

SFM CNC



▲ 廠房建坪6000平方米
(FACTORY SQUARE: 6000m²)

SUN FIRM MACHINERY IND.



SFM

三鋒機器工業股份有限公司
SUN FIRM MACHINERY IND.CO.,LTD.
台灣省台中縣大里市工業區工業11路155號
NO. 155, 11 RD TA-LI INDUSTRIAL PARK, TAICHUNG 412, TAIWAN
TEL:886-4-24913781~6 FAX:886-4-24915322
E-mail:sunfirm@ms34.hinet.net <http://www.sunfirm.com>

SFM

重切削強力巨型車床 HEAVY DUTY PRECISION LATHE



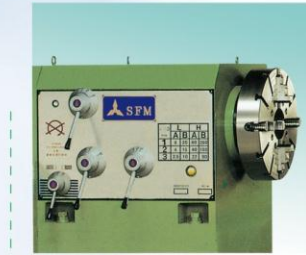
SFM

三鋒機器工業股份有限公司
SUN FIRM MACHINERY IND.CO.,LTD.

Main Features
主要功能



SGT-51120 WITH 21" SPINDLE BORE



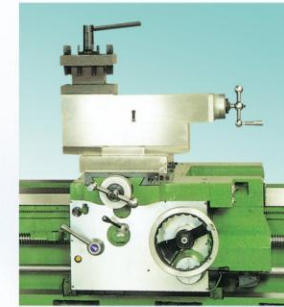
HEADSTOCK

- The spindle is supported by high precision bearings suitable for both heavy and precision cutting.
- The speeds of spindle have 12 steps and designed on theoretical base. All gears and shafts are made of Ni-Cr-Mo steel and carbonize and ground.
- Control of main drive through electromagnetic brake, and automatic forced lubrication.
- 主軸為整體鑄造加工而成，並由三個精密軸承，分三點式支持，主軸速度變換有12段，可做廣泛之切削工作。
- 頭座內齒輪及齒輪軸，採用鍍鉻鋁合金鋼，並經滲碳熱處理和精密研磨而成。
- 採用電磁刹車裝置及強制給油潤滑裝置。



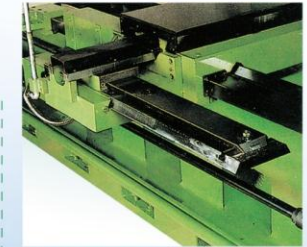
GEAR BOX

- The gear box is entirely enclosed protection and provide a large of feedings or thread cuttings (inch, metric, module pitch and diametral pitch).
- Inch and Metric threading with out changing gear.
- Oil both lubrication and built in safety clutch safeguard the continuous and proper operation of the universal gear box.
- 全封閉式齒輪箱，不需更換任何配換齒輪，便可廣泛的車製公制、英制、模數和徑節牙。
- 旋轉式的十段變速，能快速並正確地變換車牙種類和自動進給速率。



