

邁向技術尖峰，掌握效率的潮流！
*Towards The Peak Technology, Grasp The Trend
Of Efficiency!*

精密成型平面磨床

Precision Molding Surface Grinder



精旭精密機械有限公司
JINGXU PRECISION MACHINERY CO.,LTD
东莞市必嘉光栅机械有限公司
DONGGUAN CITY BIGA GRATING MACHINERY CO.,LTD

Add: ShiGu Industrial Zone, South District of Dongguan,
Guangdong Province, China
Phone: 0086-769-22857003 22850096
Fax: 0086-769-22825526
E-mail: Daisy@dgbica.com keven@dgbica.com
sales1@dgbica.com sales3@dgbica.com

WINGYANG 13929208001



精旭精密機械有限公司
JINGXU PRECISION MACHINERY CO.,LTD
东莞市必嘉光栅机械有限公司
DONGGUAN CITY BIGA GRATING MACHINERY CO.,LTD

邁向技術尖峰，掌握效率的潮流！
Towards The Peak Technology, Grasp The Trend
Of Efficiency!

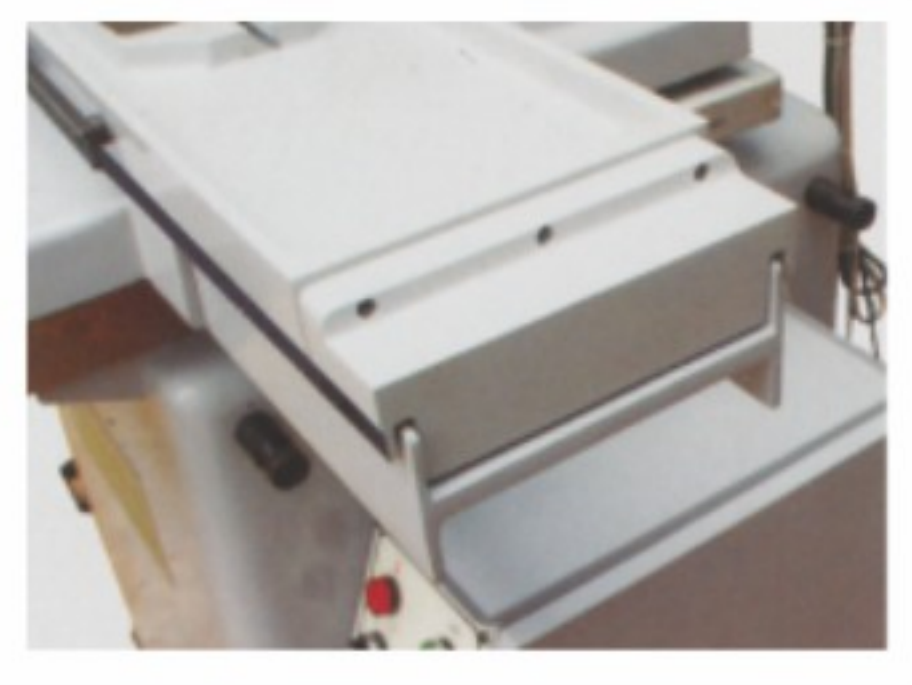
450S



618S



450S特点及特写 450S Features



直接鑄鋁件防塵，嚴密的防塵設計
Directly Protected by aluminum casting，
designed for closed protection



450型前後操作機構(A)
450 front and back operation
handle (A)



450型前後操作機構(B)
450 front and back operation
handle (B)



左右傳動齒帶傳送
left-right gear belt transmission

結構方面 主要鑄件均採用高級耐磨鑄鐵，並經由退火處理，消除內應力，以確保高精度、高剛性，並延長機器壽命。
Structure: main casting are made of super wear-resistant cast iron and are quenched to eliminate the inner stress, so as to ensure high-precision,high-rigidity and to increase of service life.

滑道方面 本機左右及前後雙 V 滑道黏貼進口義大利耐磨道軌帶TURCITE-B，並經精密鍍花，不僅滑動順暢且耐磨，最適合成型研磨。
Slide rail: double V slide rail on all sides are stick to TURCITE-B which is an Italian great wear-resistant rail belt and are scraped precisely to make it smooth sliding and wear-resistant.It is most suitable for forming grinding.

