min 50 HZ / 88 Mt / min
Packing size	1300 x 640 x 950 mm	1494 x 787 x 978 mm	1490 x 787 x 978 mm
N.W. / G.W.	205 / 225 kgs	220 / 240 kgs	320 / 355 kgs / 320 / 355 kgs / 350 / 390 kgs

## SPEEDER BAND SAWS - EUROPEAN TYPE



**SBS-210S** - Gear Drive  
- One Way Swivel



**SBS-210** - Gear Drive  
- One Way Swivel  
**SBS-210V** - Gear Drive  
- One Way Swivel  
- Variable Speeds

### SPECIFICATIONS

	SBS-210S	SBS-210/210V
Cutting capacity	0°	● 180 mm ■ 180 x 180 mm ■ 200 x 150 mm
	-45°	● 115 mm ■ 110 x 110 mm ■ 125 x 110 mm
	-60°	● 70 mm ■ 70 x 70 mm ■ 70 x 70 mm
Motor	1 HP	1 HP
Blade size	20 x 0.9 x 2085 mm	20 x 0.9 x 2085 mm
Blade speeds	3Ø	60 HZ / 48 ~ 96 Mt / min 50 HZ / 40 ~ 80 Mt / min
	1Ø	60 HZ / 95 Mt / min 50 HZ / 80 Mt / min
Packing size	1155 x 720 x 925 mm	1155 x 720 x 925 mm
N.W. / G.W.	180 / 200 kgs	190 / 210 kgs

## SPEEDER LIGHT DUTY BAND SAWS



SBS-812DR - Two Way Swivel



SBS-812GDR - Gear Drive  
- Two Way Swivel

### SPECIFICATIONS

		SBS-812DR	SBS-812GDR
Cutting capacity	0°	● 205 mm	■ 215 × 205 mm
	±45°	● 153 mm	■ 153 × 115 mm
Motor		3 / 4 HP	1 HP
Blade size		20 × 0.8 × 2362 mm	20 × 0.8 × 2362 mm
Blade speeds	60 Hz	29 / 50 / 75 / 100 Mt / min	41 / 60 / 78 Mt / min
	50 Hz	24 / 41 / 61 / 82 Mt / min	34 / 50 / 65 Mt / min
Packing size		1320 × 749 × 760 mm	1370 × 710 × 900 mm
N.W. / G.W.		180 / 200 kgs	195 / 215 kgs

## SPEEDER LIGHT DUTY BAND SAWS



SBS-912B



SBS-912G - Gear Drive

### SPECIFICATIONS

		SBS-912B	SBS-912G
Cutting capacity	0°	● 229 mm	■ 178 × 305 mm
	45°	● 150 mm	■ 127 × 150 mm
Motor		1 HP	1 HP
Blade size		27 × 0.9 × 2655 mm	27 × 0.9 × 2655 mm
Blade speeds	60 Hz	32 / 60 / 88 / 115 Mt / min	45 / 66 / 86 Mt / min
	50 Hz	26 / 50 / 73 / 95 Mt / min	38 / 55 / 72 Mt / min
Packing size		1140 × 510 × 1125 mm	1473 × 508 × 1270 mm
N.W. / G.W.		160 / 185 kgs	170 / 200 kgs

## SPEEDER LIGHT DUTY BAND SAWS



SBS-712G



SBS-712GDR - Two Way Swivel Gear Drive



OPT. - Tru - Lock Vise

### SPECIFICATIONS

		SBS-712G		SBS-712GDR	
Cutting capacity	0°	● 178 mm	■ 178 x 305 mm	0°	● 178 mm ■ 178 x 210 mm
	45°	● 127 mm	■ 120 x 125 mm	±45°	● 127 mm ■ 85 x 140 mm
Motor					1 HP
Blade size	20 x 0.8 x 2362 mm w / carbon				20 x 0.8 x 2362 mm w / bi-metal blade
Blade speeds	41 / 60 / 78 Mt / min				41 / 60 / 78 Mt / min
	34 / 50 / 65 Mt / min				34 / 50 / 65 Mt / min
Packing size	1320 x 457 x 1117 mm				1305 x 740 x 1135 mm
N.W. / G.W.	150 / 185 kgs				165 / 185 kgs

## SPEEDER LIGHT DUTY BAND SAWS



SBS-812N



SBS-812G - Gear Drive

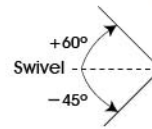
### SPECIFICATIONS

		SBS-812N			SBS-812G			
Cutting capacity	0°	● 200 mm	■ 200 x 200 mm	■ 178 x 305 mm				
	45°	● 127 mm	■ 120 x 120 mm	■ 120 x 125 mm				
Motor	3 / 4 HP				1 HP			
Blade size	20 x 0.8 x 2362 mm w / carbon				20 x 0.8 x 2362 mm			
Blade speeds	60 Hz	29 / 50 / 75 / 100 Mt / min				41 / 60 / 78 Mt / min		
	50 Hz	24 / 41 / 61 / 82 Mt / min				34 / 50 / 65 Mt / min		
Packing size	1305 x 485 x 1143 mm				1310 x 515 x 1150 mm			
N.W. / G.W.	180 / 200 kgs				195 / 215 kgs			

## SPEEDER LIGHT DUTY BAND SAWS



SBS-128



SBS-128HDR



Optional Quick Fixture Lock Vise (one way 45° swivel only)

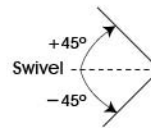
### SPECIFICATIONS

		SBS-128		SBS-128HDR	
Cutting capacity	0°	● 128 mm	■ 115 x 150 mm	0°	● 128 mm ■ 128 x 150 mm
	45°	● 76 mm	■ 76 x 115 mm	±45°	● 95 mm ■ 75 x 95 mm
Motor		1/3 HP		60°	● 44 mm ■ 44 x 56 mm
Blade size		12.7 x 0.65 x 1635 mm w / carbon			1/3 HP
Blade speeds	60 Hz	24 / 37 / 61 Mt/min			12.7 x 0.65 x 1635 mm w / carbon
	50 Hz	20 / 29 / 50 Mt/min			24 / 37 / 61 Mt/min
Packing size		965 x 330 x 381 mm			20 / 29 / 50 Mt/min
N.W. / G.W.		60 / 61 kgs			1041 x 445 x 559 mm
					78 / 82 kgs

## SPEEDER LIGHT DUTY BAND SAWS



SBS-712N - Manual Type



OPT. - Tru - Lock Vise



SBS-712DR - Two Way Swivel

### SPECIFICATIONS

		SBS-712N		SBS-712DR	
Cutting capacity	0°	● 178 mm	■ 178 x 305 mm	0°	● 178 mm ■ 178 x 210 mm
	45°	● 127 mm	■ 120 x 125 mm	±45°	● 127 mm ■ 85 x 140 mm
Motor		3 / 4 HP			3 / 4 HP
Blade size		20 x 0.8 x 2362 mm w / carbon			20 x 0.8 x 2362 mm w/bi-metal blade
Blade speeds	60 Hz	27 / 41 / 59 / 78 Mt / min			29 / 50 / 75 / 100 Mt / min
	50 Hz	22 / 34 / 49 / 64 Mt / min			24 / 41 / 61 / 82 Mt / min
Packing size		1308 x 457 x 965 mm			1372 x 686 x 762 mm
N.W. / G.W.		135 / 170 kgs			155 / 175 kgs

## SPEEDER BAND SAWS - PORTABLE TYPE



SBS-85

SBS-125

SBS-150

### SPECIFICATIONS

	SBS-85	SBS-125	SBS-150
Cutting Capacity	0° ● 85 mm ■ 85 x 85 mm ■ 85 x 100 mm	● 122 mm ■ 122 x 122 mm	● 150 mm ■ 140 x 140 mm ■ 150 x 140 mm
	-45° ● 65 mm ■ 60 x 60 mm ■ 60 x 65 mm	● 95 mm ■ 95 x 95 mm	● 90 mm ■ 90 x 90 mm ■ 100 x 90 mm
	-60°	● 63 mm ■ 63 x 63mm	● 65 mm ■ 65 x 65 mm ■ 65 x 70 mm
Motor	1Ø 850 W - 1Ø	1250 W - 1Ø	2000 W - 1Ø
Blade size	13 x 0.65 x 1325 mm	13 x 0.65 x 1440 mm w / carbon	13 x 0.9 x 1735 mm w / bi-metal
Blade speeds	Variable Speed 30 ~ 72 Mt / min	Variable Speed 30 ~ 80 Mt / min	Variable Speed 30 ~ 63 Mt / min
Packing size	720 x 340 x 520 mm	725 x 445 x 395 mm	1025 x 370 x 420 mm
N.W. / G.W.	15 / 16 kgs	21 / 22 kgs	27 / 32 kgs

## METALEX 20" DISC SANDER

SHEET METAL MACHINERY



DS-3801

- Counter balanced rack and pinion mechanism adjusts table height
- Wrap around guard for added safety
- Tilt-back guard for easy disc changes
- Precision hand wheel and large easy to read angle indicator for accurate table settings at any angle.
- Reversible motor for longer sanding life
- Precision balanced steel disc.
- Cast iron table tilts and locks securely in any position.
- Wide cast iron base and a 4" column provide exceptional stability
- 2" or 4" dust collection adaptor
- Foot brake system for quick disc stop.

### SPECIFICATIONS

	DS-3801
Table tilted	45 degree to front ,15 degree to back
Disc diameter	20"
Motor	2 HP, single phase ; 2 HP 3phase ; 3HP 3 phase
Forward & backward	reversible switch
N.W. / G.W. / Cuft	180.0 / 240 kgs / 25.7 cuft
4" or 2" Dust chute, Miter gauge	
Foot operation Brake available	

## SPEEDER AUTOMATIC HIGH SPEED CARBIDE SAWING MACHINE



STC-100EH



STC-150SP

### SPECIFICATIONS

	STC-70EH	STC-100EH	STC-150SP	STC-230LC	STC-260LC
Round bar	● 8 ~ 85 mm	20 ~ 110 mm	40 ~ 153 mm	90 ~ 230 mm	90 ~ 260 mm
Square bar	■ 8 ~ 65 mm	20 ~ 85 mm	40 ~ 110 mm	90 ~ 195 mm	90 ~ 230 mm
Hexagon bar	● 8 ~ 70 mm	20 ~ 95 mm	40 ~ 130 mm	90 ~ 200 mm	90 ~ 230 mm
TCT carbide tipped sawblade	Ø285 x 2.0 / Ø315 x 2.25 mm	Ø360 x 2.6 mm	Ø460 x 2.7 mm	Ø750 x 4.0 x 3.4 x Ø80 mm	Ø830 x 4.8 x 4.0 x Ø80 mm
HSS high-speed steel sawblade	Ø325 x 2.0 ~ 3.0 mm	Ø440 x 2.0 ~ 4 mm (Max.)	Ø460 x 3.0 ~ 5.0 mm	Ø750 x 3.0 t ~ 5.0 t mm	Ø830 x 3.0 t ~ 5.0 t mm
Sawblade rotation speed	17 ~ 200 rpm	20 ~ 180 rpm	20 ~ 160 rpm	30 ~ 90 rpm	30 ~ 90 rpm
Tank capacity	90 liters	90 liters	100 liters	100 liters	100 liters
Pneumatic pressure requirement	4 ~ 6 kg/cm <sup>2</sup>	4 ~ 6 kg/cm <sup>2</sup>	4 ~ 6 kg/cm <sup>2</sup>	4 ~ 6 kg/cm <sup>2</sup>	4 ~ 6 kg/cm <sup>2</sup>
Total electric power	14 kw	20 kw	30 kw	60 kw	60 kw
Gross weight	2800 kgs	3000 kgs	5210 kgs	6050 kgs	6050 kgs
Dimension (W x H x L)	1780 x 1740 x 6570 mm	2530 x 1940 x 6910 mm	2990 x 1910 x 7280 mm	4202 x 2086 x 8181 mm	4202 x 2086 x 8181 mm

## SPEEDER AUTOMATIC CARBIDE SAWING MACHINE (FOR NON-FERROUS METALS)



STC-100NF



STC-150NFC

### SPECIFICATIONS

	STC-100NF	STC-150NFC
Round bar	● 10 ~ 100 mm	40 ~ 153 mm
Square bar	■ 10 ~ 80 mm	40 ~ 120 mm
Hexagon bar	● 10 ~ 85 mm	40 ~ 130 mm
TCT carbide tipped sawblade	Ø355 x 2.0 mm	Ø480 x 2.7 mm
Sawblade rotation speed	1600 ~ 4000 rpm	1000 ~ 3200 rpm
Tank capacity	90 liters	100 liters
Pneumatic pressure requirement	4 ~ 6 kg/cm <sup>2</sup>	4 ~ 6 kg/cm <sup>2</sup>
Total electric power	20 kw	30 kw
Gross weight	2700 kgs	4000 kgs
Dimension (W x H x L)	1660 x 1850 x 6970 mm	2410 x 1910 x 7280 mm



## FREJOTH SAWING MACHINE



FIH-18A

FIH-18C

FIH-18D

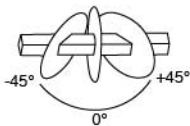
FIH-18P

FIH-18CE

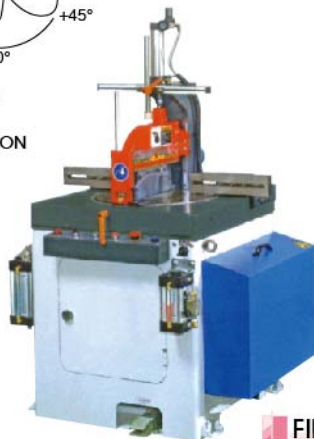
### SPECIFICATIONS

	FIH-18A	FIH-18C	FIH-18D	FIH-18P
Cutting Angle	90° or 45°	90° or 45°	90° or 45°	90° or 45°
Cutting Capacity (H x W)	115 x 115, 100 x 220 60 x 270, 20 x 300 mm	115 x 115, 100 x 220 60 x 270, 20 x 300 mm	125 x 125, 100 x 230 60 x 270, 60 x 300 mm	110 x 110, 100 x 180 60 x 230, 20 x 240 mm
Spindle speed	3200 rpm	3200 rpm	3200 rpm	3200 rpm
Saw blade size	18" x 1" bore	18" x 1" bore	18" x 1" bore	18" x 1" bore
Table area	640 x 380 mm	640 x 380 mm	640 x 380 mm	1350 x 380 mm
Table height from floor	860 mm	860 mm	860 mm	875 mm
Motor	5 HP (7.5 HP, 10 HP opt.)	5 HP (7.5 HP, 10 HP opt.)	7 1/2 HP (10 HP opt.)	7 1/2 HP (10 HP opt.)
Air pressure	4 ~ 6 kgs/cm <sup>2</sup>	4 ~ 6 kgs/cm <sup>2</sup>	4 ~ 6 kgs/cm <sup>2</sup>	4 ~ 6 kgs/cm <sup>2</sup>
Conveyor length (Opt.)	1 ~ 7 M	1 ~ 7 M	1 ~ 7 M	1 ~ 7 M
Machine Dim. (L x W x H)	840 x 800 x 1250 cm	840 x 800 x 1250 cm	840 x 870 x 1660 cm	1500 x 840 x 1460 cm
Packing Dim. (L x W x H)	960 x 920 x 1450 cm	960 x 920 x 1450 cm	960 x 990 x 1860 cm	1620 x 960 x 1660 cm
Net / Gross Weight	300 / 380 kgs	330 / 410 kgs	360 / 440 kgs	600 / 750 kgs

## FREJOTH SWIVEL ANGLE SAWING MACHINE



ANGULAR  
CUTTING  
APPLICATION



FIH-16



FIH-20CE



FIH-20

### SPECIFICATIONS

	FIH-16	FIH-20	FIH-24	FIH-30	FIH-36
Cutting Angle	+45° ~ 0 ~ -45°	+45° ~ 0 ~ -45°	+45° ~ 0 ~ -45°	+45° ~ 0 ~ -45°	+45° ~ 0 ~ -45°
Saw blade size	16" x 1" bore	20" x 1" bore	24" x 1" bore	30" x 50 mm (bore)	36" x 50 mm (bore)
Spindle speed	3400 rpm	2800 rpm	1800 rpm	1170 rpm (60 HZ) 1185 rpm (50 HZ)	936 rpm (60 HZ) 862 rpm (50 HZ)
Motor	3 HP	7 1/2 HP	7 1/2 HP	10 HP	10 HP (6P)
Air pressure	4 ~ 6 kgs/cm <sup>2</sup>	4 ~ 6 kgs/cm <sup>2</sup>	4 ~ 6 kgs/cm <sup>2</sup>	4 ~ 6 kgs/cm <sup>2</sup>	4 ~ 6 kgs/cm <sup>2</sup>
Table area	720 x 380 mm	920 x 650 mm	1140 x 750 mm	1327 x 640 mm	1500 x 770 mm
Table height from floor	865 mm	875 mm	920 mm	1070 mm	1220 mm
Machine Dim. (L x W x H)	1000 x 880 x 1610 cm	1200 x 1090 x 1780 cm	1480 x 1350 x 2100 cm	1660 x 1400 x 2210 cm	1770 x 1580 x 2520 cm
Packing Dim. (L x W x H)	1120 x 1000 x 1810 cm	1320 x 1210 x 1980 cm	1600 x 1470 x 2260 cm	1780 x 1520 x 2300 cm	1900 x 1700 x 2230 cm
Net / Gross Weight	400 / 500 kgs	500 / 610 kgs	800 / 920 kgs	1300 / 1500 kgs	1800 / 2300 kgs

## SPEEDER COLD SAW SERIES



SCS-350CS



SCS-315CS



SCS-250CS

■ option

### SPECIFICATIONS

	SCS-350CS	SCS-315CS	SCS-275CS	SCS-250CS
Cutting capacity 90 / 45 deg.				
Solid bar	85 / 75 mm	60 / 50 mm	40 / 40 mm	30 / 30 mm
Round pipe	120 / 100 mm	100 / 90 mm	85 / 65 mm	75 / 65 mm
Square tube	105 x 105 / 85 x 85 mm	82 x 82 / 75 x 75 mm	75 x 75 / 55 x 55 mm	65 x 65 / 55 x 55 mm
Rectangle pipe	160 x 90 / 85 x 70 mm	110 x 70 / 85 x 70 mm	90 x 50 / 60 x 50 mm	90 x 50 / 60 x 50 mm
Main motor - standard	3 HP / 3 ph or 1 ph 4 Pole	2 HP / 2 P / 4 P / 3 ph (standard)	1-1/2 HP / 2 P / 4 P / 3 ph	1 HP 2 P / 4 P / 3 ph
Main motor - optional		4 P / 8 P / 3 hp (optional) 2-1/2 HP 4 P / 1ph (SCS-315SP)	1-1/2 HP / 4 P / 1 ph (SCS-275SP)	1 HP 4 P / 1 ph (SCS-250SP)
Spindle speed - standard	24 ~ 120 rpm (Variable speed)	2 / 4 Pole : 50 HZ 88 / 44 rpm 60 HZ 104 / 52 rpm	2 / 4 Pole : 50 HZ 45 / 90 rpm 60 HZ 54 / 108 rpm	2 / 4 Pole : 50 HZ 45 / 90 rpm 60 HZ 54 / 108 rpm
Saw blade (optional)	HSS 2.5 mm x 32 Ø 350 mm	HSS 2.0 mm x 32 Ø 315 mm	HSS 2.0 mm x 32 Ø 275 mm	HSS 2.0 mm x 32 Ø 250 mm
Maximum vise opening	170 mm	120 mm	100 mm	100 mm
Cooling pump, tank	1/8 HP, 5L	1/8 HP, 5L	1/8 HP, 5L	1/8 HP, 2L
Machine weight (kgs)	265 (with stand)	175 (with stand)	160 (with stand)	110 (with stand) 21 (stand)
Machine dimensions (with stand)	1260 x 1030 x 1820 mm	1010 x 960 x 1770 mm	970 x 950 x 1645 mm	880 x 920 x 1600 (W/stand) 880 x 920 x 880 (W/O stand)

## SPEEDER CIRCULAR COLD SAWS



SCC-9

■ stand (opt.)



SCC-10

■ stand (opt.)