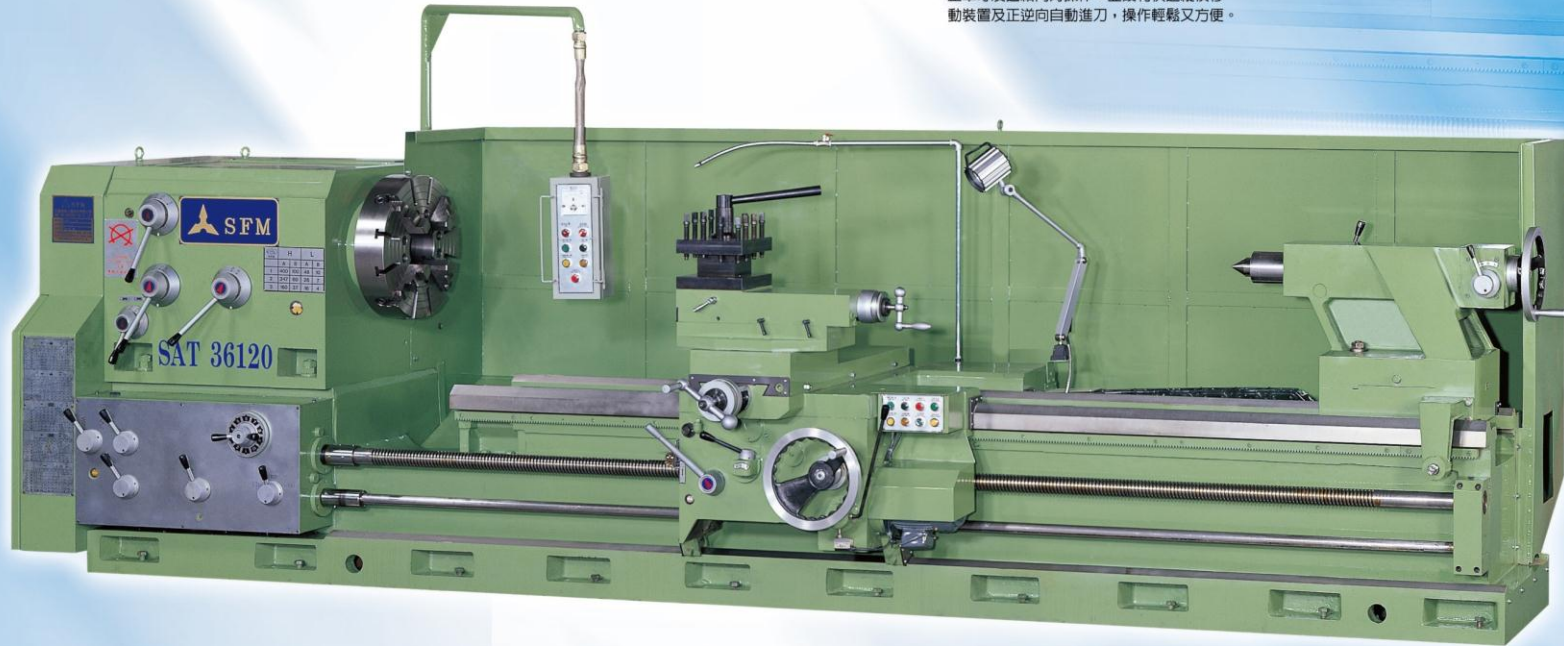
CARRIAGE & APRON

- The compound rest can be fixed the cross-slide anywhere, convenient cutting work application.
- The apron gave automatic lubrication and locked-safe device protect threads and feeding same as operation.
- Rapid traverse drive for longitudinal cross feeding and forward & reverse feed are operating very light and convenience.
- 刀架底座裝置在移動式滑板上，可任意調整位置，以利重切削工作地廣泛應用。
- 床護設有自動潤滑系統及內鎖安全裝置，防止車牙及進給同時操作，並設有快速縱橫移動裝置及正逆向自動進刀，操作輕鬆又方便。



TAPER ATTACHMENT

- The taper attachment was designed for easy operate and rapid cut taper in high accuracy, the device will produce a ± 10 angles.
- Electric cable in steel cover to protect wire from chips and preventing trouble with electric wires.
- 斜度切削裝置，供車製管牙及斜度，快速及便利。
- 斜度切削範圍：正負 $0^{\circ}\sim 10^{\circ}$ 之間。
- 鋼製鍊條式電器線保護裝置，隨著切削進給的縱向操作伸縮自如，保持電路暢通。