主軸方面 使用彈筒式一體化設計之直結式主軸，並採用德國P4級超精密滾柱軸承，在高速旋轉下，低噪音、低震動、扭力大，適合重切削及各式成型研磨。
Spindle: The direct type spindle is designed by cartridge-type integration, and are made of super-precise cylindrical bearing of German P4 degree. The spindle is less noise, low vibration and high torque and is suitable for heave cutting and all kinds of grinding.

自動潤滑系統方面 採用迴圈式自動潤滑系統，當主軸啟動時，潤滑油即自動迴圈對各螺桿及滑道提供強制潤滑，可大大降低滑道磨損度。機柱上方裝有一油鏡可監看潤滑情形。
Auto lubrication system: It is a loop type Auto lubrication system. Lubricant can automatically loop and provide forced lubrication for all screws and slide rail. The auto lubrication system could greatly reduce wear level of slide rail. There is a oil mirror above the column to check the situation of lubrication.

工作臺傳動系統 工作臺傳動使用包鋼絲同步帶式傳動，減少更換鋼絲繩的煩惱，工作臺與同步帶採用柔性連接，保證傳動平穩。
Worktable drive system: It use clad steel wire synchronous belt drive to reduce replacement of steel wire. The synchronous belt is connected with worktable with a flexible connection to ensure smooth drive.

自流式設計 對道軌進行恒壓式供油，解決電磁泵間隙供油給工作道軌精度造成誤差。
Free flow design: It could supply oil for slide rail on constant pressure. Therefore, The design could eliminate the error of accuracy of working slide rail caused by oil supply of electromagnetic.

機器規格 SPECIFICATIONS

機型 Model			450S
工作能力 Capacity	工作臺尺寸	Worktable size	150×450mm
	最大研磨長度	Max. Length of grinding	465mm
	最大研磨寬度	Max. width of grinding	175mm
	主軸中心至工作臺距離	Distance from spindle centre to worktable	400mm
	標準磁片尺寸	Standard size of magnetic disk	150×400mm
左右進給 Gross feed	手動行程	Manual stroke	465/520mm
	油壓行程	Oil pressure stroke	/
	工作臺速度	Worktable speed	/
前後進給 Longitudinal feed	自動進給	Auto feed	/
	快速進給	Rapid feed	/
	手動行程	Manual stroke	200mm
	手輪每旋轉一圈	Handwheel per revolution	5mm
	手輪每格	Handwheel per gradutaion	0.02mm
升降進給 Vertical feed	手輪每旋轉一圈	Handwheel per revolution	1mm
	手輪每格	Handwheel per gradutaion	0.005mm
砂輪 Grinding wheel	砂輪尺寸(外徑×寬×內徑)	Size(OD*W*ID)	Φ180×13×Φ31.75
	主軸轉速(50Hz/60Hz)	Spindle speed(50Hz/60Hz)	2850/3600RPM
馬達 Motor	主軸馬達	Spindle motor	1.5HP
	吸塵馬達	Dust collection motor	1/2HP
	水泵馬達	Pump motor	1/8HP
體積 Machine size	長×寬×高	L*W*H	1675×1214×1968mm
重量 Machine weight	淨重	Net weight	950kg