SCC-12

### SPECIFICATIONS

	SCC-9	SCC-10	SCC-12
Motor	0.75 kw	0.975 kw	1.65 kw
Gear box ratio	27 : 1	33 : 1	34 : 1
Blade size	Ø225 mm	Ø250 mm	Ø315 mm
Blade speed	52 rpm	42 rpm	42 / 84 rpm
Vice clamping cap.	80 mm	100 mm	120 mm
Net weight	60 kgs	85 kgs	165 kgs
Weight of stand (optional)	-	24 kgs	26 kgs

## SPEEDER CIRCULAR COLD SAWS SERIES



SCS-350D manual



SCS-350P pneumatic



SCS-350SA semi-auto

### SPECIFICATIONS

	SCS-350D	SCS-350P	SCS-350SA
Main drive motor	3 HP / 2 HP (4/8 Pole) 50 / 60 HZ or 4 HP / 3 HP (2/4 Pole) 50 / 60 HZ		
Blade speeds	L Type: 50 HZ 44 / 22 rpm, 60HZ 52 / 26 rpm(std.)		
	M Type: 50 HZ 58 / 29 rpm, 60HZ 70 / 35 rpm(std.)		
	H Type: 50 HZ 86 / 43 rpm, 60HZ 105 / 52 rpm(std.)		
Head swivel	90° / 45°		
Diameter	HSS Ø250 ~ Ø350 standard Ø350		
Bore	Ø32		
Net weight	300 kgs		340 kgs

## SPEEDER CIRCULAR COLD SAWS SERIES



SCS-275 manual



SCS-275P pneumatic



SCS-275SA semi-auto

### SPECIFICATIONS

	SCS-275	SCS-275P	SCS-275SA
Main drive motor	3 HP / 1.5 HP (2 / 4 pole) 50 / 60 HZ		
Blade speeds	H Type : 60 HZ 120 / 60 rpm , 50 HZ 100 / 50 rpm (std.) L Type : 60 HZ 60 / 30 rpm, 50 HZ 50 / 25 rpm (opt.)		
Head swivel	90° / 45°		
Saw blade diameter	HSS Ø250 ~ Ø275 Standard Ø250		
Bore	Ø32		
Net weight	240 kgs	240 kgs	270 kgs

## SPEEDER VERTICAL BANDSAW MACHINE Inverter



KC-40



KC-100

### SPECIFICATIONS

	KC-40	KC-50	KC-60	KC-100
Max. throat capacity	410 mm	520 mm	610 mm	1010 mm
Max. work height	300 mm	310 mm	340 mm	340 mm
Blade speed	Low - 20 ~ 85 M / min. High - 120 ~ 500 M / min.			
Main drive motor	2 HP	2 HP	2 HP	2 HP
Table size	600 x 500 mm		600 x 500 + 220 x 500 mm	600 x 500 + 450 x 500 mm
Table tilt	4 ways - 15 deg.			
Max. blade - L x W	3350 x 3 ~ 16 mm	3880 x 3 ~ 16 mm	3970 x 3 ~ 16 mm	4540 x 3 ~ 16 mm
Welder capacity	2.4 KVA / 3 ~ 16 mm			
Net weight	390 kgs	435 kgs	470 kgs	530 kgs

## SPEEDER VERTICAL BANDSAW MACHINE Inverter / table auto feed assembly



KC-40A



KC-100A

### SPECIFICATIONS

	KC-40A	KC-50A	KC-60A	KC-100A
Max. throat capacity	410 mm	520 mm	610 mm	1010 mm
Max. work height	300 mm	310 mm	340 mm	340 mm
Blade speed	Low - 20 ~ 85 M / min. High - 120 ~ 500 M / min.			
Main drive motor	2 HP	2 HP	2 HP	2 HP
Table size	660 x 700 mm		660 x 700 mm	660 x 700 + 450 x 500 mm
Table tilt	2 ways L - 5 deg. R - 15 deg.			
Max. blade - L x W	3350 x 3 ~ 20 mm	3880 x 3 ~ 20 mm	3970 x 3 ~ 20 mm	4540 x 3 ~ 20 mm
Welder capacity	4.2 KVA / 3 ~ 20 mm			
Net weight	475 kgs	510 kgs	555 kgs	650 kgs

## SPEEDER VERTICAL BANDSAW MACHINE High speed inverter



KS-50



KS-60

### SPECIFICATIONS

	KS-40	KS-50	KS-60	KS-100
Max. throat capacity	410 mm	520 mm	610 mm	1010 mm
Max. work height	300 mm	310 mm	340 mm	340 mm
Blade speed	Low - 18 ~ 82 M / min. High - 230 ~ 1050 M / min.			
Main drive motor	2 HP	2 HP	2 HP	2 HP
Table size	600 x 500 mm		600 x 500 + 220 x 500 mm	600 x 500 + 450 x 500 mm
Table tilt	4 ways - 15 deg.			
Max. blade - L x W	3350 x 3 ~ 16 mm	3880 x 3 ~ 16 mm	3970 x 3 ~ 16 mm	4540 x 3 ~ 16 mm
Welder capacity	2.4 KVA / 3 ~ 16 mm			
Net weight	390 kgs	435 kgs	470 kgs	530 kgs

## SPEEDER VERTICAL BANDSAW MACHINE High speed inverter / table auto feed assembly



KS-50A



KS-100A

### SPECIFICATIONS

	KS-40A	KS-50A	KS-60A	KS-100A
Max. throat capacity	410 mm	520 mm	610 mm	1010 mm
Max. work height	300 mm	310 mm	340 mm	340 mm
Blade speed	Low - 18 ~ 82 M / min. High - 230 ~ 1050 M / min.			
Main drive motor	2 HP	2 HP	2 HP	2 HP
Table size	660 x 700 mm		660 x 700 mm	660 x 700 + 450 x 500 mm
Table tilt	2 ways L - 5 deg. R - 15 deg.			
Max. blade - L x W	3350 x 3 ~ 20 mm	3880 x 3 ~ 20 mm	3970 x 3 ~ 20 mm	4540 x 3 ~ 20 mm
Welder capacity	4.2 KVA / 3 ~ 20 mm			
Net weight	475 kgs	510 kgs	555 kgs	650 kgs

## SPEEDER VERTICAL BANDSAW MACHINE



KV-50

### SPECIFICATIONS

	KV-40	KV-50	KV-60	KV-100
Max. throat capacity	410 mm	520 mm	610 mm	1010 mm
Max. work height	300 mm	310 mm	340 mm	340 mm
Blade speed	Low - 20 ~ 85 M / min. High - 120 ~ 500 M / min.			
Main drive motor	2 HP	2 HP	2 HP	2 HP
Table size	600 x 500 mm		600 x 500 + 220 x 500 mm	600 x 500 + 450 x 500 mm
Table tilt	4 ways - 15 deg.			
Max. blade - L x W	3350 x 3 ~ 16 mm	3880 x 3 ~ 16 mm	3970 x 3 ~ 16 mm	4540 x 3 ~ 16 mm
Welder capacity	2.4 KVA / 3 ~ 16 mm			
Net weight	390 kgs	435 kgs	470 kgs	530 kgs

## SPEEDER VERTICAL BANDSAW MACHINE

table auto feed assembly



KV-40A



KV-100A

### SPECIFICATIONS

	KV-40A	KV-50A	KV-60A	KV-100A
Max. throat capacity	410 mm	520 mm	610 mm	1010 mm
Max. work height	300 mm	310 mm	340 mm	340 mm
Blade speed	Low - 20 ~ 85 M / min. High - 120 ~ 500 M / min.			
Main drive motor	2 HP	2 HP	2 HP	2 HP
Table size	660 x 700 mm		660 x 700 mm	660 x 700 + 450 x 500 mm
Table tilt	2 ways L - 5 deg. R - 15 deg.			
Max. blade - L x W	3350 x 3 ~ 20 mm	3880 x 3 ~ 20 mm	3970 x 3 ~ 20 mm	4540 x 3 ~ 20 mm
Welder capacity	4.2 KVA / # ~ 20 mm			
Net weight	475 kgs	510 kgs	555 kgs	650 kgs

## SPEEDER VERTICAL BANDSAW MACHINE



KB-30

### SPECIFICATIONS

	KB-30	KB-36	KB-45
Max. throat capacity	310 mm	355 mm	455 mm
Max. work height	175 mm	230 mm	255 mm
Blade speed	20 ~ 90 M / min	20 ~ 90 M / min	25 ~ 115 M / min
Main drive motor	1/2 HP	1 HP	1 HP
Table size	500 x 400 mm	500 x 400 mm	600 x 500 mm
Table tilt		4 ways - 15 deg.	
Max. blade - L x W	2520 x 3 ~ 16 mm	2840 x 3 ~ 16 mm	3490 x 3 ~ 16 mm
Welder capacity		2.4 KVA / 3 ~ 16 mm	
Net weight	225 kgs	245 kgs	300 kgs

## SPEEDER HYDRAULIC POWER HACK SAWS



SPH-225H



SPH-280H



SPH-320H



SPH-380H

### SPECIFICATIONS

	SPH-200H	SPH-225H	SPH-280H	SPH-320H	SPH-380H	SPH-450H
Cutting capacity - round	200 mm	225 mm	280 mm	320 mm	380 mm	450 mm
Cutting capacity - rectangle	190 x 190 mm	225 x 220 mm	280 x 250 mm	300 x 300 mm	330 x 350 mm	380 x 430 mm
Max. cutting degrees	45 x 80 deg.	45 x 120 deg.	45 x 140 deg.	45 / 185 deg.	45 / 185 deg.	45 / 250 deg.
Saw bow stroke	118 mm	138 mm	138 mm	138 mm	138 mm	155 mm
Stroke speed - stroke / min.	105 / 125	80 / 100 / 120	80 / 100 / 120	80 / 100 / 120	80 / 100 / 120	80 / 100 / 120
Blade size - mm	350 x 32 x 1.6 x 8.3	400 x 32 x 1.6 x 8.3	450 x 32 x 1.6 x 8.3	500 x 38 x 2 x 10.3	550 x 45 x 2.25 x 10.3	650 x 50 x 2.5 x 12.3
Main motor	1 HP / 4 P	2 HP / 4 P	2 HP / 4 P	2 HP / 4 P	2 HP / 4 P	3 HP / 4 P
Net weight	270 kgs	415 kgs	430 kgs	450 kgs	475 kgs	715 kgs

## SPEEDER VERTICAL BAND SAW MACHINE



VBS-1408



VBS-1610E



VBS-2012



VBS-2012H



VBS-2613

### SPECIFICATIONS

	VBS-1408	VBS-1610E	VBS-2012	VBS-2012H	VBS-2613
Max. throat capacity	356 mm	396 mm	508 mm	508 mm	658 mm
Max. work height	205 mm	255 mm	305 mm	305 mm	330 mm
Wheel diameter	368 mm	408 mm	515 mm	515 mm x 2	665 mm x 2
Blade speed 60 HZ	25 ~ 100 M / min	Low - 25 ~ 100 M / min High - 300 ~ 1200 M / min	Low - 20 ~ 180 M / min High - 120 ~ 1000 M / min	Low - 15 ~ 125 M / min High - 165 ~ 1500 M / min	Low - 15 ~ 125 M / min High - 165 ~ 1500 M / min
Main drive motor	1 HP	2 HP	2 HP	3 HP	3 HP
Table size	500 x 500 mm	550 x 600 mm	600 x 560 mm	600 x 700 mm	600 x 700 mm
Table tilt	R-15°, L-12°, F&B-8°	R-15°, L-12°, F&B-8°	L&R-15°, F&B 8°	R-45°, L-10°	
Max. blade - L x W	2890 x 13 mm	3150 x 16 mm	3970 x 27 mm	4035 x 27 mm	4680 x 27 mm
Net weight	275 kgs	410 kgs	510 kgs	590 kgs	665 kgs

\*Model - 1408E / 1610E / 2012HE / 2613E with Table feed power - 80 kgcm - at 110V, and table stroke - 300 mm

## SPEEDER VERTICAL BAND SAW MACHINE Heavy Duty type



VBS-3612E



FBS-1200

### SPECIFICATIONS

	VBS-3612	VBS-3612E	FBS-1200
Max. throat capacity	915 mm		508 mm
Max. work height	305 mm		505 mm
Wheel diameter	515 mm x 2 / 368 mm x 1		560 mm
Blade speed	L 15 ~ 125 / H - 165 ~ 1500 M / min		15 ~ 90 M / min
Main drive motor	3 HP		7.5 HP
Table size	600 x 700 + 450 x 700 mm		980 x 1320 mm
Table tilt	R - 45 / L - 10 deg		Fixed
Max. blade - L x W	5020 x 27 mm		4480 x 41 mm
Net weight	800 kgs	835 kgs	3850 kgs
Table feed power / Stroke	80 kgcm, 110V / 300 mm		Hydraulic / 1200 mm

BUTT WELDER	FBW-12	FBW-24	FBW-42	FBW-72
Capacity - KVA	1.2 KVA	2.4 KVA	4.2 KVA	7.2 KVA
Carbon / Bi - metal	2 ~ 13 mm / -	3 ~ 16 / 2 ~ 13 mm	6 ~ 19 / 3 ~ 16 mm	3 ~ 25 / 6 ~ 19 mm
Dimension	265 x 260 x 400 mm			445 x 335 x 450 mm
Net weight	17 kgs	20 kgs	25 kgs	60 kgs





# SPEEDER VERTICAL SLOTTING / CNC VERTICAL SLOTTING MACHINES



SSM-200K



SSM-300K



SSM-350CNC

## SPECIFICATIONS

	SSM-200K	SSM-300K	SSM-350K	SSM-200CNC	SSM-300CNC	SSM-350CNC
Ram speed (stroke per minute) 60 Hz	L: 26 - 31 - 36 - 46 spm. H: 53 - 62 - 73 - 93 spm.					
Ratio of indexing	1 : 80	1 : 80	1 : 80	-	-	-
Max. travel of the ram (stroke)	200 mm	300 mm	350 mm	200 mm	300 mm	350 mm
Vertical travel of ram	220 mm	320 mm	320 mm	220 mm	320 mm	320 mm
Swivel angle of head	±30°	±30°	±30°	±30°	±30°	±30°
Distance between end of ram guideway and work table	300 mm	365 mm	470 mm	300 mm	365 mm	470 mm
Distance between tooling center and column surface	355 mm	510 mm	560 mm	355 mm	510 mm	560 mm
Dimension of working table	Ø400 mm	Ø560 mm	Ø560 mm	Ø400 mm	Ø560 mm	Ø560 mm
Longitudinal travel of working table	250 mm	460 mm	460 mm	250 mm	432 mm	432 mm
Cross travel of working table	250 mm	460 mm	460 mm	250 mm	432 mm	432 mm
Driving motor	2 HP 6P / 12P	5 HP 4P / 8P	5 HP 4P / 8P	2 HP 6P / 12P	5 HP 4P / 8P	5 HP 4P / 8P
Net weight	750 kgs	1600 kgs	1700 kgs	900 kgs	1700 kgs	1800 kgs

# SPEEDER CNC SLOTTING MACHINE



SSM-200A1/CNC



SSM-300A1/CNC



SSM-300A2S/CNC



SSM-300A2S/CNC with Rectangular table



SSM-300A2R/CNC with rotary table

## SPECIFICATIONS

	SSM-200A1/CNC	SSM-300A1/CNC	SSM-350A1/CNC	SSM-300A2/CNC	SSM-350A2/CNC
Ram speed (stroke per minute) 60 Hz	L: 26 - 31 - 36 - 46 spm. H: 53 - 62 - 73 - 93 spm.				
Ratio of indexing	1 : 80	1 : 80	1 : 80	only SSM - 200 / 300 / 350 A2R - 1 : 80	
Max. travel of the ram (stroke)	200 mm	300 mm	350 mm	300 mm	350 mm
Vertical travel of ram	220 mm	320 mm	320 mm	320 mm	320 mm
Swivel angle of head	±30°	±30°	±30°	±30°	±30°
Distance between end of ram guideway and work table	300 mm	365 mm	470 mm	SSM-300A2R/CNC:365 SSM-300A2S/CNC:385	SSM-350A2R/CNC:470 SSM-350A2S/CNC:490
Dimension of working table	Ø400 mm	Ø560 mm	Ø560 mm	SSM-300A2R/CNC:Ø560 SSM-300A2S/CNC:500x400	SSM-350A2R/CNC:Ø560 SSM-350A2S/CNC:500x400
Longitudinal travel of working table	250 mm	460 mm	460 mm	432 mm	432 mm
Cross travel of working table	250 mm	432 mm	432 mm	432 mm	432 mm
Driving motor	2 HP 6P / 12P	5 HP 4P / 8P	5 HP 4P / 8P	5 HP 4P / 8P	5 HP 4P / 8P
Net weight	800 kgs	1650 kgs	1750 kgs	1700 kgs	1800 kgs

## FREJOTH SUSPENDED ABRASIVE DE-BURRING MACHINE



SMKS-XF608

### SPECIFICATIONS

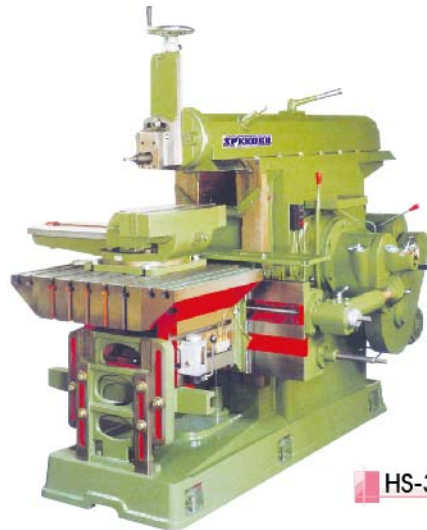
Machine Size	SMKS-XF608	SMKS-XF808
Height	2200 mm	2400 mm
Width	1800 mm	2000 mm
Depth	1500 mm	1500 mm
Weight	1.8 T	2.2 T
Remarks	specific parameters according to the material	

• Specifications can be customized according to customer's product requirements

Other Parameters	SMKS-SL608	SMKS-SL808
Operation panel	Touch screen	Touch screen
Control circuit	PLC	PLC
Processing pressure (adjustable)	0 ~ 14 Mpa	0 ~ 18 Mpa
Traffic (adjustable)	0 ~ 10 M <sup>3</sup>	0 ~ 20 M <sup>3</sup>
Motor power	25 HP	30 HP

• Specifications can be customized according to customer's product requirements

## SPEEDER HIGH SPEED HEAVY DUTY SHAPER



HS-36B

### SPECIFICATIONS

	HS-36B
Max. Stroke of ram	910 mm
Number of stroke	8
Range of stroke per min.	4 ~ 69 (50HZ)
Max. Planing width ( standard )	840 mm
Max. Distance table to ram	500 mm
Vertical travel of tool head	210 mm
Dimensions of table ( L x W x H )	750 x 480 x 390 mm
Motor	3.75 HP (2.8 kw)
Range of table feed	0.15 - 2 mm / per min
Net weight	2600 kgs



**CNC-EB1000R**



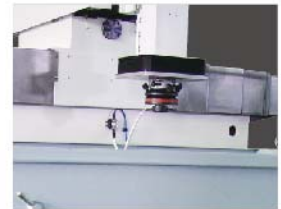
■ Light moving - column (forward and backward displacement)



■ Control system



■ Hydraulic up / down door



■ Sheet metal dust cover for horizontal travel

**SPECIFICATIONS**

	CNC-EB1000R	
Capacity of work tank	1960 x 1100 x 550 mm	
Work table size	1100 x 700 mm	
Longitudinal travel (X - axis)	1000 mm	
Cross travel (Y - axis)	600 mm	
Z axis travel (Z - axis)	500 mm	
Distance between platen to table	500 ~ 1000 mm	
Max. Electrode weight	100 kgs / 3 kgs (Slope machining process)	
Max. Work piece weight	4000 kgs	
Fluid tank capacity	1560 L	
Machine outside dimensions (W x D x H)	3600 x 3200 x 3200 mm	
Machine weight	5000 kgs	
Max. Machining current	90 A	120A (Optional)
Max. Power input	10 KVA	13 KVA
Max. Machining rate (mm 3 / min)	600	800
Min. Electrode wear ratio	0.12 %	
Best surface / Ra	Ra 0.2 μm	
Min. D. R. O. resolution (mm)	0.001 mm	
Generator weight	350 kgs	