SAT-36120



重切削精密車床 HEAVY DUTY PRECISION LATHE

規格 SPECIFICATION

ITEM	項目	SHT 系列				SFT 系列			
CAPACITY	工作範圍								
Swing Over Bed	床面上最大旋徑	1500mm (59")	1650mm (65")	1550mm (61")	1850mm (73")				
Swing Over Slide	鞍面上最大旋徑	1200mm (47")	1350mm (53")	1220mm (48")	1520mm (60")				
Swing over Gap	凹口上最大旋徑	2050mm (80")	2200mm (86")	2100mm (82")	2400mm (94")				
Width of Gap	凹口工作寬度	560mm (22")				610mm (24")			
Distance Between Centers	兩心間距離	3000mm(120")	4000mm(160")	5000mm(200")	6000mm(240")	7000mm(275")	8000mm(315")	9000mm(354")	10000mm(395")
HEAD STOCK	主軸箱								
Spindle Bore	主軸孔徑	Ø 153mm (6")							
Spindle Nose	主軸鼻端	ASA A2-15							
Number of Spindle Speeds	主軸變換段數	12 Changes							
Taper of Center	中心針斜度 (莫氏)	M.T. No.6				M.T. No.7			
Range of Spindle Speeds	主軸變速範圍	2.5 - 250 RPM				1.7 - 170 RPM			
FEEDS &	進給與車牙								
THREADS CUTTING									
Leadscrew	導螺桿直徑及螺距	57mm (2-1/4") 2 TPI				65mm(2-1/2") x 2 T.P.I / * P 12mm/1牙 (OPT)			
Inch Threads	英制螺紋 (徑節螺紋)	1/2 - 30 TPI (60 kind)							
Metric Threads	公制螺紋 (橫數螺紋)	1 - 60 mm (52 kind)							
Longitudinal Feeds	縱向進刀量範圍	0.08 - 5.0mm/rev							
Cross Feeds	橫向進刀量範圍	0.042 - 2.5mm/rev							
CARRIAGE	滑座								
Cross Slide Travel	橫送台移動範圍	750mm (30") / * 800mm (31.5")(OPT)				950mm (37.4") / * 1000mm (39.4")(OPT)			
Compound Rest Travel	複式刀座移動範圍	400mm (15")				450mm (17.7")			
Top Slide Travel	上層刀座移動範圍	N/A				320mm (12.6")			
Rapid Travel Speed to Carriage (Long)	縱向快速移動速度	2000mm/min (80"/min)							
Rapid Travel Speed to Cross Slide	橫向快速移動速度	950mm/min (37"/min)							
TAILSTOCK	尾座								
Quill Diameter	心軸直徑	145mm (5.7") / * 180mm (7")(OPT)				155mm (6.1")			
Quill Travel	心軸行程	330mm (13")				380mm (15")			
Taper of Quill Center	頂心斜度	M.T. NO.7							
BED	床體								
Width of Bed	床面寬度	850mm (33")				1016mm (40")			
Length of Bed (SHT)	床身長(SHT)	5100mm	6100mm	7100mm	8100mm	9100mm	10100mm	11100mm	12100mm
Length of Bed (SFT)	床身長(SFT)	5600mm	6600mm	7600mm	8600mm	9600mm	10600mm	11600mm	12600mm
Main Motor	主馬達	20 / * 25 HP(OPT)				25 HP / * 30 HP , 40 HP(OPT)			
Rapid Travel Motor	快速移動馬達	1 HP				2 HP			

*本公司擁有設計變更及規格變更之權利，若有變更恕不另行通知。 *Specifications are subject to change without notice for further design improvement.

STANDARD	標準附件	OPTIONAL ACCESSORIES	特別附件
Steady rest	1 PC 中心架	1個 3-Jaw Scroll Chuck	1個 三爪夾頭
Center	2 PCS 中心針	2個 4-Jaw Independent Chuck	1個 四爪夾頭
Tool Post Wrench	1 PC 刀架螺絲把手	1個 Follow Rest	1個 跟刀架
Tool Box & Tool	1 SET 工具箱及調整工具	1 SET Taper Turning Attachment	1組 斜度附件
		1 SET Coolant Pump	1組 冷卻泵浦