機型 Model			618S	614S
主要規格 Main specification	工作臺尺寸	Work table size	150×450mm	150×380mm
	最大研磨長度	Max. Length of grinding	475mm	375mm
	最大研磨寬度	Max. width of grinding	160mm	160mm
	主軸至工作臺面距離	Distance from spindle centre to worktable	350 ~ 400mm	350 ~ 300mm
	標準磁片尺寸	Standard size of magnetic disk	150×400mm	150×400mm
左右進給 Gross feed	手動行程	Manual stroke	480mm	380mm
前後進給 Longitudinal feed	手動行程	Manual stroke	180mm	180mm
	手輪每旋轉一圈	Handwheel per revolution	5mm	5mm
	手輪每格	Handwheel per gradutaion	0.02mm	0.02mm
升降進給 Vertical feed	手輪每旋轉一圈	Handwheel per revolution	1mm	1mm
	手輪每格	Handwheel per gradutaion	0.005mm	0.005mm
砂輪 Grinding wheel	砂輪尺寸(外徑×寬×內徑)	Size(OD*W*ID)	Φ180x13xΦ31.75	Φ180×13×Φ31.75
	主軸轉速(50Hz/60Hz)	Spindle speed(50Hz/60Hz)	2850/3600RPM	2850/3600RPM
馬達 Motor	主軸馬達	Spindle motor	1.5HP	1.5HP
裝箱尺寸 Machine size	長×寬×高	L*W*H	1300×1150×1980mm	1300×1150×1980mm
重量 Machine weight	毛重	Gross weight	750kg	690kg

該機械規格隨品質提高會有所變更，對此恕不另行通知！
The specification of machines in updating, if change, forgive me for not issuing s separate notice.

邁向技術尖峰，掌握效率的潮流！
*Towards The Peak Technology, Grasp The Trend
Of Efficiency!*

精密數控成型平面磨床

Precision CNC Forming Surface Grinder



精旭精密機械有限公司
JINGXU PRECISION MACHINERY CO.,LTD
东莞市必嘉光栅机械有限公司
DONGGUAN CITY BIGA GRATING MACHINERY CO.,LTD

Add: ShiGu Industrial Zone, South District of Dongguan,
Guangdong Province, China
Phone: 0086-769-22857003 22850096
Fax: 0086-769-22825526
E-mail: Daisy@dgbica.com keven@dgbica.com
sales1@dgbica.com sales3@dgbica.com

WINGANG 营销广告策划
13929208001



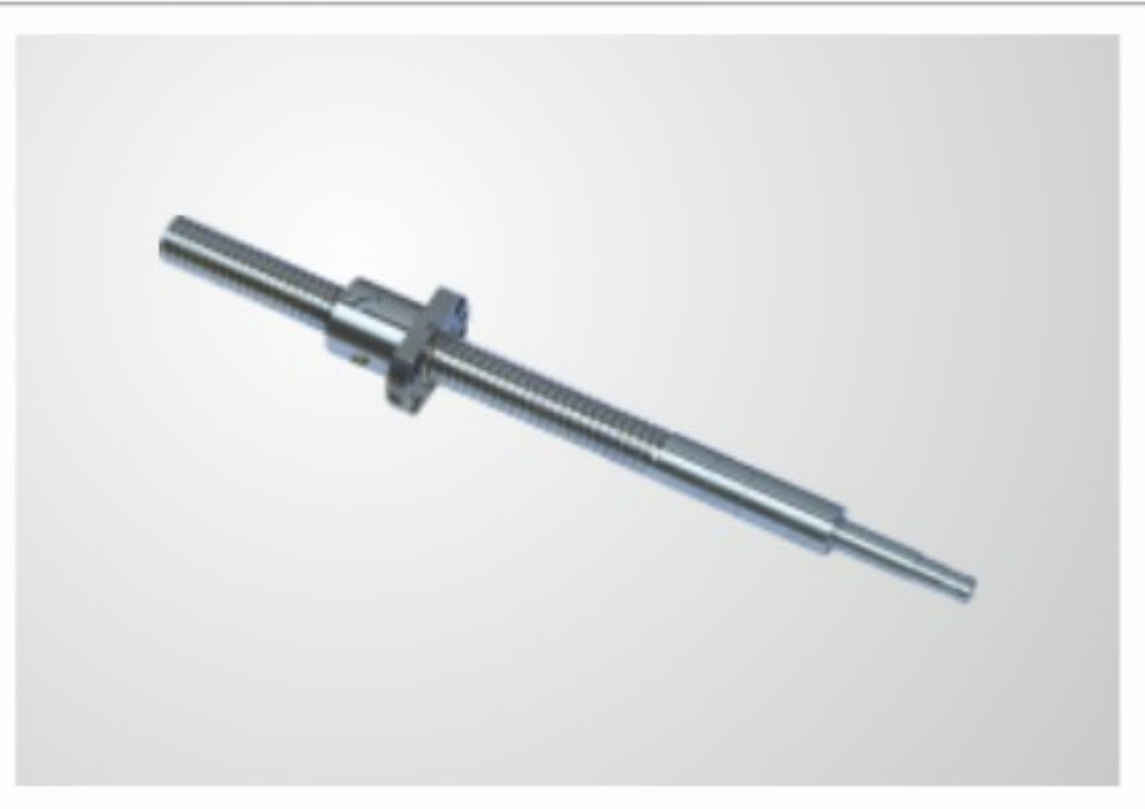
精旭精密機械有限公司
JINGXU PRECISION MACHINERY CO.,LTD
东莞市必嘉光栅机械有限公司
DONGGUAN CITY BIGA GRATING MACHINERY CO.,LTD