## FREJOTH CNC ELECTRICAL DISCHARGE MACHINES



CNC-EB1470L



CNC-EB1675L

### SPECIFICATIONS

	CNC-EB1470L		CNC-EB1510L		CNC-EB1675L		CNC-EB1880L		CNC-EB2010L	
Capacity of work tank	2250 x 1350 x 620 mm		2300 x 1700 x 800 mm		2400 x 1320 x 700 mm		2600 x 1320 x 700 mm		2700 x 1700 x 800 mm	
Work table size	1850 x 1000 mm		1580 x 1100 mm		1850 x 1000 mm		1850 x 1000 mm		2250 x 1100 mm	
Longitudinal travel (X - axis)	1400 mm		1500 mm		1600 mm		1800 mm		2000 mm	
Cross travel (Y - axis)	700 mm		1000 mm		750 mm		800 mm		1000 mm	
Z axis travel (Z - axis)	500 mm		600 mm		550 mm		600 mm		600 mm	
Distance between platen to table	550 ~ 1050 mm		650 ~ 1250 mm		500 ~ 1050 mm		450 ~ 1050 mm		660 ~ 1260 mm	
Max. Electrode weight	450 kgs		500 kgs		450 kgs		500 kgs		500 kgs	
Max. Work piece weight	6000 kgs		11000 kgs		6500 kgs		7000 kgs		9500 kgs	
Fluid tank capacity	2100 L		3500 L		2600 L		2800 L		3800 L	
Machine outside dimensions (W x D x H)	4300 x 3400 x 3250 mm		4600 x 4800 x 3620 mm		4800 x 3800 x 3200 mm		5000 x 4000 x 3200 mm		5200 x 4500 x 3570 mm	
Machine weight	8000 kgs		14500 kgs		8500 kgs		9000 kgs		12500 kgs	
Max. Machining current	90 A	120A (Optional)	90 A	120A (Optional)	90 A	120A (Optional)	90 A	120A (Optional)	90 A	120A (Optional)
Max. Power input	10 KVA	13 KVA	10 KVA	13 KVA	10 KVA	13 KVA	10 KVA	13 KVA	10 KVA	13 KVA
Max. Machining rate (mm 3 / min)	600	800	600	800	600	800	600	800	600	800
Min. Electrode wear ratio	0.12 %		0.12 %		0.12 %		0.12 %		0.12 %	
Best surface / Ra	Ra 0.2 μm		Ra 0.2 μm		Ra 0.2 μm		Ra 0.2 μm		Ra 0.2 μm	
Min. D. R. O. resolution (mm)	0.001 mm		0.001 mm		0.001 mm		0.001 mm		0.001 mm	
Generator weight	350 kgs		350 kgs		350 kgs		350 kgs		350 kgs	

## FREJOTH CNC ELECTRICAL DISCHARGE MACHINES



CNC-EB2210L



CNC-EB3010L-2H

### SPECIFICATIONS

	CNC-EB2210L	CNC-EB2210L-2H	CNC-EB3010L	CNC-EB3010L-2H
Capacity of work tank	2850 x 1700 x 800 mm	2900 x 1700 x 800 mm	3900 x 1700 x 800 mm	3900 x 1700 x 800 mm
Work table size	2250 x 1100 mm	2250 x 1100 mm	3100 x 1100 mm	3100 x 1100 mm
Longitudinal travel (X - axis)	2200 mm	1550 (SM) 775 (DM) mm	3000 mm	2550 (SM) 1275 (DM) mm
Cross travel (Y - axis)	1000 mm	1000 mm	1000 mm	1000 mm
Z axis travel (Z - axis)	600 mm	600 mm	600 mm	600 mm
Distance between platen to table	660 ~ 1260 mm	720 ~ 1320 mm	660 ~ 1260 mm	720 ~ 1320 mm
Max. Electrode weight	500 kgs	500 kgs	500 kgs	500 kgs
Max. Work piece weight	9500 kgs	10000 kgs	16000 kgs	16000 kgs
Fluid tank capacity	4100 L	4700 L	5800 L	6000 L
Machine outside dimensions (W x D x H)	5500 x 4600 x 3570 mm	6500 x 4600 x 3570 mm	6000 x 4600 x 3620 mm	7000 x 4600 x 3620 mm
Machine weight	13500 kgs	15000 kgs	19000 kgs	21000 kgs
Max. Machining current	120 A	120 A	120 A	120 A
Max. Power input	13 KVA	13 KVA	13 KVA	13 KVA
Max. Machining rate (mm 3 / min)	800	800	800	800
Min. Electrode wear ratio	0.12 %	0.12 %	0.12 %	0.12 %
Best surface / Ra	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm	Ra 0.2 μm
Min. D. R. O. resolution (mm)	0.001 mm	0.001 mm	0.001 mm	0.001 mm
Generator weight	380 kgs	380 kgs	380 kgs	380 kgs

## FREJOTH CNC ELECTRICAL DISCHARGE MACHINES



CNC-EB600L ( S.F )



CNC-EB700L

### SPECIFICATIONS

	CNC-EB433	CNC-EB600L	CNC-EB600L ( S.F )	CNC-EB5435L	CNC-EB700L
Capacity of work tank	900 x 520 x 385 mm	1100 x 600 x 400 mm	1100 x 600 x 400 mm	1250 x 800 x 520 mm	1500 x 940 x 520 mm
Work table size	600 x 350 mm	700 x 400 mm	700 x 400 mm	850 x 450 mm	1000 x 600 mm
Longitudinal travel (X - axis)	400 mm	400 mm	400 mm	500 mm	600 mm
Cross travel (Y - axis)	300 mm	300 mm	300 mm	400 mm	450 mm
Z axis travel (Z - axis)	300 mm	300 mm	300 mm	350 mm	400 mm
Distance between platen to table	310 ~ 610 mm	270 ~ 570 mm	270 ~ 570 mm	420 ~ 770 mm	350 ~ 750 mm
Max. Electrode weight	100 kgs	100 kgs	100 kgs	200 kgs	250 kgs
Max. Work piece weight	500 kgs	1000 kgs	1000 kgs	2000 kgs	3000 kgs
Fluid tank capacity	300 L	370 L	370 L	850 L	1100 L
Machine outside dimensions (W x D x H)	1700 x 1600 x 2350 mm	1900 x 1750 x 2350 mm	2700 x 1750 x 2350 mm	2700 x 2250 x 2400 mm	2850 x 2700 x 2610 mm
Machine weight	1750 kgs	2250 kgs	2400 kgs	2700 kgs	3600 kgs
Max. Machining current	60 A 90A (Optional)	60 A 90A (Optional)	60 A 90A (Optional)	60 A 90A (Optional)	60 A 90A (Optional)
Max. Power input	7 KVA 10 KVA	7 KVA 10 KVA	7 KVA 10 KVA	7 KVA 10 KVA	7 KVA 10 KVA
Max. Machining rate (mm 3 / min)	400 600	400 600	400 600	400 600	400 600
Min. Electrode wear ratio	0.12 %	0.12 %	0.12 %	0.12 %	0.12 %
Best surface / Ra	Ra 0.2 µm	Ra 0.2 µm	Ra 0.1 µm	Ra 0.2 µm	Ra 0.2 µm
Min. D. R. O. resolution (mm)	0.001 mm	0.001 mm	0.001 mm	0.001 mm	0.001 mm
Generator weight				320 kgs	320 kgs

## FREJOTH CNC ELECTRICAL DISCHARGE MACHINES



CNC-EB860L



CNC-EB1060L

### SPECIFICATIONS

	CNC-EB860L	CNC-EB1060L	CNC-EB1000R	CNC-EB1270L
Capacity of work tank	1180 x 1100 x 620 mm	1900 x 1100 x 620 mm	1960 x 1100 x 550 mm	2100 x 1250 x 620 mm
Work table size	1200 x 700 mm	1250 x 750 mm	1100 x 700 mm	1350 x 820 mm
Longitudinal travel (X - axis)	800 mm	1000 mm	1000 mm	1200 mm
Cross travel (Y - axis)	600 mm	600 mm	600 mm	700 mm
Z axis travel (Z - axis)	500 mm	500 mm	500 mm	500 mm
Distance between platen to table	420 ~ 950 mm	450 ~ 950 mm	500 ~ 1000 mm	510 ~ 1010 mm
Max. Electrode weight	350 kgs	350 kgs	100 kgs / 3 kgs (Slope machining process)	400 kgs
Max. Work piece weight	4000 kgs	4500 kgs	4000 kgs	5000 kgs
Fluid tank capacity	1400 L	1600 L	1560 L	1900 L
Machine outside dimensions (W x D x H)	3400 x 3250 x 3200 mm	3600 x 3250 x 3200 mm	3600 x 3200 x 3200 mm	4000 x 3400 x 3250 mm
Machine weight	4700 kgs	5200 kgs	5000 kgs	6500 kgs
Max. Machining current	90 A 120A (Optional)	90 A 120A (Optional)	90 A 120A (Optional)	90 A 120A (Optional)
Max. Power input	10 KVA 13 KVA	10 KVA 13 KVA	10 KVA 13 KVA	10 KVA 13 KVA
Max. Machining rate (mm 3 / min)	600 800	600 800	600 800	600 800
Min. Electrode wear ratio	0.12 %	0.12 %	0.12 %	0.12 %
Best surface / Ra	Ra 0.2 µm	Ra 0.2 µm	Ra 0.2 µm	Ra 0.2 µm
Min. D. R. O. resolution (mm)	0.001 mm	0.001 mm	0.001 mm	0.001 mm
Generator weight	350 kgs	350 kgs	350 kgs	350 kgs

## FREJOATH CNC WIRE CUTTER



Wi-430S / Wi-530S



Wi-640S

### SPECIFICATIONS

	Wi-200S	Wi-430S	Wi-530S	Wi-640S
Maximum Workpiece Size L x W x H (mm)	550 x 470 x 115 / 150	700 x 540 x 295	870 x 540 x 295	1000 x 720 x 345
Work table size	450 x 400 mm	640 x 500 mm	740 x 500 mm	870 x 680 mm
Maximum Workpiece Weight	300 kgs	500 kgs	700 kgs	1000 kgs
Drive & Servo	5 axes AC Servo	5 axes AC Servo	5 axes AC Servo	5 axes AC Servo
Simulations Axis	X / Y / U / V (4 axes)	X / Y / U / V (4 axes)	X / Y / U / V (4 axes)	X / Y / U / V (4 axes)
X / Y Axis Travel	210 / 200 mm	400 / 300 mm	500 / 300 mm	600 / 450 mm
Z Axis Travel	155 mm	300 mm	300 mm	350 mm
U / V Axis Travel	40 / 40 mm	100 / 100 mm	100 / 100 mm	120 / 120 mm
Wire Diameter Range	Ø 0.1 ~ 0.3 mm	Ø 0.1 ~ 0.3 mm	Ø 0.1 ~ 0.3 mm	Ø 0.1 ~ 0.3 mm
Max. Taper Angle (°) Workpiece Thickness (mm)	± 15° (70 mm)	± 22.5° (100 mm)	± 22.5° (100 mm)	± 22.5° (130 mm)
Maximum Axes Load	6 kgs	10 kgs	10 kgs	10 kgs
Conductivity	Automatic	Automatic	Automatic	Automatic
Water Tank Capacity	450 L	570 L	570 L	940 L
Net Weight	1700 kgs	2100 kgs	2450 kgs	3500 kgs
Machine Layout Size (W x D x H)	1800 x 1900 x 1850 mm	3100 x 2200 x 2150 mm	3250 x 2200 x 2150 mm	3550 x 2650 x 2300 mm

## FREJOATH CNC WIRE CUTTER



Wi-1065SA

### SPECIFICATIONS

	Wi-1065SA
Maximum Workpiece Size L x W x H (mm)	1550 x 1050 x 515
Work table size	1345 x 855 mm
Maximum Workpiece Weight	4500 kgs
Drive & Servo	5 axes AC Servo
Simulations Axis	X / Y / U / V (4 axes)
X / Y Axis Travel	1000 / 600 mm
Z Axis Travel	520 mm
U / V Axis Travel	160 / 160 mm
Wire Diameter Range	Ø 0.15 ~ 0.3 mm
Max. Taper Angle (°) Workpiece Thickness (mm)	± 22.5° (160 mm)
Maximum Axes Load	16 kgs
Conductivity	Automatic
Water Tank Capacity	2400 L
Net Weight	8000 kgs
Machine Layout Size (W x D x H)	4200 x 4350 x 3250 mm



Wi-30E



Wi-70E



Wi-90E

## SPECIFICATIONS

	Wi-30E	Wi-50E	Wi-60E	Wi-70E	Wi-90E
Machining method	Flushing Type	Flushing Type	Flushing Type	Flushing Type	Flushing Type
Max. work piece size (L x W x H)	760 x 520 x 295	870 x 520 x 295	1100 x 650 x 340	1165 x 680 x 295	1380 x 760 x 295
Max. work Piece weight	500	700	1000	1000	1300
Driver motor	5 Axes AC servo				
Simultaneous axis	XYUV (4 axes)				
X / Y axis travel	400 / 300	500 / 300	600 / 450	750 / 500	900 / 500
Z axis travel	300	300	350	300	300
U / V axis travel	100 / 100				
Wire diameter	Ø0.1 ~ 0.3				
Max. taper angle	±15° (±22.5°)				
Max wire bobbin weight	10				
Conductivity	Automatic				
Capacity of water tank	270	270	300	360	360
Machine weight	1950	2300	3400	4000	5200
Machine outside	2300 x 2200	2600 x 2200	3000 x 2650	3200 x 2700	3600 x 2900
Dimension (W x D x H)	x 2150	x 2150	x 2250	x 2250	x 2300

## FREJOTH CNC DRILLING EDM (ATC series)



CNC-6030AT

### SPECIFICATIONS

	CNC-D2535T	CNC-4030AT	CNC-5060AT	CNC-5040AT
Work Table Dimensions	500 x 300 mm	515 x 390 mm	600 x 700 mm	600 x 490 mm
Table Travel X, Y	350 x 250 mm	400 x 300 mm	500 x 600 mm	500 x 400 mm
Z Axis Travel	350 mm	350 mm	350 mm	350 mm
Min. Electrode Diameter	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm
Max. Workpiece Weight	150 kgs	500 kgs	500 kgs	500 kgs
Packing Dimensions	1800 x 1500 x 2240 mm	2300 x 1800 x 2240 mm	1900 x 1700 x 2400 mm	2300 x 1800 x 2240 mm
Machine Structure	C-Type	Traveling Head	Double Column	Traveling Head

## FREJOTH CNC DRILLING EDM (CNC series)



CNC-D2535

### SPECIFICATIONS

	CNC-D2535	CNC-D2535A	CNC-D4030A	CNC-5060A	CNC-5040A
Work Table Dimensions	500 x 300 mm	500 x 300 mm	510 x 390 mm	600 x 700 mm	600 x 490 mm
Table Travel X, Y	350 x 250 mm	350 x 250 mm	400 x 300 mm	500 x 600 mm	500 x 400 mm
Z Axis Travel	350 mm	350 mm	350 mm	350 mm	350 mm
Min. Electrode Diameter	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm
Max. Workpiece Weight	150 kgs	150 kgs	500 kgs	500 kgs	500 kgs
Packing Dimensions	1300 x 1500 x 2240 mm	1300 x 1500 x 2240 mm	1500 x 1800 x 2240 mm	1900 x 1700 x 2400 mm	1500 x 1800 x 2240 mm
Machine Structure	C-Type	C-Type	Traveling Head	Double Column	Traveling Head

## FREJOTH DRILLING EDM (manual series)



AD-20

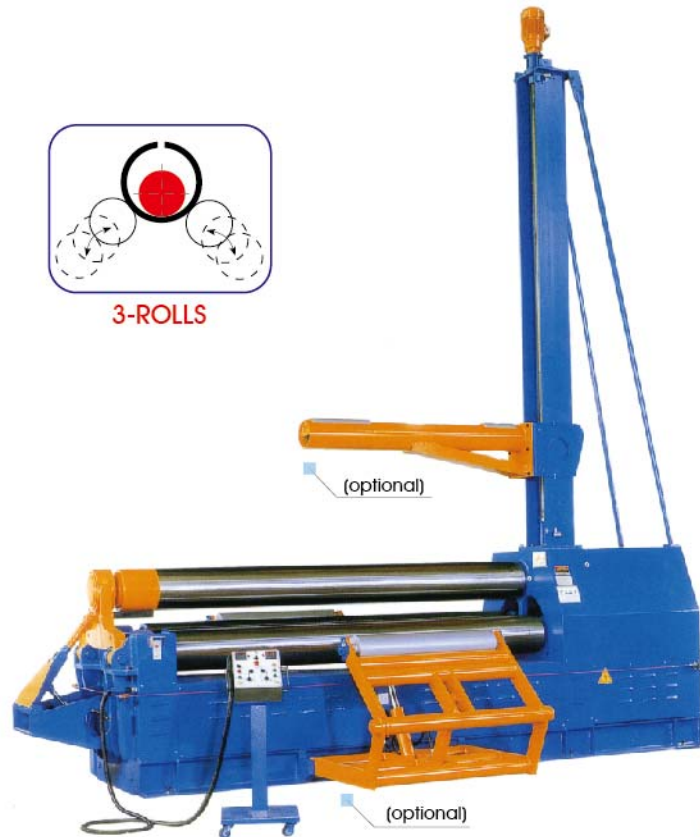
### SPECIFICATIONS

	AD-20	AD-20A	AD-30	AD-30A	AD-40A
Work Table Dimensions	460 x 210 mm	460 x 210 mm	500 x 300 mm	500 x 300 mm	600 x 300 mm
Table Travel X, Y	300 x 200 mm	300 x 200 mm	350 x 250 mm	350 x 250 mm	450 x 350 mm
Z Axis Travel	350 mm	350 mm	350 mm	350 mm	350 mm
Min. Electrode Diameter	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm	Ø 0.2 ~ Ø 3.0 mm
Max. Workpiece Weight	80 kgs	80 kgs	150 kgs	150 kgs	300 kgs
Machine Weight (NW / GW)	500 / 600 kg	550 / 650 kg	750 / 850 kg	800 / 900 kg	1000 / 1100 kg
Packing Dimensions	1240 x 1210 x 2240 mm	1240 x 1210 x 2240 mm	1240 x 1210 x 2240 mm	1240 x 1210 x 2240 mm	1450 x 1450 x 2240 mm