重切削精密車床 HEAVY DUTY PRECISION LATHE

規格 SPECIFICATION

ITEM	項目	SAT 系列				SGT 系列			
CAPACITY	工作範圍								
Swing Over Bed	床面上最大旋徑	920mm (36")	1020mm (40")	1160mm (45")	1310mm (51")				
Swing Over Slide	鞍面上最大旋徑	650mm (25")	750mm (29")	850mm (33")	1000mm (40")				
Swing over Gap	凹口上最大旋徑	1400mm (55")	1500mm (60")	1700mm (67")	1850mm (72")				
Width of Gap	凹口工作寬度	508mm (20")				560mm (22")			
Distance Between Centers	兩心間距離	2000mm(80")	2500mm(100")	3000mm(120")	4000mm(160")	5000mm(200")	6000mm(240")	7000mm(275")	
HEAD STOCK	主軸箱								
Spindle Bore	主軸孔徑	105mm (4-1/8") / *153mm (6") (OPT.)				153mm (6")			
Spindle Nose	主軸鼻端	ASA-A2-11							
Number of Spindle Speeds	主軸變換段數	12 Changes							
Taper of Center	中心針斜度 (莫氏)	M.T. No.6							
Range of Spindle Speeds	主軸變速範圍	4-400, 3-300, 2.5-250 RPM							
FEEDS &	進給與車牙								
THREADS CUTTING									
Leadscrew	導螺桿直徑及螺距	57mm (2-1/4")							
Pitch of Leadscrew	導螺桿螺紋	2 T.P.I / * P12mm (OPT.)							
Inch Threads	英制螺紋 (徑節螺紋)	1/4-30 TPI (70 kinds)							
Metric Threads	公制螺紋 (橫數螺紋)	1-120mm (62 kinds)							
D.P Threads	徑節螺紋	1-120 D.P. (70 kinds)							
M.P Threads	模數螺紋	0.25-30 M.P. (53 kinds)							
Longitudinal Feeds	縱向進刀量範圍	0.085-10.08 mm/rev				0.004-0.40 in/rev			
Cross Feeds	橫向進刀量範圍	0.042-5.04 mm/rev				0.002-0.20 in/rev			
CARRIAGE	滑座								
Cross Slide Travel	橫送台移動範圍	610mm (24")				635mm (25")			
Compound Rest Travel	複式刀座移動範圍	365mm (14")				420mm (16-1/2")			
Rapid Travel Speed to Carriage	滑座快速移動速度	2000mm/min (80"/min)							
TAILSTOCK	尾座								
Quill Diameter	心軸直徑	105mm (4-1/8")				125mm (4-7/8")			
Quill Travel	心軸行程	285mm (11-1/4")				340mm (13-3/8")			
Taper of Quill Center	頂心斜度	M.T. NO.6							
BED	床體								
Width of Bed	床面寬度	560mm (22")				660mm (26")			
Length of Bed (SAT)	床身長(SAT)	3900mm (154")	4400mm (174")	4900mm (194")	5900mm (232")	6900mm (272")	7900mm (311")	8900mm (350")	
Length of Bed (SGT)	床身長(SGT)	4000mm (157")	4500mm (177")	5000mm (197")	6000mm (237")	7000mm (276")	8000mm (315")	9000mm (354")	
Main Motor	主馬達	15 HP / * 20 HP (OPT.)				20 HP / * 25 HP (OPT.)			
Rapid Travel Motor	快速移動馬達	1 HP							
Weight (Approx) (SAT)	重量(約) (SAT)	7300 kg	7800 kg	8300 kg	9300 kg	10300 kg	11300 kg	12300 kg	
Weight (Approx) (SGT)	重量(約) (SGT)	8500 kg	9100 kg	9700 kg	10900 kg	12100 kg	13300 kg	14500 kg	
Packing Size (LxWxH)	裝箱尺寸 (SAT) (長x寬x高) (SGT)	180" x 65" x 72"	200" x 65" x 72"	220" x 65" x 72"	260" x 65" x 72"	300" x 65" x 72"	340" x 65" x 72"	380" x 65" x 72"	
		180" x 80" x 77"	200" x 80" x 77"	220" x 80" x 77"	260" x 80" x 77"	300" x 80" x 77"	340" x 80" x 77"	380" x 80" x 77"	

*本公司擁有設計變更及規格變更之權利，若有變更恕不另行通知。 *Specifications are subject to change without notice for further design improvement.

STANDARD/標準附件	數量	規格	數量	規格	數量	規格	數量	規格
4-Jaw Face plate Chuck 45"	1 PC	英式四爪盤 45"	1個	Center	2 PC	中心套筒	2個	
Steady rest	1 PC	固定中心架	1個	Erection Bolt	1 Set	直立螺絲	1組	
Center Sleeve	1 PC	頂心	2個	Tool & tool box	1 Set	工具箱及調整工具	1組	