邁向技術尖峰，掌握效率的潮流！
Towards The Peak Technology, Grasp The Trend
Of Efficiency!

450CNCs



精密、穩定 Precision and Stabilization
最佳研磨品質，配特殊規劃設計CNC控制器，即可輕易達到您所期望的研磨品質
Special designed CNC controller with best grinding quality could easily meet your requirement.



穩重 Steady
高剛性機械結構體，為了確保機器之恒久精度以及在重研削狀態下之高穩定性
High rigid machine structure is to ensure lasting accuracy of machine and high stability in the state of regrounding.

前後滾珠螺桿 Ball Screw of Y Axis
前後進給採用高精度滾珠螺桿傳動，螺桿加裝伸縮護套保護確保螺桿之最佳使用壽命，密封式油脂潤滑不需要另行潤滑
Feed on y axis is driven by ball screw of High precision which is added with telescopic protective cover to protect it and to ensure optimal service life. The ball screw is lubricated by sealed lubrication, would not need lubrication separately.



**磁性紙帶過濾沖水裝置
Magnetic paper belt filter flushing device**
避免鐵粉拉傷工件
Avoiding iron powder hurts the workpiece.



精密主軸 Precise spindle
主軸與馬達 (V-3級) 為直接式驅動，主軸採用超精密 (P-4級) 滾柱雙排軸承保證擁有最佳研磨剛性及品質
Spindle and motor (V-3 degree) are all driven directly. Spindle is made of super precise (P4-degree) double roller bearing to ensure best grinding rigidity and quality.

機械特性 MACHINE FEATURES

精度 Precision
※工作臺精度保證(試磨X6片，其高度差3u)
Worktable accuracy assurance (3um error of height on six trials of grinding)
※上下及前後軸進刀最小單位1u
Min. Tool feed unit 1 um on all sides
※前後採用C3級滾珠螺桿重復定位精度
3u Using C3 degree roller ball screw on Y axis with 3 um repeat positioning accuracy.
※上下，前後軸可經由光柵尺回饋在加工定位中精度更準
Z and Y axes have higher precision glass linear scale.
主軸及馬達 Spindle and Motor
※上下軸、前後軸採用AC伺服馬達驅動
Z and Y axes are drove by AC servo motor.
※2HPV3 級底震主軸與馬達
2HPV 3 spindle and motor 2HPV3
※精密主軸採用直接式，主軸軸承前端使用P4級滾柱雙排斜角軸承。
Direct precision spindle, Front bearing of spindle use P4 degree roller double bevel bearing.
自動潤滑系統 Auto lubrication system
採用回圈式自動潤滑系統，當液壓系統啟動時，潤滑油對螺桿及滑道提供潤滑，可大大降低滑道磨損度。
It is a loop type Auto lubrication system. Lubricant can automatically lubricate for all screws and slide rail to greatly reduce wear level of slide rail.
左右工作臺 Cross worktable
左右工作臺採用先進的油壓回路系統，工作臺在兩端反轉時達到最小震動，速率1~25m/min近接開關內藏式設計保證操作安全。
Cross worktable has advanced hydraulic loop system. Worktable could reach the Min. Vibration when it reverse at both ends. Its speed is 1-25m/min. Build-in switch could ensure safe operation.
底床及滑軌 Bottom bed and slide rail
※前後雙V，左右1V—平，貼附耐磨片，TURCITE B 以及手工鏟花，滑軌皆硬軌。
Double “V” on the Y axis, a “V” and a flat on the X axis with wear-resistant plate. TURCITE ,are hand scraped and rail are all hard rail.
※一體式鑄件底床鑄件採用FC300高級鑄鐵，經過退火及季化不變形
Integrated bottom bed casting is made of FC300 high degree cast iron, which could keep its indeformable after quenching treatment.
CNC系統 CNC controller CNC
簡易操控的CNC控制器，自動修底部、側面、斜度砂輪自動補數，大幅提升整體加工效率，降低人工成本。
Easy-to-use CNC controller automatically grind the bottom and side of work piece and bevel grinding wheel automatically compensate to largely improve work efficiency and reduce labour cost.