3-ROLLS



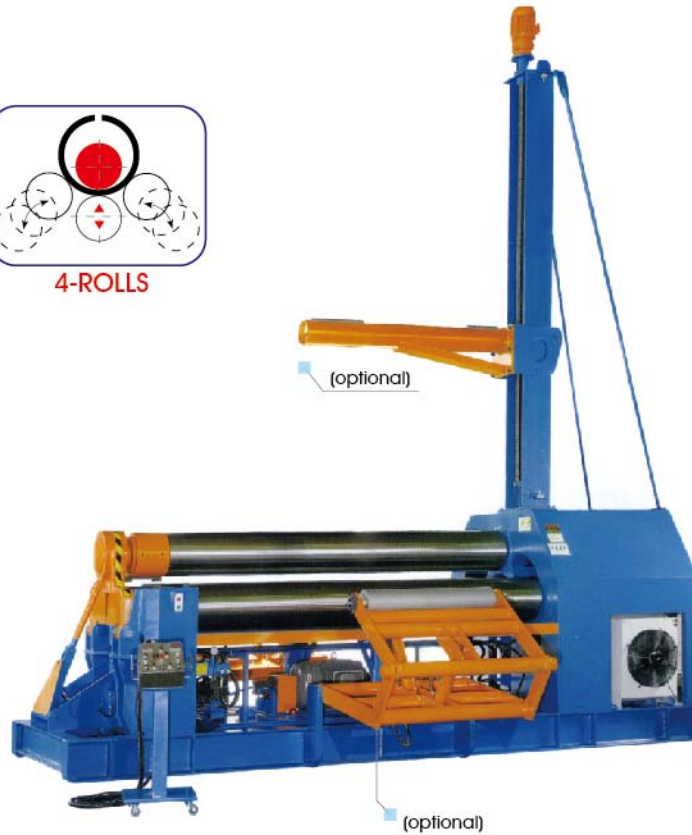
THF-1020H

**SPECIFICATIONS**

	THF-606H	THF-608H	THF-610H	THF-612H	THF-806H	THF-808H	THF-810H	THF-812H
Prebending cap.	6 x 2000 mm	8 x 2000 mm	10 x 2000 mm	12 x 2000 mm	6 x 2500 mm	8 x 2500 mm	10 x 2500 mm	12 x 2500 mm
3 x top roll dia.	8 x 2000 mm	10 x 2000 mm	12 x 2000 mm	16 x 2000 mm	8 x 2500 mm	10 x 2500 mm	12 x 2500 mm	16 x 2500 mm
5 x top roll dia.	9 x 2000 mm	12 x 2000 mm	16 x 2000 mm	19 x 2000 mm	9 x 2500 mm	12 x 2500 mm	16 x 2500 mm	19 x 2500 mm
Roll dia.	210 mm	230 mm	260 mm	280 mm	230 mm	260 mm	280 mm	310 mm
Motor	7.5 HP	7.5 HP	7.5 HP	10 HP	7.5 HP	7.5 HP	10 HP	25 HP
Net weight	4100 kgs	4500 kgs	5000 kgs	7000 kgs	5300 kgs	6200 kgs	8000 kgs	11000 kgs
	THF-816H	THF-820H	THF-825H	THF-1006H	THF-1008H	THF-1010H	THF-1012H	THF-1016H
Prebending cap.	16 x 2500 mm	20 x 2500 mm	25 x 2500 mm	6 x 3100 mm	8 x 3100 mm	10 x 3100 mm	12 x 3100 mm	16 x 3100 mm
3 x top roll dia.	22 x 2500 mm	25 x 2500 mm	30 x 2500 mm	8 x 3100 mm	10 x 3100 mm	12 x 3100 mm	16 x 3100 mm	22 x 3100 mm
5 x top roll dia.	25 x 2500 mm	30 x 2500 mm	35 x 2500 mm	9 x 3100 mm	12 x 3100 mm	16 x 3100 mm	19 x 3100 mm	25 x 3100 mm
Roll dia.	340 mm	370 mm	400 mm	260 mm	280 mm	310 mm	340 mm	370 mm
Motor	30 HP	40 HP	50 HP	7.5 HP	10 HP	25 HP	40 HP	50 HP
Net weight	14000 kgs	16000 kgs	21000 kgs	8400 kgs	10800 kgs	13000 kgs	15000 kgs	18000 kgs
	THF-1020H	THF-1025H	THF-1030H	THF-1035H	THF-1040H	THF-1210H	THF-1212H	THF-1216H
Prebending cap.	20 x 3100 mm	25 x 3100 mm	30 x 3100 mm	35 x 3100 mm	40 x 3100 mm	10 x 3700 mm	12 x 3700 mm	16 x 3700 mm
3 x top roll dia.	25 x 3100 mm	30 x 3100 mm	38 x 3100 mm	44 x 3100 mm	50 x 3100 mm	12 x 3700 mm	16 x 3700 mm	22 x 3700 mm
5 x top roll dia.	30 x 3100 mm	35 x 3100 mm	45 x 3100 mm	52 x 3100 mm	60 x 3100 mm	16 x 3700 mm	19 x 3700 mm	25 x 3700 mm
Roll dia.	420 mm	460 mm	500 mm	550 mm	600 mm	340 mm	370 mm	420 mm
Motor	60 HP	75 HP	100 HP	125 HP	150 HP	40 HP	50 HP	60 HP
Net weight	23000 kgs	26000 kgs	35000 kgs	45000 kgs	55000 kgs	18000 kgs	23000 kgs	28000 kgs
	THF-1220H	THF-1225H	THF-1230H	THF-1235H	THF-1240H	THF-1250H	THF-1260H	THF-2016H
Prebending cap.	20 x 3700 mm	25 x 3700 mm	30 x 3700 mm	35 x 3700 mm	40 x 3700 mm	50 x 3700 mm	60 x 3700 mm	16 x 6100 mm
3 x top roll dia.	25 x 3700 mm	30 x 3700 mm	38 x 3700 mm	44 x 3700 mm	50 x 3700 mm	60 x 3700 mm	70 x 3700 mm	19 x 6100 mm
5 x top roll dia.	30 x 3700 mm	35 x 3700 mm	45 x 3700 mm	52 x 3700 mm	60 x 3700 mm	70 x 3700 mm	80 x 3700 mm	22 x 6100 mm
Roll dia.	460 mm	500 mm	550 mm	600 mm	650 mm	700 mm	800 mm	500 mm
Motor	75 HP	100 HP	125 HP	125 HP	150 HP	250 HP	350 HP	150 HP
Net weight	32000 kgs	35000 kgs	60000 kgs	65000 kgs	75000 kgs	85000 kgs	105000 kgs	70000 kgs



4-ROLLS



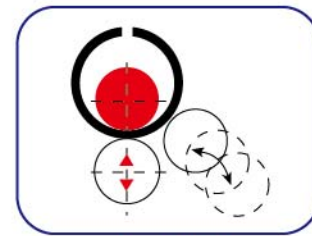
FHF-10416H

**SPECIFICATIONS**

	FHF-5406H	FHF-5408H	FHF-6408H	FHF-6410H	FHF-6412H	FHF-8406H	FHF-8408H	FHF-8410H
Prebending cap.	6 x 1600 mm	8 x 1600 mm	8 x 2000 mm	10 x 2000 mm	12 x 2000 mm	6 x 2500 mm	8 x 2500 mm	10 x 2500 mm
3 x top roll dia.	8 x 1600 mm	10 x 1600 mm	10 x 2000 mm	12 x 2000 mm	16 x 2000 mm	8 x 2500 mm	10 x 2500 mm	12 x 2500 mm
5 x top roll dia.	9 x 1600 mm	12 x 1600 mm	12 x 2000 mm	16 x 2000 mm	19 x 2000 mm	9 x 2500 mm	12 x 2500 mm	16 x 2500 mm
Roll dia.	200 mm	220 mm	230 mm	260 mm	280 mm	230 mm	260 mm	280 mm
Motor	7.5 HP	7.5 HP	7.5 HP	7.5 HP	10 HP	7.5 HP	7.5 HP	10 HP
Net weight	6700 kgs	7000 kgs	7500 kgs	7900 kgs	8200 kgs	7700 kgs	8600 kgs	10600 kgs
	FHF-8412H	FHF-8416H	FHF-8420H	FHF-8425H	FHF-10406H	FHF-10408H	FHF-10410H	FHF-10412H
Prebending cap.	12 x 2500 mm	16 x 2500 mm	20 x 2500 mm	25 x 2500 mm	6 x 3100 mm	8 x 3100 mm	10 x 3100 mm	12 x 3100 mm
3 x top roll dia.	16 x 2500 mm	22 x 2500 mm	25 x 2500 mm	30 x 2500 mm	8 x 3100 mm	10 x 3100 mm	12 x 3100 mm	16 x 3100 mm
5 x top roll dia.	19 x 2500 mm	25 x 2500 mm	30 x 2500 mm	35 x 2500 mm	9 x 3100 mm	12 x 3100 mm	16 x 3100 mm	19 x 3100 mm
Roll dia.	310 mm	340 mm	370 mm	400 mm	260 mm	280 mm	310 mm	340 mm
Motor	25 HP	30 HP	40 HP	50 HP	7.5 HP	10 HP	25 HP	40 HP
Net weight	12500 kgs	15500 kgs	18000 kgs	20500 kgs	9300 kgs	11800 kgs	14500 kgs	19000 kgs
	FHF-10416H	FHF-10420H	FHF-10425H	FHF-10430H	FHF-10435H	FHF-10440H	FHF-12410H	FHF-12412H
Prebending cap.	16 x 3100 mm	20 x 3100 mm	25 x 3100 mm	30 x 3100 mm	35 x 3100 mm	40 x 3100 mm	10 x 3700 mm	12 x 3700 mm
3 x top roll dia.	22 x 3100 mm	25 x 3100 mm	30 x 3100 mm	38 x 3100 mm	44 x 3100 mm	50 x 3100 mm	12 x 3700 mm	16 x 3700 mm
5 x top roll dia.	25 x 3100 mm	30 x 3100 mm	35 x 3100 mm	45 x 3100 mm	52 x 3100 mm	60 x 3100 mm	16 x 3700 mm	19 x 3700 mm
Roll dia.	370 mm	420 mm	460 mm	500 mm	550 mm	600 mm	340 mm	370 mm
Motor	50 HP	60 HP	70 HP	100 HP	125 HP	150 HP	40 HP	50 HP
Net weight	23000 kgs	29000 kgs	32000 kgs	40000 kgs	52000 kgs	65000 kgs	21000 kgs	27000 kgs
	FHF-12416H	FHF-12420H	FHF-12425H	FHF-12430H	FHF-12435H	FHF-12440H		
Prebending cap.	16 x 3700 mm	20 x 3700 mm	25 x 3700 mm	30 x 3700 mm	35 x 3700 mm	40 x 3700 mm		
3 x top roll dia.	22 x 3700 mm	25 x 3700 mm	30 x 3700 mm	38 x 3700 mm	44 x 3700 mm	50 x 3700 mm		
5 x top roll dia.	25 x 3700 mm	30 x 3700 mm	35 x 3700 mm	45 x 3700 mm	52 x 3700 mm	60 x 3700 mm		
Roll dia.	420 mm	460 mm	500 mm	550 mm	600 mm	650 mm		
Motor	60 HP	75 HP	100 HP	125 HP	125 HP	150 HP		
Net weight	34000 kgs	37000 kgs	45000 kgs	70000 kgs	78000 kgs	90000 kgs		



LPR



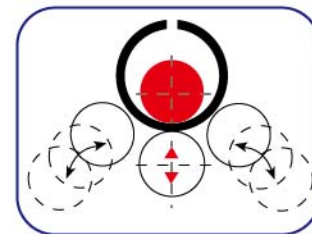
3 - ROLLS

**SPECIFICATIONS**

	LPR-1207	LPR-1209	LPR-1214	LPR-1506	LPR-1508	LPR-1512
Capacity	1270 x 7 mm	1270 x 9 mm	1270 x 14 mm	1550 x 6 mm	1550 x 8 mm	1550 x 12 mm
Roll diameter	160 mm	180 mm	200 mm	160 mm	180 mm	200 mm
Driven motor	5 HP	5 HP	5 HP	5 HP	5 HP	7.5 HP
Hydraulic motor	1 HP	2 HP	3 HP	1 HP	2 HP	7.5 HP
Net weight	1950 kgs	2300 kgs	3150 kgs	2200 kgs	2600 kgs	3700 kgs
	LPR-1516	LPR-1807	LPR-1810	LPR-1814	LPR-2503	LPR-2505
Capacity	1550 x 16 mm	1850 x 7 mm	1850 x 10 mm	1850 x 14 mm	2450 x 3 mm	2450 x 5 mm
Roll diameter	240 mm	180 mm	200 mm	240 mm	160 mm	180 mm
Driven motor	7.5 HP	5 HP	7.5 HP	10 HP	5 HP	5 HP
Hydraulic motor	7.5 HP	2 HP	7.5 HP	10 HP	1 HP	2 HP
Net weight	4000 kgs	2900 kgs	4200 kgs	4500 kgs	2850 kgs	3400 kgs
	LPR-2508	LPR-2512	LPR-3004	LPR-3006	LPR-3008	
Capacity	2450 x 8 mm	2450 x 12 mm	3050 x 4 mm	3050 x 6 mm	3050 x 8 mm	
Roll diameter	200 mm	240 mm	180 mm	200 mm	240 mm	
Driven motor	10 HP	15 HP	5 HP	10 HP	15 HP	
Hydraulic motor	10 HP	15 HP	2 HP	10 HP	15 HP	
Net weight	4800 kgs	5200 kgs	3800 kgs	5300 kgs	5900 kgs	



TPR



4 - ROLLS

**SPECIFICATIONS**

	TPR-1202	TPR-1203	TPR-1204	TPR-1207	TPR-1209	TPR-1214	TPR-1503
Capacity	1270 x 2 mm	1270 x 3 mm	1270 x 4 mm	1270 x 7 mm	1270 x 9 mm	1270 x 14 mm	1550 x 3 mm
Roll diameter	80 mm	100 mm	120 mm	160 mm	180 mm	200 mm	120 mm
Driven motor	2 HP	2 HP	2 HP	5 HP	5 HP	5 HP	2 HP
Hydraulic motor	1 HP	1 HP	1 HP	1 HP	2 HP	3 HP	1 HP
Net weight	1250 kgs	1500 kgs	1900 kgs	2540 kgs	3000 kgs	4100 kgs	2150 kgs
	TPR-1506	TPR-1508	TPR-1512	TPR-1802	TPR-1804	TPR-1807	
Capacity	1550 x 6 mm	1550 x 8 mm	1550 x 12 mm	1850 x 2 mm	1850 x 4 mm	1850 x 7 mm	
Roll diameter	160 mm	180 mm	200 mm	120 mm	160 mm	180 mm	
Driven motor	5 HP	5 HP	5 HP	2 HP	5 HP	5 HP	
Hydraulic motor	1 HP	2 HP	3 HP	1 HP	1 HP	2 HP	
Net weight	2200 kgs	2900 kgs	4550 kgs	2470 kgs	3250 kgs	3800 kgs	
	TPR-1810	TPR-2503	TPR-2505	TPR-2508	TPR-3004	TPR-3006	
Capacity	1850 x 10 mm	2450 x 3 mm	2450 x 5 mm	2450 x 8 mm	3050 x 4 mm	3050 x 6 mm	
Roll diameter	200 mm	160 mm	180 mm	200 mm	180 mm	200 mm	
Driven motor	5 HP	5 HP	5 HP	5 HP	5 HP	5 HP	
Hydraulic motor	3 HP	1 HP	2 HP	3 HP	2 HP	3 HP	
Net weight	5150 kgs	3700 kgs	4420 kgs	4850 kgs	4950 kgs	6500 kgs	



**SPECIFICATIONS**

	HB-4802	HB-7202	HB-8002	HB-9602	HB-12002	HB-16002	HB-18002	HB-20002	HB-24002
Folding length	1230 mm	1830 mm	2030 mm	2440 mm	3030 mm	4000 mm	4500 mm	5000 mm	6000 mm
Folding capacity	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm	1.6 mm
Minimum folding	60°	60°	60°	60°	60°	60°	60°	60°	60°
Folding angle	Any angle	Any angle	Any angle	Any angle	Any angle	Any angle	Any angle	Any angle	Any angle
Weight	650 kgs	1000 kgs	1200 kgs	1500 kgs	2500 kgs	3800 kgs	4200 kgs	5600 kgs	7000 kgs
Main motor	3 HP	3 HP	3 HP	3 HP	3 HP	3 HP	5 HP	5 HP	5 HP

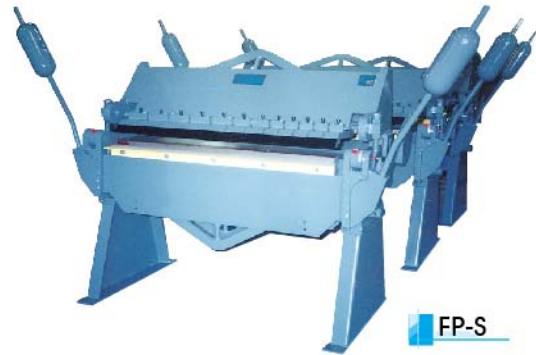


**SPECIFICATIONS**

	MB-4802	MB-7202	MB-8002	MB-9602
Folding length	1230 mm	1830 mm	2030 mm	2440 mm
Folding capacity	1.6 mm	1.6 mm	1.6 mm	1.6 mm
Minimum folding	60°	60°	60°	60°
Folding angle	Any angle	Any angle	Any angle	Any angle
Weight	550 kgs	900 kgs	1000 kgs	1250 kgs



**FK-S**



**FP-S**

**SPECIFICATIONS**

	Bending Length	Capacity Mild Steel	Capacity Stainless Steel	Shipping Weight ( G.W. )
FK-S12016	3048 mm ( 120" )	1.6 mm ( 16 GA )	1.0 mm ( 20 GA )	1350 kgs ( 2970 lbs )
FK-S12014	3048 mm ( 120" )	2.0 mm ( 14 GA )	1.2 mm ( 18 GA )	1450 kgs ( 3190 lbs )
FK-S9618	2438 mm ( 96" )	1.2 mm ( 18 GA )	0.8 mm ( 22 GA )	690 kgs ( 1513 lbs )
FK-S9616	2438 mm ( 96" )	1.6 mm ( 16 GA )	1.2 mm ( 20 GA )	865 kgs ( 1883 lbs )
FK-S9612	2438 mm ( 96" )	2.5 mm ( 12 GA )	1.6 mm ( 16 GA )	1250 kgs ( 2750 lbs )
FK-S7212	1828 mm ( 72" )	2.5 mm ( 12 GA )	1.6 mm ( 16 GA )	1025 kgs ( 2255 lbs )
FK-S4812	1219 mm ( 48" )	2.5 mm ( 12 GA )	1.6 mm ( 16 GA )	570 kgs ( 1254 lbs )
FP-S12016	3048 mm ( 120" )	1.6 mm ( 16 GA )	1.0 mm ( 20 GA )	1650 kgs ( 3630 lbs )
FP-S12014	3048 mm ( 120" )	2.0 mm ( 14 GA )	1.2 mm ( 18 GA )	1745 kgs ( 3839 lbs )
FP-S9616	2438 mm ( 96" )	1.6 mm ( 16 GA )	1.0 mm ( 20 GA )	1000 kgs ( 2200 lbs )
FP-S9612	2438 mm ( 96" )	2.5 mm ( 12 GA )	1.6 mm ( 16 GA )	1275 kgs ( 2805 lbs )
FP-S7212	1828 mm ( 72" )	2.5 mm ( 12 GA )	1.6 mm ( 16 GA )	1150 kgs ( 2530 lbs )
FP-S4812	1219 mm ( 48" )	2.5 mm ( 12 GA )	1.6 mm ( 16 GA )	865 kgs ( 1903 lbs )



**FP-B**



**FN-M616**

**SPECIFICATIONS**

	Bending Length	Capacity mild Steel	Maximum Deep Of Box	Maximum Lift Of Beam	Weight
FP-B4822	1219 mm ( 48" )	0.8 mm ( 22 GA )	100 mm ( 4" )	22 mm ( 7/8" )	145 kgs ( 319 lbs )
FP-B4816	1219 mm ( 48" )	1.6 mm ( 16 GA )	100 mm ( 4" )	32 mm ( 1 1/4" )	230 kgs ( 506 lbs )

**SPECIFICATIONS**

	Capacity	Material Capacity	Notch	Stock	Shipping Weight
FN-M616	4 TON	1.6 mm ( 16 GA )	152 x 152 x 90° ( 6" x 6" x 90° )	19 mm ( 3/4" )	100 kgs ( 220 lbs )

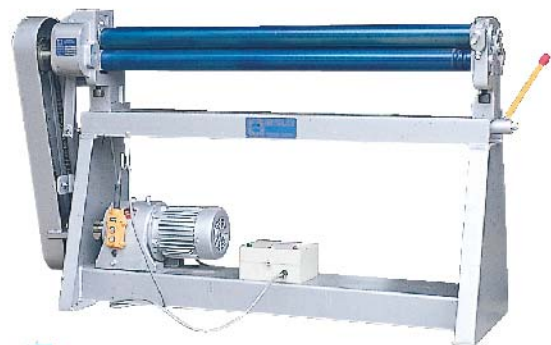

**FS-F**

**FS-P5216H**
**SPECIFICATIONS**

	Cutting Length	Capacity Mild Steel	Back Gauge Range	Front Gauge Range	Weight
FS-F5216	1320 mm ( 52" )	1.6 mm ( 16 GA )	700 mm ( 27.5" )	960 mm ( 37.8" )	540 kgs ( 1188 lbs )
FS-F3616	914 mm ( 36" )	1.6 mm ( 16 GA )	700 mm ( 27.5" )	960 mm ( 37.8" )	400 kgs ( 880 lbs )

**SPECIFICATIONS**

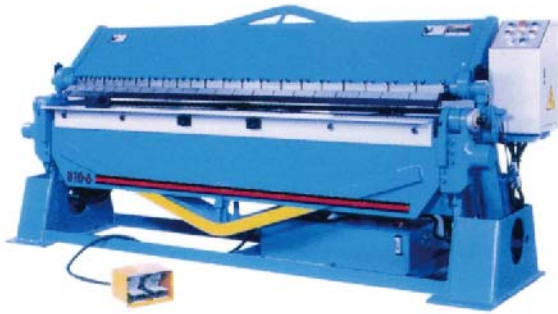
	Cutting Length	Capacity Mild Steel	Capacity Stainless Steel	Back Gauge Range	Front Gauge Range	Weight
FS-P5216H	1320 mm ( 52" )	1.6 mm ( 16 GA )	1.0 mm ( 20 GA )	700 mm ( 27.5" )	960 mm ( 37.8" )	640 kgs ( 1408 lbs )
FS-P5212H	1320 mm ( 52" )	2.5 mm ( 12 GA )	1.6 mm ( 16 GA )	700 mm ( 27.5" )	960 mm ( 37.8" )	850 kgs ( 1870 lbs )
FS-P5210H	1320 mm ( 52" )	3.2 mm ( 10 GA )	1.6 mm ( 16 GA )	700 mm ( 27.5" )	960 mm ( 37.8" )	850 kgs ( 1870 lbs )
FS-P5216A	1320 mm ( 52" )	1.6 mm ( 16 GA )	1.0 mm ( 20 GA )	700 mm ( 27.5" )	960 mm ( 37.8" )	570 kgs ( 1254 lbs )


**FR-S**

**FR-P**
**SPECIFICATIONS**

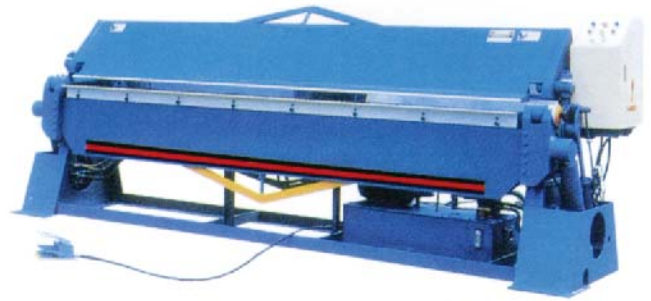
	Forming Width	Material Capacity	Diameter Of Rolls	Minimum Radius	Shipping Weight
FR-S2420	609 mm ( 24" )	1.0 mm ( 20 GA )	50 mm ( 2" )	33.25 mm ( 1.3" )	75 kgs ( 165 lbs )
FR-S3622	914 mm ( 36" )	0.8 mm ( 22 GA )	50 mm ( 2" )	33.25 mm ( 1.3" )	130 kgs ( 286 lbs )
FR-S5016	1270 mm ( 50" )	1.6 mm ( 16 GA )	75 mm ( 3" )	50 mm ( 2" )	250 kgs ( 550 lbs )

**SPECIFICATIONS**

	Working length	Capacity mild steel	Rolls Dia.	Max. dia of rolling capacity	Shipping Weight
FR-P5016	1270 mm ( 50" )	1.6 mm ( 16 GA )	76 mm ( 3" )	101 mm ( 4" )	420 kgs ( 924 lbs )



HFP-9610



HFK-9612

**SPECIFICATIONS**

	HFP-7212	HFP-9612	HFP-9610	HFP-12014	HFP-12012	HFP-14418
Capacity - MM	2.5 x 1830 mm	2.5 x 2440 mm	3.2 x 2440 mm	2.0 x 3050 mm	2.5 x 3050 mm	1.25 x 3660 mm
Capacity - Inch	72" x 12 Ga.	96" x 12 Ga.	96" x 10 Ga.	120" x 14 Ga.	120" x 12 Ga.	144" x 18 Ga.
Max. Lift of beam	38 mm	38 mm	38 mm	50 mm	50 mm	50 mm
Beam adjustment	22 mm	22 mm	22 mm	22 mm	22 mm	22 mm
Motor	2 HP	3 HP	5 HP	3 HP	5 HP	3 HP
Net weight	1530 kg	2110 kg	2783 kg	2300 kg	3133 kg	2420 kg

**HYDRAULIC BRAKES - STRAIGHT BRAKE**

**SPECIFICATIONS**

	HFK-7212	HFK-9612	HFK-9610	HFK-12014	HFK-12012	HFK-14418
Capacity - MM	2.5 x 1850 mm	2.5 x 2440 mm	3.2 x 2440 mm	2.0 x 3050 mm	2.5 x 3050 mm	1.25 x 3660 mm
Capacity - Inch	72" x 12 Ga.	96" x 12 Ga.	96" x 10 Ga.	120" x 14 Ga.	120" x 12 Ga.	144" x 18 Ga.
Max. Lift of beam	38 mm	50 mm	50 mm	50 mm	50 mm	50 mm
Beam adjustment	22 mm	22 mm	22 mm	22 mm	22 mm	22 mm
Motor	3 HP	3 HP	5 HP	3 HP	5 HP	3 HP
Net weight	1420 kg	2000 kg	2630 kg	2198 kg	3466 kg	2310 kg



FBB-20

**SPECIFICATIONS**

Capacity	Approx. 25 mm (1") of material 0.5-1.0 mm (20 - 26 GA)
Depth of pocket	8 mm (5/16") width of hammer-over edge adjustable up to 9.5 mm (3/8")
Speed	25 feet / 76.2 meter per minute
Motor	AC Motor 1 HP - 3Phase - Manual switch
Drive	V-belt
Overall height	812.8 mm (32")
Overall dimension	914 mm (36") L x 419 mm (16-1/2") W x 927 mm (36-1/2") H
Weight	150 kgs (330 lbs)

MODEL	Optional rolls	Capacity	Approx. Material used	Size
	Double seam rolls	0.5-1.0 mm 20 to 26 gauge	25.4 mm (1")	10 mm 3/8" Seam
	Drive cleat rolls	0.5-1.0 mm 20 to 26 gauge	54 mm (2-1/8")	28.5 mm 1-1/8" Width
	Right angle flange rolls	0.5-1.0 mm 20 to 26 gauge	up to 10 mm (3/8")	10 mm up to 3/8" High



**HIW-40**  
capacity:40 Ton



**HIW-45/60**  
capacity:45/60 Ton



**HIW-60DC/80/100**  
capacity:60/80/100 Ton



**HIW-125/140/175**  
capacity:125/140/175 Ton

**SPECIFICATIONS**

		HIW-40	HIW-45	HIW-60	HIW-60DC	HIW-80	HIW-100	HIW-125	HIW-140	HIW-175
Punching	Rated capacity	40 Ton	45 Ton	60 Ton	60 Ton	80 Ton	100 Ton	125 Ton	140 Ton	175 Ton
	Maximum capacity	20 x 15	22 x 15	28 x 15	29 x 15	28 x 20	27 x 25	35 x 25	39 x 25	40 x 32
	Diameter x thickness	38 x 8	38 x 8	38 x 11	57 x 8	57 x 10	57 x 12	57 x 16	57 x 17	57 x 22
	Stroke length	32	50	55	55	55	80	80	80	80
	Speed – 20 mm travel	23 cycles/min	20 cycles/min	26 cycles/min	20 cycles/min	20 cycles/min	20 cycles/min	20 cycles/min	20 cycles/min	20 cycles/min
	Standard throat depth	175	175	220	305	305	355	355	355	625
	Deep throat model (optional)	-	210	250	625	625	625	625	625	625
	Largest hole (standard)	38	38	38	57	57	57	57	57	57
	Largest hole (optional)	57	110	110	160	160	160	225	225	225
	Max. section flange punch	-	102	102	305	305	305	305	305	380
Working height	1075	940	940	1030	1090	1040	1060	1060	1134	
Shearing	Flat bar - max. thickness	200 x 13	200 x 10	200 x 20	230 x 20	300 x 20	380 x 20	380 x 25	400 x 25	380 x 30
	Flat bar - max. width	350 x 6	300 x 12	300 x 15	375 x 10	450 x 15	480 x 15	600 x 15	600 x 20	600 x 20
	Length of blade	352.5	317.5	317.5	405	483	500	620	620	620
	Angle flange trim - max 45°	80 x 10	80 x 10	80 x 10	100 x 15	100 x 15	120 x 15	120 x 15	120 x 15	120 x 15
	Working height	1075	940	940	890	890	890	900	800	850
Angle cutting	90° cut	80 x 8	100 x 10	127 x 12	130 x 13	150 x 13	150 x 15	150 x 18	150 x 18	200 x 20
	45° miter (true int. / ext.)	50 x 6	70 x 6	80 x 8	70 x 10	70 x 10	80 x 10	80 x 10	80 x 10	80 x 10
	Working height	1210	1140	1140	1130	1155	1155	1160	1160	1160
Section cutting	Round / Square	30 / 25	30 / 30	40 / 35	45 / 45	45 / 45	50 / 50	55 / 55	55 / 55	65 / 55
	Section blades - round	30	30	20, 40	16, 25, 45	16, 25, 45	20, 30, 50	20, 40, 55	20, 40, 55	20, 25, 30, 40, 65
	Section blades - square	25	30	16, 35	20, 45	20, 45	30, 50	30, 40, 55	30, 40, 55	25, 40, 55
	Channel / beam (optional)	76 x 38	80 x 45	102 x 51	130 x 65	130 x 65	160 x 90	200 x 100	200 x 100	300 x 125
	Tee (optional)	38 x 6	40 x 7	76 x 10	90 x 12	90 x 12	100 x 12	120 x 12	120 x 12	150 x 15
	Working height	1140	1135	1140	1175	1175	1170	1170	1170	1170
Notching	Material thickness	-	8	10	10	12	13	13	13	16
	Width - rectangle	-	35	42	45	40	52	60	60	60
	Depth - rectangle	-	75	100	90	90	100	100	100	100
	Depth - vee (optional)	-	60	60	60	60	70	80	80	80
	Angle flange - max. profile (optional)	-	80 x 8	100 x 10	100 x 10	100 x 10	100 x 13	100 x 13	100 x 13	110 x 14
	Working height	-	940	940	890	890	890	900	900	900
Std. throat	Motor power	5 HP	5 HP	5.5 HP	7.5 HP	10 HP	15 HP	15 HP	15 HP	20 HP
	Net weight	570 kgs	1100 kgs	1300 kgs	1650 kgs	2000 kgs	3100 kgs	3400 kgs	3500 kgs	5400 kgs
	Gross weight	640 kgs	1200 kgs	1450 kgs	1800 kgs	2200 kgs	3300 kgs	3600 kgs	3700 kgs	5700 kgs
	Machine dim.(LxWxH), cm	106 x 55 x 148	145 x 59 x 162	152 x 59 x 170	164 x 71 x 177	176 x 71 x 183	190 x 79 x 191	200 x 80 x 203	202 x 85 x 203	270 x 112 x 210
	Packed dim.(LxWxH), cm	122 x 64 x 159	159 x 86 x 182	177 x 86 x 186	191 x 90 x 201	198 x 90 x 207	217 x 101 x 212	230 x 102 x 221	232 x 107 x 221	287 x 135 x 224
Option accessories	Deep throat	-	-	-	1850 kgs	2200 kgs	3300 kgs	3700 kgs	3800 kgs	5500 kgs
	Net weight	-	-	-	2050 kgs	2400 kgs	3500 kgs	3900 kgs	4000 kgs	5800 kgs
	Gross weight	-	-	-	2050 kgs	2400 kgs	3500 kgs	3900 kgs	4000 kgs	5800 kgs
	Machine dim.(LxWxH), cm	-	-	-	194 x 71 x 177	206 x 71 x 183	210 x 79 x 191	227 x 80 x 203	229 x 85 x 203	270 x 112 x 210
	Packed dim.(LxWxH), cm	-	-	-	221 x 90 x 201	226 x 90 x 209	229 x 101 x 217	250 x 101 x 222	255 x 108 x 221	285 x 127 x 235
	Corner notch	-	150 sq x 3	150 sq x 4	250 sq x 6	250 sq x 6	250 sq x 6	250 sq x 6	250 sq x 6	250 sq x 6
	Tube notch	-	40	60	60	83	83	108	108	108
Bending	Bar bend max. capacity	80 x 10	100 x 12	150 x 12	250 x 12	250 x 15	250 x 20	250 x 22	250 x 22	250 x 25
	Sheet bend max. capacity	-	-	-	500 x 3	500 x 3	500 x 3	700 x 3	700 x 3	700 x 4
Punching at notch station	Throat depth	-	85	110	125	125	125	125	125	125
	Max. capacity	-	18 x 12	20 x 12	38 x 7	38 x 8	38 x 10	38 x 12	38 x 12	38 x 13





HPM-100

**SPECIFICATIONS**

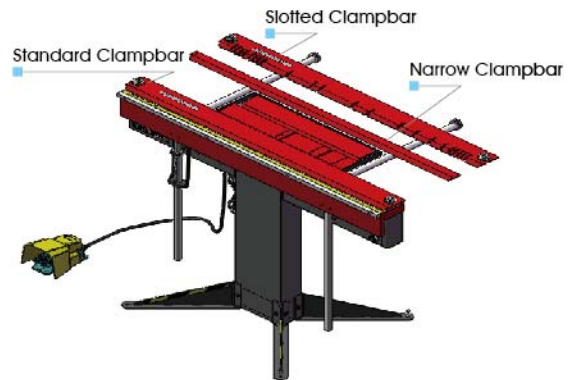
	HPM-60	HPM-80	HPM-100	HPM-125	HPM-140
Rated capacity	60	80	100	125	140
Maximum capacity	29 x 15 mm	28 x 20 mm	27 x 25 mm	35 x 25 mm	39 x 25 mm
Diameter x thickness	57 x 8 mm	57 x 10 mm	57 x 12 mm	57 x 16 mm	57 x 17 mm
Stroke length	55 mm	55 mm	80 mm	80 mm	80 mm
Throat depth	625 mm	625 mm	625 mm	625 mm	625 mm
Large hole (standard)	57 mm	57 mm	57 mm	57 mm	57 mm
Large hole (optional)	160 mm	160 mm	160 mm	225 mm	225 mm
Maximum section	305 mm	305 mm	305 mm	305 mm	305 mm
Working height	1075 mm	1075 mm	1050 mm	1056 mm	1056 mm
Motor power	7.5 HP (5.5 kw)	10 HP (7.5 kw)	10 HP (7.5 kw)	15 HP (11 kw)	15 HP (11 kw)
Net weight	1400 kg	1700 kg	2230 kg	2750 kg	2800 kg

**OPTIONAL ACCESSORIES**

	HPM-60	HPM-80	HPM-100	HPM-125	HPM-140
Corner notch Max. capacity	250 x 250 x 6 mm	250 x 250 x 6 mm	250 x 250 x 6 mm	250 x 250 x 6 mm	250 x 250 x 6 mm
Tube notch max. outside diameter	83 mm	83 mm	108 mm	108 mm	108 mm
Max. sheet bending	500 x 3 mm	500 x 3 mm	500 x 3 mm	700 x 3 mm	700 x 3 mm
Max. bar bending	250 x 12 mm	250 x 15 mm	250 x 20 mm	250 x 22 mm	250 x 22 mm



1250E



**Feature :**

- \*Get rid of the traditional style but light weight.
- \*Electromagnetic clamping faster and easy to carry.
- \*Can bend a variety of shapes sheet metal.
- \*Angle ruler re-positioning, more accurate.
- \*PCB design, easy to replacement.

**SPECIFICATIONS**

	1250E
Size	1250 x 1.6 mm
L x W x H	1310 x 910 x 900 mm
Clamping Force	6 Tonne
Weight	150 kg
Electrical	1 ph, 220 / 240 VAC, 10A



**HN-4200**



**HN-6200**



**HN-6220V**

**SPECIFICATIONS**

	HN-4200	HN-6200	HN-6220V
Motor	3 HP	4 HP	4 HP
Blade length	200 x 200 mm	220 x 220 mm	220 x 220 mm
Table size	700 x 600 mm	650 x 650 mm	950 x 795 mm
Strokes per minute	50	15	15
Working force	12 Tons	24 Tons	24 Tons
Cutting angle	fixed: 90 degree	fixed: 90 degree	30 ~ 140 degree
Cutting capacity: Mild steel r=42 kg / mm <sup>2</sup> Mild steel r=60 kg / mm <sup>2</sup>	4 mm / 9 GA 3 mm / 12 GA	6 mm / 4 GA 5 mm / 7 GA	6 mm / 4 GA 5 mm / 7 GA
Noise	70 dB	70 dB (at 1 Meter)	70 dB (at 1 Meter)
Overall dimension	830 x 700 x 1050 mm	660 x 660 x 1100 mm	960 x 950 x 1250 mm
Packing size	940 x 730 x 1115 mm	892 x 745 x 1192 mm	1140 x 1090 x 1360 mm
N.W. / G.W.	375 kgs / 410 kgs	495 kgs / 525 kgs	758 kgs / 790 kgs



**PN-2150**



**PN-3130**

**SPECIFICATIONS**

	PN-2150	PN-3130
Working pressure	115 P.S.I.	115 P.S.I.
Blade length	154 x 154 mm ( 6" x 6" )	130 x 130 mm
Table size	600 x 460 mm	600 x 460 mm
Strokes per minute	40	50
Working force	2.2 Tons	2.2 Tons
Cutting capacity: mild steel R=42 kg/mm <sup>2</sup>	2 mm / 14 GA	3 mm / 11 GA 2 mm / 13 GA
Noise	68 dB ( at 1 Meter )	68 dB
Emergency stop	YES	YES
Overall dimension	660 x 600 x 1260 mm	660 x 600 x 1260 mm
Packing size	754 x 706 x 1366 mm	754 x 706 x 1366 mm
N.W. / G.W.	170 / 198 kgs	160 / 188 kgs



**BM-42A**



**BM-60A**



**BM-65A**



**BM-70A**

**SPECIFICATIONS**

	BM-42A Without Mandrel		BM-60A Without Mandrel		BM-65A Without Mandrel		BM-70A Without Mandrel	
	Diameter ≤	Thickness ≤	Diameter ≤	Thickness ≤	Diameter ≤	Thickness ≤	Diameter ≤	Thickness ≤
Hard and soft copper pipes , annealed brass pipes	42 mm	1.5 mm	54 mm	4 mm	54 mm	4 mm	64 mm	4 mm
Steel pipe for electricity plants	40 mm	1.5 mm	54 mm	2 mm	54 mm	2 mm	60 mm	2 mm
Stainless steel AISI 304 / 316 pipes	30 mm	2 mm	42 mm	3 mm	42 mm	3 mm	60 mm	3 mm
Hydraulic steel tubes ST , 35.4	42 mm	3 mm	54 mm	4 mm	54 mm	4 mm	60 mm	4 mm
Furniture tubes	42 mm	2 mm	54 mm	3 mm	54 mm	3 mm	60 mm	3 mm
FE boiler pipes	42 mm	3 mm	54 mm	4 mm	54 mm	4 mm	60 mm	4 mm
Aluminum pipes	42 mm	3 mm	54 mm	5 mm	54 mm	5 mm	60 mm	8 mm
Gas pipes UNI 5745	1-1/4"	Standard	1-1/2"	Standard	1-1/2"	Standard	2"	Standard
Double coated pipe	42 mm	Standard	54 mm	Standard	63 mm	Standard	-	-
Standard centreline bending radius	3 or 4 mm x Ø		3 or 4 mm x Ø		3 or 4 mm x Ø		3 or 4 mm x Ø	
Motor power	0.65 kw / 220 v ( 380 v )		1.1 kw / 220 v ( 380 v )		1.5 kw / 220 v ( 380 v )		1.5 / 2.2 kw / 220 v ( 415 v )	
Dimensions ( L x W x H )	600 x 180 x 450 mm		600 x 220 x 470 mm		700 x 520 x 1250 mm		810 x 515 x 1100 mm	
Weight (nt)	94 kgs		107 kgs		185 kgs		210 kgs	



**SK-30**



**SK-50**

**SPECIFICATIONS**

	SK-30	SK-50
Motor	1 HP ( 0.75 kw )	3 HP ( 2.25 kw )
Shaft speed	5 / 10 RPM ( 2 speed )	60 HZ : 22 RPM ; 50 HZ : 18 RPM
Shaft diameters	Ø 30 mm	Ø 50 mm
Top roll diameters	Ø 148 mm	Ø 155 mm
Lower rolls diameters	Ø 118 mm	Ø 155 mm
Operating position	Vertical or horizontal	Vertical or horizontal
Foot pedal stand	Yes	Yes
Overall dimension	790 x 500 x 1420 mm	950 x 710 x 1350 mm
N.W / G.W	239 kgs / 275 kgs	346 kgs / 388 kgs



SK-75RS (Vert)



SK-120RS



SK-150RS



SK-75RS (Hor)



SK-100RS

**SPECIFICATIONS**

	SK-50RS	SK-75RS	SK-100RS	SK-120RS	SK-150RS	SK-200RS	SK-250RS
Section - modulus (cm)	7 ~ 14 cm	18 ~ 25 cm	30 ~ 40 cm	45 ~ 50 cm	95 ~ 100 cm	300 ~ 600 cm	600 ~ 1000 cm
Power	5 HP	5 HP	15 HP	20 HP	20 HP	60 HP	100 HP
Diameter of standard rolls (mm)	220 mm	250 mm	310 mm	385 mm	500 mm	660 mm	800 mm
Shaft diameter - top / lower	70 / 70 mm	85 / 85 mm	105 / 105 mm	150 / 150 mm	180 / 180 mm	280 / 280 mm	360 / 360 mm
Weight	2000 kgs	2500 kgs	6000 kgs	9000 kgs	10000 kgs	20000 kgs	31000 kgs