多功能研削能力
MULTIFUNCTIONAL GRINDING RANGE

高精度，精度在0.003mm以內 High Precision within 0.003 mm

平面研磨 Surface Grinding	切溝研磨 Cut Full of Grinding	蛇形研磨 Serpentine Grinding	不等距、不等深溝槽台階研磨 Non-equidistant, different depth tankful Step Grinding	斜度研磨 Slope grinding

機器規格 SPECIFICATIONS

機型 Model		單位 Unit	450CNCs
加工能力 Capacity	最大研磨面積(長×寬) Max.grinding area	mm	450×150
	主軸中心至工作臺距離 Distance from spindle centre to worktable	mm	400
工作臺 Worktable	工作臺尺寸(長×寬) Worktable size(L*W)	mm	450×150
	左右最大行程 X axis travel	mm	550
	前後最大行程 Y axis travel	mm	180
	T型槽(尺寸×數量) T slot (S*N)	mm*n	17×1
進給 Feed	工作臺左右移動 Worktable cross movement	油壓驅動速度 Hydraulic drive speed	m/min 1-25
		手輪每轉 Handwheel per revolution	mm 69
	鞍座前後移動 Saddle Longitudinal movement	手動手輪每轉 Manual Handwheel per revolution	mm 5
		電子手輪 MPG Electronic handwheel MPG (每刻度per scale) (X1, X10, X100)	mm 0.001, 0.01, 0.1
		手動手輪每轉 Manual Handwheel per revolution	mm 5
		手動手輪每刻度 Manual Handwheel per scale	mm 0.02
	主軸頭上下移動 Spindle head vertical movement	手動手輪每轉 Manual Handwheel per revolution	mm 1
		電子手輪 MPG Electronic handwheel MPG (每刻度per scale) (X1, X10, X100)	mm 0.001, 0.01, 0.1
		手動手輪每刻度 Manual Handwheel per scale	mm 0.005
	上下自動進刀 Automatic vertical feed	每次進刀量(粗/精) Each amount of feed (rough/precise)	mm 0.001-0.099
		進刀總量 Total amount of feed	mm 0.001-999.999
		細磨進刀總量 Total amount of fine grinding	mm 0.001-0.099
	零研磨 Zero grinding		次 times 0-9
主軸與砂輪 Spindle and Grinding Wheel	主軸馬力 Spindle HP		HP 2
	主軸轉速 Spindle speed (50Hz/60H)		rpm 2850/3600
	砂輪尺寸(外径×寬×內径) Grinding wheel Size(OD*W*ID)		mm 180×13×31.75
馬達Motor	油壓 Oil pressure		HP 2
	前後伺服馬達 Longitudinal servo motor		W 750
	上下伺服馬達 Vertical servo motor		W 400
佔地空間 (長×寬×高) Machine Size (L*W*H)		cm	220×130×200
裝箱尺寸(長×寬×高) Packing Size (L*W*H)		cm	200×120×220
機臺重量 Machine Weight		Kg	1000

該機械規格隨品質提高會有所變更，對此恕不另行通知！
The specification of machine in updating, if change, forgive me for not issuing s separate notice.