\* SK-50RS / 75RS / 100RS / available horizontal design also

**Standard section die roller**

SETCION	SK-50RS	SK-75RS	SK-100RS	SK-120RS	SK-150RS	SK-200RS	SK-250RS
	50 x 50 x 6 Ø 600	75 x 75 x 9 Ø 800	100 x 100 x 12 Ø 1000	120 x 120 x 12 Ø 1250	150 x 150 x 15 Ø 1000	200 x 200 x 20 Ø 3000	250 x 250 x 25 Ø 1800
	50 x 50 x 6 Ø 600	75 x 75 x 9 Ø 1000	100 x 100 x 12 Ø 1000	120 x 120 x 12 Ø 1250	150 x 150 x 15 Ø 1200	200 x 200 x 20 Ø 3000	250 x 250 x 25 Ø 2000
	50 x 50 x 6 Ø 600	75 x 75 x 9 Ø 700	100 x 100 x 12 Ø 800	120 x 120 x 12 Ø 1250	150 x 150 x 15 Ø 1200	200 x 200 x 20 Ø 1600	250 x 250 x 25 Ø 1600
	50 x 50 x 6 Ø 600	75 x 75 x 9 Ø 1300	100 x 100 x 12 Ø 1500	120 x 120 x 12 Ø 1500	150 x 150 x 15 Ø 1700	200 x 200 x 20 Ø 2500	250 x 250 x 25 Ø 2500
	50 x 50 x 6 Ø 600	75 x 75 x 9 Ø 1000	100 x 100 x 12 Ø 1200	120 x 120 x 12 Ø 1250	150 x 150 x 15 Ø 1300	200 x 200 x 20 Ø 1800	250 x 250 x 25 Ø 1600
	60 x 12 Ø 400	80 x 18 Ø 800	100 x 25 Ø 700	120 x 25 Ø 1000	150 x 30 Ø 1000	200 x 50 Ø 2000	250 x 70 Ø 1800
	150 x 16 Ø 400	180 x 20 Ø 500	200 x 35 Ø 600	250 x 30 Ø 1000	250 x 40 Ø 1000	400 x 60 Ø 2000	500 x 80 Ø 1200
	35 x 35 Ø 350	50 x 50 Ø 500	60 x 60 Ø 600	70 x 70 Ø 800	90 x 90 Ø 1200	130 x 130 Ø 1800	165 x 165 Ø 2200

**Optional section die roller**

SETCION	SK-50RS	SK-75RS	SK-100RS	SK-120RS	SK-150RS	SK-200RS	SK-250RS
	Ø 40 Ø 400	60 Ø 600	70 Ø 700	80 Ø 800	100 Ø 1000	150 Ø 1500	190 Ø 1900
	Ø 60 Ø 600	76 Ø 700	100 Ø 1100	142 Ø 1800	170 Ø 2000	220 Ø 3000	330 Ø 5000
	40 x 40 x 4	65 x 65 x 6	90 x 90 x 5	100 x 100 x 6.5	120 x 120 x 8	180 x 180 x 10	250 x 250 x 12
	-	140 Ø 600	160 Ø 800	200 Ø 900	300 Ø 1100	450 Ø 2000	550 Ø 2200
	-	-	120 Ø 800	140 Ø 900	180 Ø 1100	280 Ø 2000	450 Ø 2700
	-	-	100 Ø 800	120 Ø 900	160 Ø 1100	240 Ø 2000	320 Ø 2200
	-	140 x 60 Ø 600	160 x 65 Ø 800	200 x 75 Ø 900	300 x 100 Ø 1100	450 Ø 2000	550 Ø 2200
	-	140 x 60 Ø 800	160 x 65 Ø 1000	200 x 75 Ø 1000	300 x 100 Ø 1100	450 Ø 3000	550 Ø 2200
	-	65 x 42 Ø 4000	80 x 45 Ø 5000	100 x 50 Ø 8000	160 x 65 Ø 9000	240 x 85 Ø 12000	300 x 100 Ø 24000
	-	80 Ø 1200	100 Ø 1500	120 x 50 Ø 2500	160 Ø 3500	240 Ø 10000	330 Ø 20000
	-	-	-	-	120 Ø 3500	200 Ø 9000	240 Ø 11000
	-	-	-	-	120 Ø 2800	180 Ø 4600	220 Ø 5600



CNCPB-12032



**SPECIFICATIONS**

	CNCPB-5016	CNCPB-6020	CNCPB-8020	CNCPB-8025	CNCPB-10025	CNCPB-10032	CNCPB-10042	CNCPB-12025	CNCPB-12032	CNCPB-15025	
Capacity (SS400)	3.5 x 1600 mm	4.0 x 2000 mm	5.0 x 2000 mm	4.0 x 2500 mm	4.5 x 2500 mm	3.5 x 3200 mm	3.0 x 4200 mm	5.5 x 2500 mm	4.0 x 3200 mm	7.0 x 2500 mm	
Max. pressure	50 ton	60 ton	80 ton	80 ton	100 ton	100 ton	100 ton	120 ton	120 ton	150 ton	
Motor	7.5 HP	7.5 HP	10 HP	10 HP	15 HP	15 HP	15 HP	15 HP	15 HP	20 HP	
Table length	1600 mm	2000 mm	2000 mm	2500 mm	2500 mm	3200 mm	4200 mm	2500 mm	3200 mm	2500 mm	
Table width	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	
Distance between housing	1220 mm	1600 mm	1600 mm	2100 mm	2100 mm	2600 mm	3400 mm	2100 mm	2600 mm	2020 mm	
Daylight	450 mm	450 mm	450 mm	450 mm	450 mm	450 mm	450 mm	450 mm	450 mm	450 mm	
Stroke	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	
Throat	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	
Lowering speed	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	
Pressing speed	12 mm/s	12 mm/s	12 mm/s	12 mm/s	12 mm/s	12 mm/s	12 mm/s	12 mm/s	12 mm/s	12 mm/s	
Return speed	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	
	CNCPB-15032	CNCPB-15042	CNCPB-15050	CNCPB-20032	CNCPB-20042	CNCPB-20050	CNCPB-20060	CNCPB-25032	CNCPB-25042	CNCPB-25050	
Capacity (SS400)	5.8 x 3200 mm	4.5 x 4200 mm	3.5 x 5000 mm	7.0 x 3200 mm	6.0 x 4200 mm	5.0 x 5000 mm	4.0 x 6000 mm	8.0 x 3200 mm	7.0 x 4200 mm	5.5 x 5000 mm	
Max. pressure	150 ton	150 ton	150 ton	200 ton	200 ton	200 ton	200 ton	250 ton	250 ton	250 ton	
Motor	20 HP	20 HP	20 HP	25 HP	25 HP	25 HP	25 HP	25 HP	25 HP	25 HP	
Table length	3200 mm	4200 mm	5000 mm	3200 mm	4200 mm	5000 mm	6000 mm	3200 mm	4200 mm	5000 mm	
Table width	100 mm	100 mm	100 mm	150 mm	150 mm	150 mm	150 mm	150 mm	150 mm	150 mm	
Distance between housing	2600 mm	3400 mm	4200 mm	2600 mm	3400 mm	4200 mm	5200 mm	2600 mm	3200 mm	4000 mm	
Daylight	450 mm	450 mm	450 mm	450 mm	450 mm	450 mm	450 mm	550 mm	550 mm	550 mm	
Stroke	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	250 mm	300 mm	300 mm	300 mm	
Throat	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	
Lowering speed	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	180 mm/s	
Pressing speed	12 mm/s	12 mm/s	12 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	
Return speed	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	160 mm/s	
	CNCPB-30032	CNCPB-30042	CNCPB-30050	CNCPB-30060	CNCPB-40032	CNCPB-40042	CNCPB-40050	CNCPB-40060	CNCPB-50042	CNCPB-50050	CNCPB-50060
Capacity (SS400)	11 x 3200 mm	8.5 x 4200 mm	7.0 x 5000 mm	6.0 x 6000 mm	15 x 3200 mm	12 x 4200 mm	10 x 5000 mm	8.0 x 6000 mm	15 x 4200 mm	12 x 5000 mm	10 x 6000 mm
Max. pressure	300 ton	300 ton	300 ton	300 ton	400 ton	400 ton	400 ton	400 ton	500 ton	500 ton	500 ton
Motor	40 HP	40 HP	40 HP	40 HP	50 HP	50 HP	50 HP	50 HP	60 HP	60 HP	60 HP
Table length	3200 mm	4200 mm	5000 mm	6000 mm	3200 mm	4200 mm	5000 mm	6000 mm	4200 mm	5000 mm	6000 mm
Table width	150 mm	150 mm	150 mm	150 mm	150 mm	150 mm	150 mm	150 mm	300 mm	300 mm	300 mm
Distance between housing	2600 mm	3200 mm	4000 mm	5000 mm	2600 mm	3200 mm	4000 mm	5000 mm	3200 mm	4000 mm	5000 mm
Daylight	550 mm	550 mm	550 mm	550 mm	550 mm	550 mm	550 mm	550 mm	550 mm	550 mm	550 mm
Stroke	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm
Throat	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm
Lowering speed	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s
Pressing speed	10 mm/s	10 mm/s	10 mm/s	10 mm/s	7 mm/s	7 mm/s	7 mm/s	7 mm/s	6 mm/s	6 mm/s	6 mm/s
Return speed	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	70 mm/s	70 mm/s	70 mm/s
	CNCPB-60042	CNCPB-60050	CNCPB-60060	CNCPB-70050	CNCPB-70060	CNCPB-80050	CNCPB-80060	CNCPB-90050	CNCPB-90060	CNCPB-100050	CNCPB-100060
Capacity (SS400)	18 x 4200 mm	15 x 5000 mm	12 x 6000 mm	18 x 5000 mm	14 x 6000 mm	20 x 5000 mm	16 x 6000 mm	22 x 5000 mm	18 x 6000 mm	25 x 5000 mm	20 x 6000 mm
Max. pressure	600 ton	600 ton	600 ton	700 ton	700 ton	800 ton	800 ton	900 ton	900 ton	1000 ton	1000 ton
Motor	60 HP	60 HP	60 HP	75 HP	75 HP	100 HP	100 HP	100 HP	100 HP	125 HP	125 HP
Table length	4200 mm	5000 mm	6000 mm	5000 mm	6000 mm	5000 mm	6000 mm	5000 mm	6000 mm	5000 mm	6000 mm
Table width	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm
Distance between housing	3200 mm	4000 mm	5000 mm	4000 mm	5000 mm	4000 mm	5000 mm	4000 mm	5000 mm	4000 mm	5000 mm
Daylight	600 mm	600 mm	600 mm	600 mm	600 mm	600 mm	600 mm	600 mm	600 mm	600 mm	600 mm
Stroke	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm
Throat	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm
Lowering speed	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s
Pressing speed	6 mm/s	6 mm/s	6 mm/s	6 mm/s	6 mm/s	6 mm/s	6 mm/s	6 mm/s	6 mm/s	6 mm/s	6 mm/s
Return speed	70 mm/s	70 mm/s	70 mm/s	65 mm/s	65 mm/s	65 mm/s	65 mm/s	60 mm/s	60 mm/s	60 mm/s	60 mm/s



**NCPB-8025**

**SPECIFICATIONS**

	NCPB-3013	NCPB-4516	NCPB-4520	NCPB-6020	NCPB-6025	NCPB-8020	NCPB-8025	
Capacity (SS400)	2.5 x 1300 mm	3.2 x 1600 mm	2.5 x 2000 mm	4.0 x 2000 mm	3.0 x 2500 mm	5.0 x 2000 mm	4.0 x 2500 mm	
Max. pressure	30 ton	45 ton	45 ton	60 ton	60 ton	80 ton	80 ton	
Motor	3 HP	3 HP	3 HP	5 HP	5 HP	5 HP	5 HP	
Table length	1300 mm	1600 mm	2000 mm	2000 mm	2500 mm	2000 mm	2500 mm	
Table width	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	
Distance between housing	1000 mm	1220 mm	1600 mm	1600 mm	2100 mm	1600 mm	2100 mm	
Daylight	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	
Stroke	180 mm	180 mm	180 mm	180 mm	180 mm	180 mm	180 mm	
Throat	320 mm	320 mm	320 mm	320 mm	320 mm	320 mm	320 mm	
Lowering speed	135 mm/s	135 mm/s	135 mm/s	120 mm/s	120 mm/s	120 mm/s	120 mm/s	
Pressing speed	10 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	
Return speed	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	
	NCPB-10025	NCPB-10032	NCPB-10042	NCPB-15025	NCPB-15032	NCPB-15042	NCPB-15050	
Capacity (SS400)	4.5 x 2500 mm	3.5 x 3200 mm	3.0 x 4200 mm	7.0 x 2500 mm	5.8 x 3200 mm	4.5 x 4200 mm	3.5 x 5000 mm	
Max. pressure	100 ton	100 ton	100 ton	150 ton	150 ton	150 ton	150 ton	
Motor	7.5 HP	7.5 HP	7.5 HP	10 HP	10 HP	10 HP	15 HP	
Table length	2500 mm	3200 mm	4200 mm	2500 mm	3200 mm	4200 mm	5000 mm	
Table width	100 mm	100 mm	100 mm	150 mm	150 mm	150 mm	150 mm	
Distance between housing	2100 mm	2600 mm	3400 mm	2020 mm	2600 mm	3400 mm	4200 mm	
Daylight	350 mm	350 mm	350 mm	450 mm	450 mm	450 mm	450 mm	
Stroke	180 mm	180 mm	180 mm	250 mm	250 mm	250 mm	250 mm	
Throat	320 mm	320 mm	320 mm	320 mm	320 mm	320 mm	320 mm	
Lowering speed	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	
Pressing speed	10 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	10 mm/s	
Return speed	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	90 mm/s	
	NCPB-20032	NCPB-20042	NCPB-20050	NCPB-20060	NCPB-30032	NCPB-30042	NCPB-30050	
Capacity (SS400)	7.0 x 3200 mm	6.0 x 4200 mm	5.0 x 5000 mm	4.0 x 6000 mm	11 x 3200 mm	8.5 x 4200 mm	7.0 x 5000 mm	
Max. pressure	200 ton	200 ton	200 ton	200 ton	300 ton	300 ton	300 ton	
Motor	15 HP	15 HP	20 HP	20 HP	25 HP	25 HP	30 HP	
Table length	3200 mm	4200 mm	5000 mm	6000 mm	3200 mm	4200 mm	5000 mm	
Table width	250 mm	250 mm	250 mm	250 mm	300 mm	300 mm	300 mm	
Distance between housing	2600 mm	3400 mm	4200 mm	5200 mm	2600 mm	3200 mm	4000 mm	
Daylight	450 mm	450 mm	450 mm	450 mm	500 mm	500 mm	500 mm	
Stroke	250 mm	250 mm	250 mm	250 mm	300 mm	300 mm	300 mm	
Throat	320 mm	320 mm	320 mm	320 mm	400 mm	400 mm	400 mm	
Lowering speed	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	
Pressing speed	8-9 mm/s	8-9 mm/s	8-9 mm/s	8-9 mm/s	8-9 mm/s	8-9 mm/s	8-9 mm/s	
Return speed	90 mm/s	90 mm/s	90 mm/s	90 mm/s	80 mm/s	80 mm/s	80 mm/s	
	NCPB-30060	NCPB-40032	NCPB-40042	NCPB-40050	NCPB-40060	NCPB-50042	NCPB-50050	NCPB-50060
Capacity (SS400)	6.0 x 6000 mm	15 x 3200 mm	12 x 4200 mm	10 x 5000 mm	8.0 x 6000 mm	15 x 4200 mm	12 x 5000 mm	10 x 6000 mm
Max. pressure	300 ton	400 ton	400 ton	400 ton	400 ton	500 ton	500 ton	500 ton
Motor	30 HP	30 HP	40 HP	40 HP	40 HP	45 HP	45 HP	45 HP
Table length	6000 mm	3200 mm	4200 mm	5000 mm	6000 mm	4200 mm	5000 mm	6000 mm
Table width	300 mm	300 mm	300 mm	300 mm	300 mm	400 mm	400 mm	400 mm
Distance between housing	5000 mm	2600 mm	3200 mm	4000 mm	5000 mm	3200 mm	4000 mm	5000 mm
Daylight	500 mm	500 mm	500 mm	500 mm	500 mm	500 mm	500 mm	500 mm
Stroke	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm
Throat	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm	400 mm
Lowering speed	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s	100 mm/s
Pressing speed	8-9 mm/s	7 mm/s	7 mm/s	7 mm/s	7 mm/s	6 mm/s	6 mm/s	6 mm/s
Return speed	80 mm/s	76 mm/s	76 mm/s	76 mm/s	76 mm/s	70 mm/s	70 mm/s	70 mm/s



**CNCEPB-5816**  
Twin-motor



**CNCEPB-2606**  
Single-motor

**SPECIFICATIONS**

	CNCEPB-2606	CNCEPB-3813	CNCEPB-5816	CNCEPB-5820	CNCEPB-8025
Capacity	26 ton	38 ton	58 ton	58 ton	80 ton
Bending length	600 mm	1300 mm	1600 mm	2000 mm	2500 mm
Stroke length	120 mm	120 mm	120 mm	160 mm	160 mm
Speed	Lowering	1 ~ 150 mm/s	1 ~ 150 mm/s	1 ~ 120 mm/s	1 ~ 120 mm/s
	Pressing	0.2 ~ 20 mm/s	0.2 ~ 20 mm/s	0.2 ~ 20 mm/s	0.2 ~ 20 mm/s
	Return	1 ~ 150 mm/s	1 ~ 150 mm/s	1 ~ 120 mm/s	1 ~ 120 mm/s
AC servo motor / (Y)	4.2 kw				
AC servo motor / (Y1 , Y2)		4.2 kw	4.6 kw	4.6 kw	7.1 kw
Angle positioning accuracy	± 0.01 mm	± 0.01 mm	± 0.01 mm	± 0.01 mm	± 0.01 mm
Backgauge	AC servo motor	0.7 kw	0.7 kw	0.7 kw	0.7 kw
	Positioning accuracy	0.03 mm	0.03 mm	0.03 mm	0.03 mm
	Speed	MAX. 30 m/min	MAX. 30 m/min	MAX. 30 m/min	MAX. 30 m/min
	Stroke	480 mm	480 mm	480 mm	480 mm
R axis stroke	100 mm	100 mm	100 mm	100 mm	100 mm
N.W.	2330 kg	3000 kg	3600 kg	4000 kg	6000 kg



**HCU-5010**

**SPECIFICATIONS**

	HCU-5010	HCU-6210	HCU-7210	HCU-8010
Capacity (SS41)	3.2 x 1260 mm	3.2 x 1560 mm	3.2 x 1830 mm	3.2 x 2000 mm
Max. pressure	35 tons	40 tons	45 tons	65 tons
Motor	3 HP	3 HP	5 HP	5 HP
Table length	1260 mm	1560 mm	1830 mm	2000 mm
Table width	300 mm	300 mm	300 mm	300 mm
Distance between housing	470 mm	470 mm	580 mm	580 mm
Daylight	320 mm	320 mm	350 mm	350 mm
Stroke	120 mm	120 mm	150 mm	150 mm
Throat	600 mm	600 mm	600 mm	600 mm
Net weight	2100 kgs	2200 kgs	2800 kgs	3000 kgs



**HPB-8025**

**SPECIFICATIONS**

	HPB-3013	HPB-4516	HPB-4520	HPB-6020	HPB-6025	HPB-8020	HPB-8025	HPB-10025	HPB-10032	HPB-10042
Capacity (SS400) mm	2.5 x 1300	3.2 x 1600	2.5 x 2000	4.0 x 2000	3.0 x 2500	5.0 x 2000	4.0 x 2500	4.5 x 2500	3.5 x 3200	3.0 x 4200
Max. pressure (Ton)	30	45	45	60	60	80	80	100	100	100
Motor (HP)	3	3	3	5	5	5	5	7.5	7.5	7.5
Table length (mm)	1300	1600	2000	2000	2500	2000	2500	2500	3200	4200
Table width (mm)	100	100	100	100	100	100	100	100	100	100
Distance between housing (mm)	1000	1220	1600	1600	2100	1600	2100	2100	2600	3400
Daylight (mm)	350	350	350	350	350	350	350	350	350	350
Stroke (mm)	180	180	180	180	180	180	180	180	180	180
Throat (mm)	320	320	320	320	320	320	320	320	320	320
Lowering speed (mm/s)	135	135	135	120	120	120	120	100	100	100
Pressing speed (mm/s)	10	10	10	10	10	10	10	10	10	10
Return speed (mm/s)	90	90	90	90	90	90	90	90	90	90
	HPB-15025	HPB-15032	HPB-15042	HPB-15050	HPB-20032	HPB-20042	HPB-20050	HPB-20060	HPB-30032	HPB-30042
Capacity (SS400) mm	7.0 x 2500	5.8 x 3200	4.5 x 4200	3.5 x 5000	7.0 x 3200	6.0 x 4200	5.0 x 5000	4.0 x 6000	11 x 3200	8.5 x 4200
Max. pressure (Ton)	150	150	150	150	200	200	200	200	300	300
Motor (HP)	10	10	10	15	15	15	20	20	25	25
Table length (mm)	2500	3200	4200	5000	3200	4200	5000	6000	3200	4200
Table width (mm)	150	150	150	150	250	250	250	250	300	300
Distance between housing (mm)	2020	2600	3400	4200	2600	3400	4200	5200	2600	3200
Daylight (mm)	450	450	450	450	450	450	450	450	500	500
Stroke (mm)	250	250	250	250	250	250	250	250	300	300
Throat (mm)	320	320	320	320	320	320	320	320	400	400
Lowering speed (mm/s)	100	100	100	100	100	100	100	100	100	100
Pressing speed (mm/s)	10	10	10	10	8-9	8-9	8-9	8-9	8-9	8-9
Return speed (mm/s)	90	90	90	90	90	90	90	90	80	80
	HPB-30050	HPB-30060	HPB-40032	HPB-40042	HPB-40050	HPB-40060	HPB-50042	HPB-50050	HPB-50060	
Capacity (SS400) mm	7.0 x 5000	6.0 x 6000	15 x 3200	12 x 4200	10 x 5000	8.0 x 6000	15 x 4200	12 x 5000	10 x 6000	
Max. pressure (Ton)	300	300	400	400	400	400	500	500	500	
Motor (HP)	30	30	30	40	40	40	45	45	45	
Table length (mm)	5000	6000	3200	4200	5000	6000	4200	5000	6000	
Table width (mm)	300	300	300	300	300	300	400	400	400	
Distance between housing (mm)	4000	5000	2600	3200	4000	5000	3200	4000	5000	
Daylight (mm)	500	500	500	500	500	500	500	500	500	
Stroke (mm)	300	300	300	300	300	300	300	300	300	
Throat (mm)	400	400	400	400	400	400	400	400	400	
Lowering speed (mm/s)	100	100	100	100	100	100	100	100	100	
Pressing speed (mm/s)	8-9	8-9	7	7	7	7	6	6	6	
Return speed (mm/s)	80	80	76	76	76	76	70	70	70	





**CNC GS-31065H**

**SPECIFICATIONS**

	CNC GS-15045H	CNC GS-20045H	CNC GS-25045H	CNC GS-31045H	CNC GS-41045H	CNC GS-61045H	CNC GS-15065H	CNC GS-20065H	CNC GS-25065H	
Shearing length	1550 mm	2000 mm	2500 mm	3100 mm	4100 mm	6100 mm	1550 mm	2000 mm	2500 mm	
Max. thickness (SS400)	4.5 mm	4.5 mm	4.5 mm	4.5 mm	4.5 mm	4.5 mm	6.5 mm	6.5 mm	6.5 mm	
Stainless steel thickness (SUS304)	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	4.0 mm	4.0 mm	4.0 mm	
Throat	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	
Max. angle (SS400)	2° 30'	2° 30'	2° 30'	2° 30'	2°	2°	2° 30'	2° 30'	2° 30'	
Minimum angle	1°	1°	1°	1°	1°	1°	1°	1°	1°	
Shear / Min	27-35	26-34	25-33	24-32	17-25	11-19	26-34	25-33	24-32	
Hold-down beam cylinder (No.)	9	11	13	16	21	30	9	11	13	
Main motor	10 HP	10 HP	10 HP	15 HP	15 HP	20 HP	15 HP	15 HP	15 HP	
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	
	CNC GS-31065H	CNC GS-41065H	CNC GS-61065H	CNC GS-25080H	CNC GS-31080H	CNC GS-41080H	CNC GS-61080H	CNC GS-150100H	CNC GS-250100H	
Shearing length	3100 mm	4100 mm	6100 mm	2500 mm	3100 mm	4100 mm	6100 mm	1550 mm	2500 mm	
Max. thickness (SS400)	6.5 mm	6.5 mm	6.5 mm	8.0 mm	8.0 mm	8.0 mm	8.0 mm	10 mm	10 mm	
Stainless steel thickness (SUS304)	4.0 mm	4.0 mm	4.0 mm	5.0 mm	5.0 mm	5.0 mm	5.0 mm	6.5 mm	6.5 mm	
Throat	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	
Max. angle (SS400)	2° 30'	2°	2°	2° 30'	2° 30'	2°	2° 30'	2° 30'	2° 30'	
Minimum angle	1°	1°	1°	1°	1°	1°	1°	1°	1°	
Shear / Min	21-29	15-23	11-19	18-26	15-23	12-20	7-15	22-30	18-26	
Hold-down beam cylinder (No.)	16	21	30	13	16	21	30	9	13	
Main motor	20 HP	25 HP	30 HP	25 HP	25 HP	30 HP	40 HP	30 HP	30 HP	
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	
	CNC GS-310100H	CNC GS-410100H	CNC GS-610100H	CNC GS-250130H	CNC GS-310130H	CNC GS-410130H	CNC GS-610130H	CNC GS-250160H	CNC GS-310160H	CNC GS-410160H
Shearing length	3100 mm	4100 mm	6100 mm	2500 mm	3100 mm	4100 mm	6100 mm	2500 mm	3100 mm	4100 mm
Max. thickness (SS400)	10 mm	10 mm	10 mm	13 mm	13 mm	13 mm	13 mm	16 mm	16 mm	16 mm
Stainless steel thickness (SUS304)	6.5 mm	6.5 mm	6.5 mm	8.5 mm	8.5 mm	8.5 mm	8.5 mm	10.5 mm	10.5 mm	10.5 mm
Throat	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Max. angle (SS400)	2° 30'	2°	2°	2° 30'	2° 30'	2°	2°	2° 30'	2° 30'	2°
Minimum angle	1°	1°	1°	1°	1°	1°	1°	1°	1°	1°
Shear / Min	15-23	12-20	7-15	15-21	13-19	10-16	7-13	11-17	9-15	7-13
Hold-down beam cylinder (No.)	16	21	30	13	16	21	30	13	16	21
Main motor	30 HP	40 HP	50 HP	40 HP	40 HP	50 HP	75 HP	50 HP	50 HP	50 HP
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm
	CNC GS-610160H	CNC GS-250200H	CNC GS-310200H	CNC GS-410200H	CNC GS-610200H	CNC GS-200250H	CNC GS-250250H	CNC GS-310250H	CNC GS-410250H	CNC GS-610250H
Shearing length	6100 mm	2500 mm	3100 mm	4100 mm	6100 mm	2000 mm	2500 mm	3100 mm	4100 mm	6100 mm
Max. thickness (SS400)	16 mm	20 mm	20 mm	20 mm	20 mm	25 mm	25 mm	25 mm	25 mm	25 mm
Stainless steel thickness (SUS304)	10.5 mm	13 mm	13 mm	13 mm	13 mm	16.5 mm	16.5 mm	16.5 mm	16.5 mm	16.5 mm
Throat	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Max. angle (SS400)	2°	2° 30'	2° 30'	2°	2°	2° 30'	2° 30'	2° 30'	2°	2°
Minimum angle	1°	1°	1°	1°	1°	1°	1°	1°	1°	1°
Shear / Min	3-9	10-16	8-14	6-12	2-8	11-17	10-16	8-13	6-12	2-8
Hold-down beam cylinder (No.)	30	13	16	21	30	10	13	16	21	30
Main motor	75 HP	100 HP	100 HP	100 HP	125 HP	100 HP	100 HP	125 HP	125 HP	125 HP
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm



**NCGS-31065HA**

**SPECIFICATIONS**

	NCGS-15045HA	NCGS-20045HA	NCGS-25045HA	NCGS-31045HA	NCGS-41045HA	NCGS-61045HA	NCGS-15065HA	NCGS-20065HA	NCGS-25065HA	
Shearing length	1550 mm	2000 mm	2500 mm	3100 mm	4100 mm	6100 mm	1550 mm	2000 mm	2500 mm	
Max. thickness (SS400)	4.5 mm	4.5 mm	4.5 mm	4.5 mm	4.5 mm	4.5 mm	6.5 mm	6.5 mm	6.5 mm	
Stainless steel thickness (SUS304)	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	4.0 mm	4.0 mm	4.0 mm	
Throat	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	
Max. angle (SS400)	2° 30'	2° 30'	2° 30'	2° 30'	2°	2°	2° 30'	2° 30'	2° 30'	
Minimum angle	1°	1°	1°	1°	1°	1°	1°	1°	1°	
Shear / Min	27-35	26-34	25-33	24-32	17-25	11-19	26-34	25-33	24-32	
Hold-down beam cylinder (No.)	9	11	13	16	21	30	9	11	13	
Main motor	10 HP	10 HP	10 HP	15 HP	15 HP	20 HP	15 HP	15 HP	15 HP	
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	
	NCGS-31065HA	NCGS-41065HA	NCGS-61065HA	NCGS-25080HA	NCGS-31080HA	NCGS-41080HA	NCGS-61080HA	NCGS-150100HA	NCGS-250100HA	
Shearing length	3100 mm	4100 mm	6100 mm	2500 mm	3100 mm	4100 mm	6100 mm	1550 mm	2500 mm	
Max. thickness (SS400)	6.5 mm	6.5 mm	6.5 mm	8.0 mm	8.0 mm	8.0 mm	8.0 mm	10 mm	10 mm	
Stainless steel thickness (SUS304)	4.0 mm	4.0 mm	4.0 mm	5.0 mm	5.0 mm	5.0 mm	5.0 mm	6.5 mm	6.5 mm	
Throat	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	
Max. angle (SS400)	2° 30'	2°	2°	2° 30'	2° 30'	2°	2° 30'	2° 30'	2° 30'	
Minimum angle	1°	1°	1°	1°	1°	1°	1°	1°	1°	
Shear / Min	21-29	15-23	11-19	18-26	15-23	12-20	7-15	22-30	18-26	
Hold-down beam cylinder (No.)	16	21	30	13	16	21	30	9	13	
Main motor	20 HP	25 HP	30 HP	25 HP	25 HP	30 HP	40 HP	30 HP	30 HP	
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	
	NCGS-310100HA	NCGS-410100HA	NCGS-610100HA	NCGS-250130HA	NCGS-310130HA	NCGS-410130HA	NCGS-610130HA	NCGS-250160HA	NCGS-310160HA	NCGS-410160HA
Shearing length	3100 mm	4100 mm	6100 mm	2500 mm	3100 mm	4100 mm	6100 mm	2500 mm	3100 mm	4100 mm
Max. thickness (SS400)	10 mm	10 mm	10 mm	13 mm	13 mm	13 mm	13 mm	16 mm	16 mm	16 mm
Stainless steel thickness (SUS304)	6.5 mm	6.5 mm	6.5 mm	8.5 mm	8.5 mm	8.5 mm	8.5 mm	10.5 mm	10.5 mm	10.5 mm
Throat	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Max. angle (SS400)	2° 30'	2°	2°	2° 30'	2° 30'	2°	2°	2° 30'	2° 30'	2°
Minimum angle	1°	1°	1°	1°	1°	1°	1°	1°	1°	1°
Shear / Min	15-23	12-20	7-15	15-21	13-19	10-16	7-13	11-17	9-15	7-13
Hold-down beam cylinder (No.)	16	21	30	13	16	21	30	13	16	21
Main motor	30 HP	40 HP	50 HP	40 HP	40 HP	50 HP	75 HP	50 HP	50 HP	50 HP
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm
	NCGS-610160HA	NCGS-250200HA	NCGS-310200HA	NCGS-410200HA	NCGS-610200HA	NCGS-200250HA	NCGS-250250HA	NCGS-310250HA	NCGS-410250HA	NCGS-610250HA
Shearing length	6100 mm	2500 mm	3100 mm	4100 mm	6100 mm	2000 mm	2500 mm	3100 mm	4100 mm	6100 mm
Max. thickness (SS400)	16 mm	20 mm	20 mm	20 mm	20 mm	25 mm	25 mm	25 mm	25 mm	25 mm
Stainless steel thickness (SUS304)	10.5 mm	13 mm	13 mm	13 mm	13 mm	16.5 mm	16.5 mm	16.5 mm	16.5 mm	16.5 mm
Throat	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Max. angle (SS400)	2°	2° 30'	2° 30'	2°	2°	2° 30'	2° 30'	2° 30'	2°	2°
Minimum angle	1°	1°	1°	1°	1°	1°	1°	1°	1°	1°
Shear / Min	3-9	10-16	8-14	6-12	2-8	11-17	10-16	8-13	6-12	2-8
Hold-down beam cylinder (No.)	30	13	16	21	30	10	13	16	21	30
Main motor	75 HP	100 HP	100 HP	100 HP	125 HP	100 HP	100 HP	125 HP	125 HP	125 HP
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm



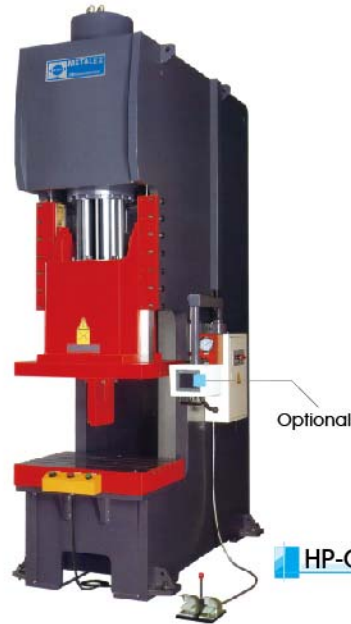
**NCSBS-310100S**

**SPECIFICATIONS**

	NCSBS-15045S	NCSBS-20045S	NCSBS-25045S	NCSBS-31045S	NCSBS-41045S	NCSBS-15065S	NCSBS-20065S	NCSBS-25065S
Shearing length	1550 mm	2000 mm	2500 mm	3050 mm	4050 mm	1550 mm	2000 mm	2500 mm
Steel plate thickness (SS400)	4.5 mm	4.5 mm	4.5 mm	4.5 mm	4.5 mm	6.5 mm	6.5 mm	6.5 mm
Stainless steel thickness (SUS304)	3.0 mm	3.0 mm	3.0 mm	3.0 mm	3.0 mm	4.0 mm	4.0 mm	4.0 mm
Throat	250 mm	250 mm	250 mm	300 mm	300 mm	300 mm	300 mm	300 mm
Max. angle	1° 15'	1° 30'	1° 30'	1° 30'	1° 45'	1° 30'	1° 30'	1° 30'
Shear / Min	27-32	26-31	25-30	24-29	17-22	26-31	25-30	24-39
Hold-down beam cylinder (No.)	9 PC	11 PC	13 PC	16 PC	21 PC	9 PC	11 PC	13 PC
Main motor	10 HP	10 HP	10 HP	15 HP	15 HP	15 HP	15 HP	20 HP
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm
	NCSBS-31065S	NCSBS-41065S	NCSBS-61065S	NCSBS-150100S	NCSBS-250100S	NCSBS-310100S	NCSBS-410100S	NCSBS610100S
Shearing length	3050 mm	4050 mm	6050 mm	1550 mm	2500 mm	3050 mm	4050 mm	6050 mm
Steel plate thickness (SS400)	6.5 mm	6.5 mm	6.5 mm	10 mm	10 mm	10 mm	10 mm	10 mm
Stainless steel thickness (SUS304)	4.0 mm	4.0 mm	4.0 mm	6.5 mm	6.5 mm	6.5 mm	6.5 mm	6.5 mm
Throat	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm
Max. angle	1° 30'	1° 30'	1° 30'	1° 45'	1° 45'	1° 45'	1° 30'	1° 30'
Shear / Min	21-26	15-20	11-16	22-27	18-23	15-20	12-17	7-12
Hold-down beam cylinder (No.)	16 PC	21 PC	30 PC	9 PC	13 PC	16 PC	21 PC	30 PC
Main motor	20 HP	25 HP	30 HP	25 HP	25 HP	30 HP	40 HP	50 HP
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm
	NCSBS-250130S	NCSBS-310130S	NCSBS-410130S	NCSBS-610130S	NCSBS-250160S	NCSBS-310160S	NCSBS-410160S	NCSBS610160S
Shearing length	2550 mm	3050 mm	4050 mm	6050 mm	2500 mm	3050 mm	4050 mm	6050 mm
Steel plate thickness (SS400)	13 mm	13 mm	13 mm	13 mm	16 mm	16 mm	16 mm	16 mm
Stainless steel thickness (SUS304)	8.5 mm	8.5 mm	8.5 mm	8.5 mm	10.5 mm	10.5 mm	10.5 mm	10.5 mm
Throat	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm
Max. angle	1° 45'	1° 45'	1° 45'	1° 45'	2°	2°	2°	1° 45'
Shear / Min	15-17	13-15	10-12	7-9	11-13	9-11	7-9	3-5
Hold-down beam cylinder (No.)	13 PC	16 PC	21 PC	30 PC	13 PC	16 PC	21 PC	30 PC
Main motor	40 HP	40 HP	50 HP	75 HP	50 HP	50 HP	50 HP	75 HP
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm
	NCSBS-250200S	NCSBS-310200S	NCSBS-410200S	NCSBS-610200S	NCSBS-250250S	NCSBS-310250S	NCSBS-410250S	NCSBS610250S
Shearing length	2500 mm	3050 mm	4050 mm	6050 mm	2500 mm	3050 mm	4050 mm	6050 mm
Steel plate thickness (SS400)	20 mm	20 mm	20 mm	20 mm	25 mm	25 mm	25 mm	25 mm
Stainless steel thickness (SUS304)	13 mm	13 mm	13 mm	13 mm	16.5 mm	16.5 mm	16.5 mm	16.5 mm
Throat	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm	300 mm
Max. angle	2°	2°	2° 30'	2° 30'	2° 30'	2° 30'	2° 30'	2° 30'
Shear / Min	10-12	8-10	6-8	2-4	10-12	8-10	6-8	2-4
Hold-down beam cylinder (No.)	13 PC	16 PC	21 PC	30 PC	13 PC	16 PC	21 PC	30 PC
Main motor	75 HP	75 HP	100 HP	100 HP	100 HP	125 HP	125 HP	125 HP
Backgauge stroke	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm	800 mm



HP-C30



Optional

HP-C200

**SPECIFICATIONS**

	HP-C10	HP-C20	HP-C30	HP-C50	HP-C100	HP-C150	HP-C200	HP-C300
Capacity	10 ton	20 ton	30 ton	50 ton	100 ton	150 ton	200 ton	300 ton
Table size	550 x 425 mm	600 x 425 mm	600 x 500 mm	700 x 600 mm	750 x 600 mm	900 x 700 mm	1000 x 800 mm	1000 x 800 mm
Daylight	450 mm	450 mm	450 mm	500 mm	600 mm	700 mm	700 mm	700 mm
Stroke	300 mm	300 mm	300 mm	350 mm	400 mm	450 mm	450 mm	450 mm
Descending speed	160 mm/sec	160 mm/sec	170 mm/sec	180 mm/sec	200 mm/sec	200 mm/sec	200 mm/sec	200 mm/sec
Pressing speed	10 mm/sec	15 mm/sec	14 mm/sec	14 mm/sec	14 mm/sec	14 mm/sec	10 mm/sec	10 mm/sec
Ascending speed	170 mm/sec	160 mm/sec	160 mm/sec	180 mm/sec	200 mm/sec	200 mm/sec	200 mm/sec	200 mm/sec
Motor	3 HP	5 HP	7.5 HP	10 HP	15 HP	20 HP	25 HP	30 HP

**METALEX** HYDRAULIC STRAIGHT-SIDE PRESS HSP SERIES  
SHEET METAL MACHINERY



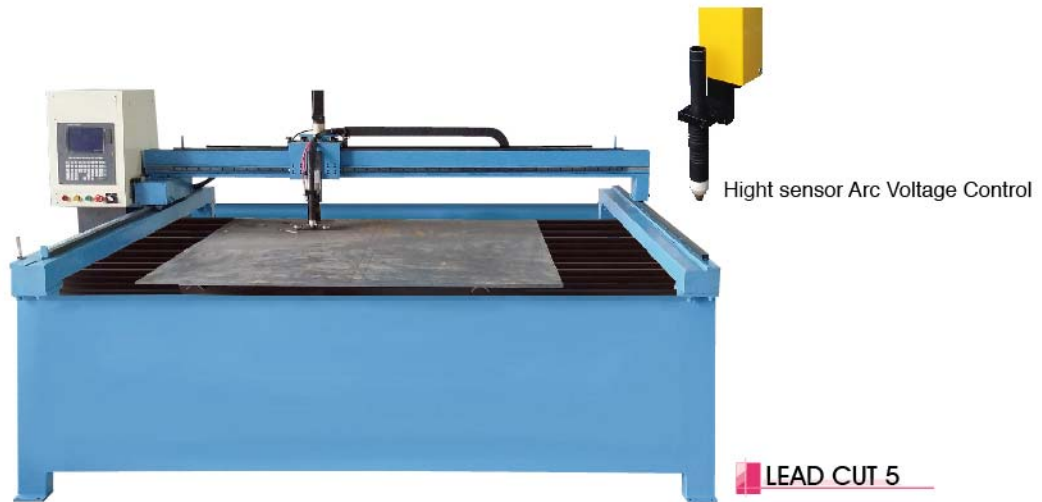
HSP-300



HSP-400

**SPECIFICATIONS**

	HSP-100	HSP-150	HSP-200	HSP-250	HSP-300	HSP-400	HSP-500	HSP-600	HSP-800	HSP-1000	HSP-1200	HSP-1500
Capacity	100 ton	150 ton	200 ton	250 ton	300 ton	400 ton	500 ton	600 ton	800 ton	1000 ton	1200 ton	1500 ton
Table size	800 x 700 mm	1000 x 850 mm	1200 x 1000 mm	1350 x 1100 mm	1500 x 1200 mm	1800 x 1300 mm	2000 x 1500 mm	2000 x 1500 mm	2500 x 1800 mm	3000 x 2000 mm	3200 x 2400 mm	3600 x 2400 mm
Daylight	650 mm	800 mm	950 mm	1000 mm	1100 mm	1200 mm	1400 mm	1400 mm	1500 mm	1800 mm	1800 mm	2000 mm
Stroke	500 mm	600 mm	700 mm	800 mm	800 mm	800 mm	1000 mm	1000 mm	1000 mm	1200 mm	1300 mm	1500 mm
Cushion capacity	30 ton	50 ton	70 ton	80 ton	100 ton	140 ton	180 ton	200 ton	250 ton	300 ton	450 ton	500 ton
Cushion stroke	180 mm	200 mm	250 mm	250 mm	300 mm	300 mm	350 mm	350 mm	400 mm	500 mm	450 mm	500 mm
Descending speed	200-250 mm/sec	200-250 mm/sec	200-250 mm/sec	200-250 mm/sec	200-250 mm/sec	200-250 mm/sec	200-250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec	300-350 mm/sec	300-350 mm/sec
Pressing speed	15-20 mm/sec	15-20 mm/sec	15-20 mm/sec	15-20 mm/sec	10-15 mm/sec	10-12 mm/sec	10-12 mm/sec	10-12 mm/sec	10-12 mm/sec	10-12 mm/sec	10-20 mm/sec	10-20 mm/sec
Ascending speed	250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec	250 mm/sec
Drive motor	20 HP	25 HP	30 HP	40 HP	50 HP	60 HP	75 HP	100 HP	125 HP	150 HP	175 HP	200 HP

**SPECIFICATIONS**

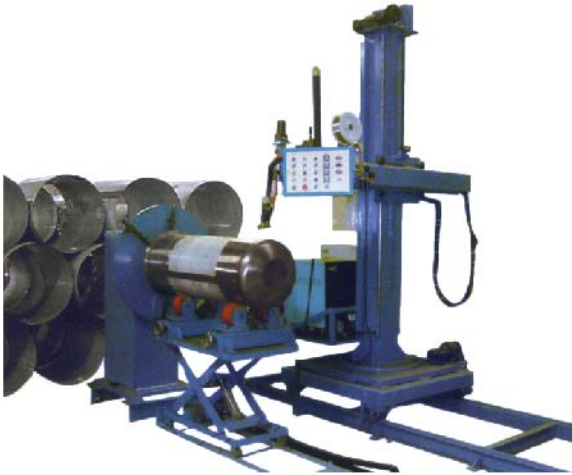
	LEAD CUT 4	LEAD CUT 5	LEAD CUT 8	LEAD CUT 10
Power input	3Ø 220V 50/60 HZ			
Cutting width	1300 mm	1600 mm	2500 mm	3100 mm
Max. travel speed	11300 mm/min			
Cutting speed	10 ~ 9000 mm/min			
Position accuracy	± 0.1 mm			
Repeat accuracy	± 0.1 mm			
Motor driven unit	AC SERVO MOTOR			
Cutting table	1300 mm	1600 mm	2500 mm	3100 mm
Rail gauge	1600 mm	1900 mm	2800 mm	3400 mm
Overall width	2100 mm	2400 mm	3300 mm	3900 mm
Cutting length	2500 mm	3200 mm	6200 mm	6200 mm

**FREJOTH WELDING POSITIONERS**

- Position system transmit by worm gear set without gap and accurate.
- Available for combine with automatic weld equipments.

**PO-500****PO-750****PO-3000****PO-5000****SPECIFICATIONS**

	PO-220	PO-350	PO-500	PO-750	PO-1000	PO-2000	PO-3000	PO-5000
Load 0° (kg)	200	350	500	750	1000	2000	3000	5000
Speed rpm	A : 1 - 16 B : 0.4 - 4	A : 1 - 16 B : 0.4 - 4	0.2 - 2	0.1 - 1	0.05 - 0.5	0.03 - 0.3	0.02 - 0.2	0.02 - 0.2
Disc Ø (mm)	330	330	500	600	700	900	1000	1200
Slant operating	Manual	Manual	Manual	Automatic	Automatic	Automatic	Automatic	Automatic



LP-4000



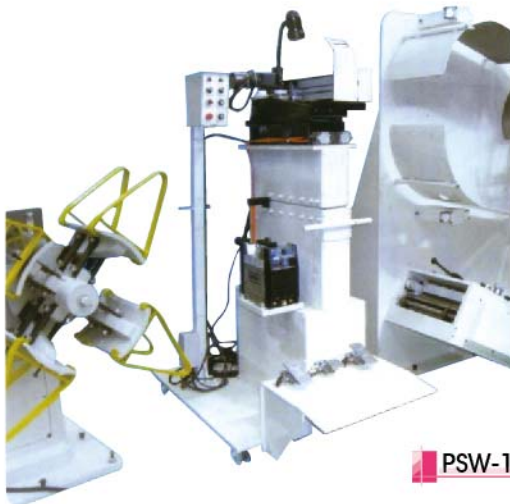
LP-1000



LP-2000

**SPECIFICATIONS**

		LP-1000	LP-2000	LP-3000	LP-4000	LP-5000	LP-6000
Vertical Column	Working range vertical	1 M	2 M	3 M	4 M	5 M	6 M
	Traveling speed	1000 mm/min	1000 mm/min	1000 mm/min	900 mm/min	900 mm/min	800 mm/min
	Column rotation	Manual 360°	Manual 360°	Manual 360°	Manual 360°	Manual or 0.2 rpm	Manual or 0.2 rpm
Side beam	Working range	1 M	2 M	3 M	4 M	5 M	6 M
	Boom load each end	100 kg	120 kg	150 kg	150 kg	200 kg	200 kg
	Welding speed	150 ~ 1500 mm	150 ~ 1500 mm	150 ~ 1500 mm	150 ~ 1500 mm	150 ~ 1500 mm	150 ~ 1500 mm

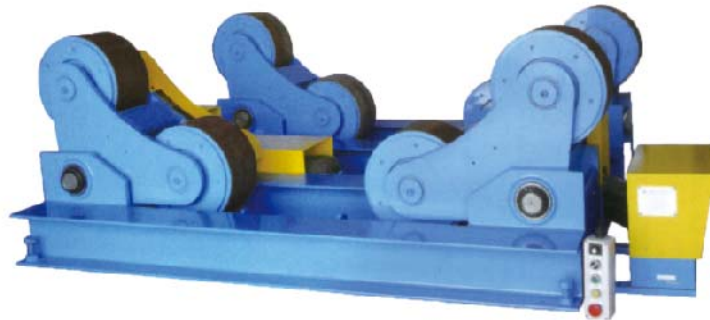


PSW-168

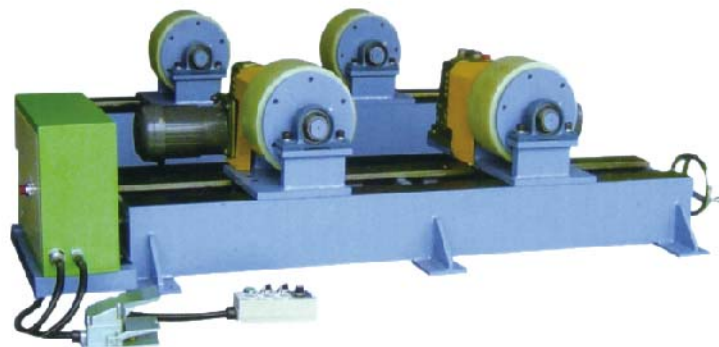


**SPECIFICATIONS**

	PSW-168	PSW-250	PSW-320	PSW-380	PSWH-168	PSWH-250	PSWH-320	PSWH-380
Input power	1Ø , 220V				3Ø , 220V			
Strip width	168 mm	250 mm	320 mm	380 mm	168 mm	250 mm	320 mm	380 mm
Strip thickness	2.0 mm	2.0 mm	2.0 mm	2.0 mm	2.5 mm	4.0 mm	4.0 mm	4.0 mm
Shearing system	Pneumatic				Oil hydraulic			
Clamping system	Pneumatic				Pneumatic / Oil hydraulic			
Tig welder	200 A				200 A	300 A		
Dimension (L x W x H)	800 x 600 x 1540 mm	920 x 600 x 1540 mm	1000 x 600 x 1540 mm	1100 x 600 x 1540 mm	800 x 600 x 1540 mm	920 x 600 x 1540 mm	1000 x 600 x 1540 mm	1100 x 600 x 1540 mm

**TRS-50T****SPECIFICATIONS**

	TRS-5T	TRS-10T	TRS-20T	TRS-30T	TRS-50T
Load	5000 kg	10000 kg	20000 kg	30000 kg	50000 kg
Speed	100 ~ 1000 mm/min	100 ~ 1000 mm/min	100 ~ 1000 mm/min	100 ~ 1000 mm/min	100 ~ 1000 mm/min
Diameter max	Ø 1500 mm	Ø 2000 mm	Ø 3500 mm	Ø 4000 mm	Ø 5000 mm
Diameter min	Ø 300 mm	Ø 400 mm	Ø 400 mm	Ø 400 mm	Ø 400 mm
Rolls diameter	300 mm	300 mm	350 mm	350 mm	350 mm

**TR-50T****SPECIFICATIONS**

	TR-5T	TR-10T	TR-20T	TR-30T	TR-50T
Load	5000 kg	10000 kg	20000 kg	30000 kg	50000 kg
Speed	100 ~ 1000 mm/min	100 ~ 1000 mm/min	100 ~ 1000 mm/min	100 ~ 1000 mm/min	100 ~ 1000 mm/min
Diameter max	Ø 2000 mm	Ø 3000 mm	Ø 3500 mm	Ø 4000 mm	Ø 5000 mm
Diameter min	Ø 200 mm	Ø 300 mm	Ø 400 mm	Ø 400 mm	Ø 400 mm
Rolls diameter	Ø 200 mm	Ø 250 mm	Ø 300 mm	Ø 300 mm	Ø 400 mm
Distance adj.	Manual	Manual	Manual	Manual	Manual

## SPEEDER PORTABLE WELDING FUME EXTRACTOR

### ■ Appliance :

Welding Fumes  
Solder Fumes  
Grinding Dusts  
Dry Dusts  
Powders



FI-800

FI-1200

- Plant efficiency improvement
- OSHA & EU-OSHA compliance
- HEPA module for choice

### SPECIFICATIONS

	FI-800	FI-1200	FI-2500	FI-3000
Motor	TEFC 1.5 HP	TEFC 1.5 HP	TEFC 3.0 HP	TEFC 5.0 HP
Airflow	850 ft <sup>3</sup> / min 1,443.3 m <sup>3</sup> / hr	1100 ft <sup>3</sup> / min 1867.8 m <sup>3</sup> / hr	1500 ft <sup>3</sup> / min 2547 m <sup>3</sup> / hr	2340 ft <sup>3</sup> / min 3973.3 m <sup>3</sup> / hr
Arm port	Ø 6" (150 mm) x 1 or Ø 8" (200 mm) x 1	Ø 6" (150 mm) x 1 Ø 4" (100 mm) x 2	Ø 8" (200 mm) x 1 Ø 6" (150 mm) x 2	Ø 8" (200 mm) x 1 Ø 6" (150 mm) x 2
Fume arm recommended	-	Ø 4" (100 mm) x 2 or Ø 6" (150 mm) x 1	Ø 8" (200 mm) x 1 or Ø 6" (150 mm) x 2	Ø 8" (200 mm) x 1 or Ø 6" (150 mm) x 2
Machine size (cm)	120.3 x 74.6 x 85 (not including Fume Arm)	111.2 x 79.6 x 175.2 (not including Fume Arm)	120.7 x 95.3 x 178.6 (not including Fume Arm)	120.7 x 95.3 x 178.6 (not including Fume Arm)

## SPEEDER AIR CLEANER ( PH TYPE - DUST COLLECTOR )

### ■ Appliance :

Grinding Dusts  
Welding Fumes  
Dust Collection

- Productivity improvement
- OSHA & EU-OSHA compliance
- HEPA module for choice



FI-A-2500

- Plant efficiency improvement
- OSHA & EU-OSHA compliance
- HEPA module for choice



FI-C-3500

### ■ Appliance :

Welding Fumes  
Soldering Fumes  
Grinding Dusts  
Graphite Dusts  
Process Dusts  
Sanding Dusts

### SPECIFICATIONS

	FI-A-2500	FI-C-1200	FI-C-2500	FI-C-3500
Motor	TEFC 5 HP	TEFC 1.5 HP	TEFC 3 HP	TEFC 5 HP
Airflow	2340 ft <sup>3</sup> / min 3973.32 m <sup>3</sup> / hr	1100 ft <sup>3</sup> / min 1867.8 m <sup>3</sup> / hr	1500 ft <sup>3</sup> / min 2547 m <sup>3</sup> / hr	2340 ft <sup>3</sup> / min 3973 m <sup>3</sup> / hr
Inlet opening	510 mm x 408 mm x 4	Ø 6" (195 mm) x 1	Ø 8" (203 mm) x 1	Ø 10" (203 mm) x 1
Machine size (cm)	92.0 x 99.4 x 257.8	87.9 x 65.6 x 173.1	96.9 x 99.4 x 191.7	96.9 x 99.4 x 191.7



# SPEEDER DOWNDRAFT TABLE

- **Appliance :**  
Welding Fumes  
Soldering Fumes  
Grinding Dusts  
Smoke Extraction



FI-D-2000

- OSHA & EU-OSHA compliance
- HEPA module for choice

## SPECIFICATIONS

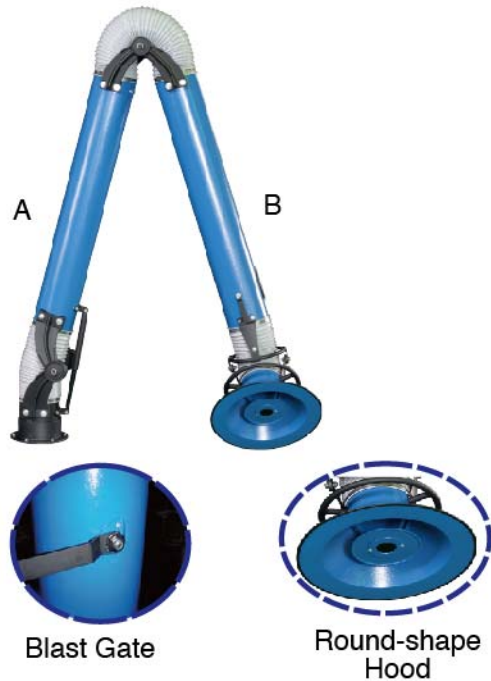
	FI-D-2000	FI-D-3500
Motor	TEFC 2 HP	TEFC 5 HP
Airflow	1350 ft <sup>3</sup> / min 2296.3 m <sup>3</sup> / hr	2340 ft <sup>3</sup> / min 3973 m <sup>3</sup> / hr
Machine size (cm)	124.7 x 99.8 x 102.9	198.7 x 132.1 x 95.1

# SPEEDER FUME ARMS ( STANDING & HANDING FUME ARMS )

- **Appliance :**  
Welding Fumes Extraction  
Soldering Fumes Extraction  
Grinding Dusts Extraction  
Dry Dusts Extraction  
Powders Extraction



Arm Mounting Base



- Full sizes to adapt all circumstances
- Easy-to-shift hood ring as a handle

## SPECIFICATIONS

	M 1015P	M 1020P	M 1025P	M 1220P	M 1230P	M 1620P	M 1630P	M 1640P	M 2020P	M 2030P	M 2040P
SPEC.	Ø 4"	Ø 4"	Ø 4"	Ø 5"	Ø 5"	Ø 6"	Ø 6"	Ø 6"	Ø 8"	Ø 8"	Ø 8"
Length	5' / 1.5 M	7' / 2 M	8.5' / 2.5 M	7' / 2 M	10' / 3 M	7' / 2 M	10' / 3 M	14' / 4 M	7' / 2 M	10' / 3 M	14' / 4 M
Pipe A (inch)	24	31.5	39	31.5	40	31.5	39	66	31.5	39	66
Pipe B (inch)	16	24	31.5	20	39	20	39	55	20	39	55
Pipe A (mm)	610	800	990	800	1015	800	990	1680	800	990	1680
Pipe B (mm)	410	610	800	510	990	510	990	1400	510	990	1400

# METALEX SELF - PROPELLED CHAMFERING MACHINE



JT-10W



JT-12W

## SPECIFICATIONS

	JT-10W	JT-12W
Voltage	220 ~ 440 V, 50 / 60 Hz, 3PH	220 ~ 440 V, 50 / 60 Hz, 3PH
Motor	400 W	2 HP, 2800 rpm / 50 HZ, 3420 rpm / 60HZ
Cutting speed	1800 ~ 2000 mm / min (max)	4000 ~ 4500 mm / min (max)
Height of bevel	10 mm (carbon steel) 8 mm (stainless steel)	13 mm / 45° (carbon steel) 8 mm / 45° (stainless steel)
Bevel angle	30° / 35° / 45° (Alternative)	15° ~ 50°
Work piece thickness	4 ~ 12 mm	6 ~ 40 mm
Work piece width	60 mm ↑	100 mm ↑
N.W / G.W.	28 / 46 kgs	140 / 179 kgs

# METALEX SELF - PROPELLED CHAMFERING MACHINE



Standard mode:  
Top chamfering

## FEATURES:

1. Applicant : Available for steel, stainless steel, aluminum, copper, plastic and others materials.
2. No need the coolant oil or cutting oil while chamfering.
3. Available for different size of panel.  
The large size : Chamfering it is self for work piece.  
The small size : Fixed way, move the work piece for chamfering.
4. Easy operation, to adjustment each function with only one fixed wrench.
5. Adopt hydraulic lift table, the height can random adjusting from 840 - 1240 mm.
6. Easy operation, to turn round no need accessories.



Reverse mode:  
Bottom chamfering

## SPECIFICATIONS

	JT-20W
Voltage	220 ~ 440 V, 50 / 60 Hz, 3PH
Motor	3 HP, 1400 rpm / 50 HZ, 1720 rpm / 60HZ
Cutting speed	1850 ~ 2250 mm / min (max)
Height of bevel	20 mm / 45° (carbon steel) 20 mm / 45° (stainless steel) * 8 mm for one time processing
Bevel angle	15° ~ 50°
Work piece thickness	9 ~ 50 mm
Work piece width	100 mm ↑
N.W / G.W.	283 / 368 kgs

**ACRA MACHINERY**  
MANUAL & CNC  
LATHES • GRINDERS  
MILLS • RADIAL DRILLS  
SAWS • SHEET METAL

13173



**FREJOTH INTERNATIONAL LTD.**

**F**rejoth had been proudly stood the test of time since our first establishment in 1973. Adapting to this micro profit era, our products now include machinery, machine accessories, and cutting tools; also with a small department that covers expert hand tools, air tools and wood working machines. Our annual turnover is USD 34,000,000.

**W**e treat our customers like how we want to be treated. We are grateful for the wonderful partnership and trusting friendship with our customers throughout the years; and looking forward to meet new customers. We have dealers around the world; we support them at the trade shows to promote awareness of our products.

**O**ur team of people loves what we do; we are open, friendly, helpful, and responsible individuals. We take great pride being part of this company. Most of our team members had been working with us from 10-30 some years. We are a big family. We love new challenges and we are looking forward to serve you for the next coming 43 years and more, come meet us!



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