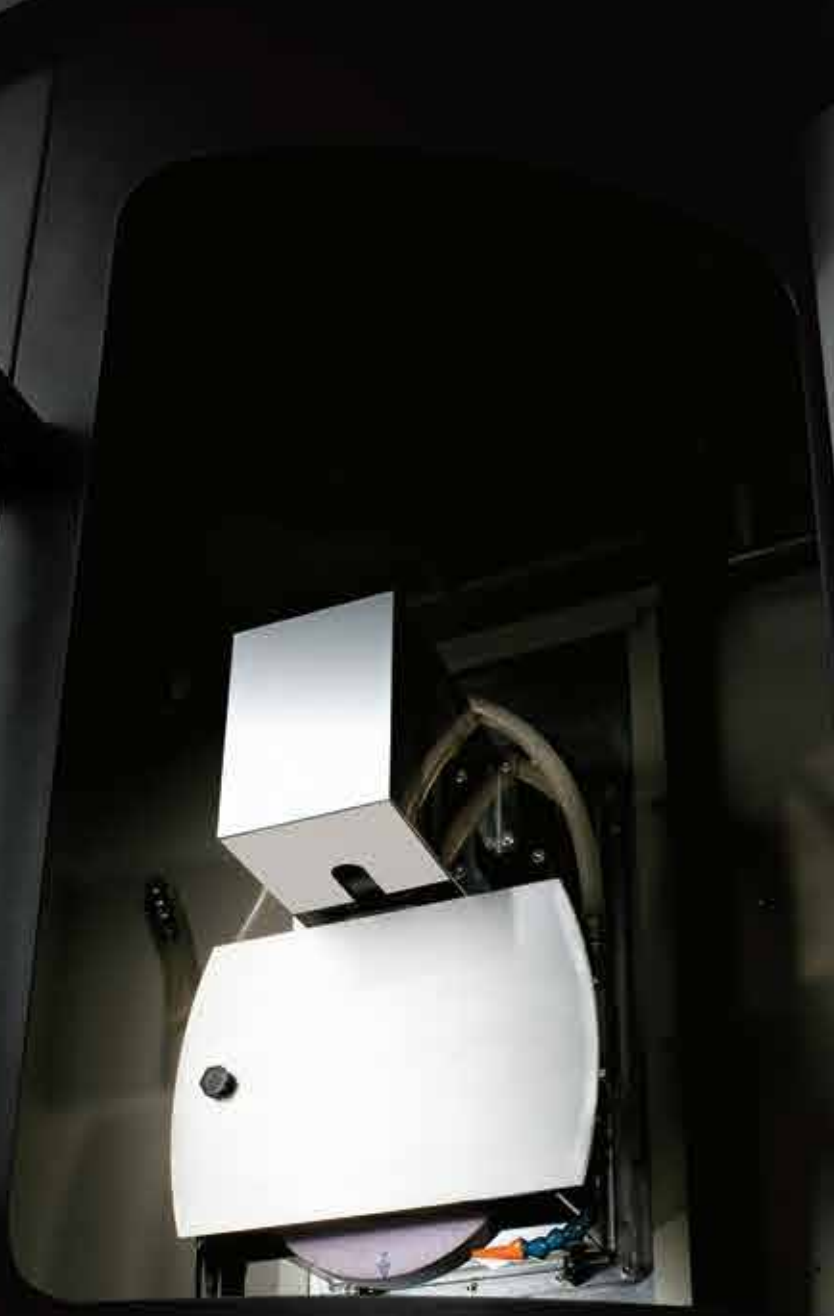


Simple is the Best




PROTH®
PRECISION SURFACE GRINDER

PROTH Surface Grinders

SIMPLE IS THE BEST

Founded in 1980, **PROTH** Industrial Co., Ltd. has specialized in the field of precision surface grinders. As a highly reputed manufacturer of precision surface grinders in Taiwan, a whole line of surface grinders are manufactured in house, including the following series: small saddle, medium column & over-arm, large double column planer, rotary and CNC surface grinders. In dedicated to research and develop the most comprehensive ranges of surface grinders, our mission is to provide the finest quality in assisting customers to achieve the best performance.

Over the years, **PROTH** supplies the best machines with excellent service has been highly acclaimed both domestically and internationally. With a proud commitment to quality control, **PROTH** surface grinders consistently surpass all the rigorous quality requirements of the European and Japanese markets.

In addition to the emphasis on innovating our product lines, achieving a better working environment with social and environment concerns, **PROTH** Industrial Co., Ltd. seeks to provide not only the best surface grinding machines but to do so with the focus on humanity.

“Simple is the best”. The simplest design contributes to maximizing excellent grinding implementation.

R&D Capabilities

Constant technical upgrade has long been a **PROTH** tradition, our outstanding R&D team continuously develops new models to meet customers' requirements and assist customers to stay competitive. All surface grinders are developed and manufactured in-house. We are proud of our R&D professions who are from various machinery backgrounds with the same passion in dedicating to up-to-date surface grinding technology. With unceasing enthusiasm towards R&D, **PROTH** offers supreme surface grinders with competitive edge.

Stability Guaranteed

Coins remain standing upright while the machine is in operation. The hydraulic system is designed particularly to assure extremely smooth motion, quiet running and shock-free performance.



Minimum Vibration and Deformation Integrated One Piece Casting Design

PSGC, PSGO and PSGP models are all first precision ground before final hand finish scraping.

The slideway lengths are equal to table lengths, insuring table free from torsion and floatation.

Excellent Features for Absolute Precision Grinding

The surfaces of longitudinal table ways and saddle ways are all hand scraped by experts to insure high accuracy and to get perfect contact patterns between the matching surfaces. High rigidity, heavy loading capability and lowest twist deformation, all yield maximum productivity with the highest surface finished and accuracy maintained.

Quality Assurance

At **PROTH**, we have a strong commitment to offer the best surface grinders with rigorous quality control throughout the entire manufacturing process. **PROTH** surface grinders have provided full satisfaction to each customer in both machine quality and performance. Fully equipped with a comprehensive range of inspection instruments for rigorously inspecting parts and machines, all these guarantee the maximum dependability of each surface grinder from **PROTH**.



Performance

Hydraulic System : Extra Low Noise

- Two single-acting hydraulic cylinders are anchored at very specific positions with their piston rods to enhance rigidity and stability. It creates a very stable table motion and eliminates table floatation.
- A specially designed hydraulic system, in consideration of preventing excessive heating of hydraulic oil and reducing table reversal shock, results in an extra smooth table movement.
- The hydraulic tank and pumping unit are separated from the main machine body to provide the following advantages:
 - Prevent the heat of warm hydraulic oil from entering the machine body and the cause of the expansion and distortion which can affect the accuracy of workpiece finished.
 - Prevent any vibration generated by the hydraulic pumping system from being transferred to the machine base and the cause of flatter marks on workpiece.
- Hydraulic-type driven system for table left/right motion provides the smoothest, shock-free stepless feeds for superior workpiece finished.
- In order to enhance the life of pistons, pumps, cylinders, O-rings and seals, oil filtration is provided to keep the supplied hydraulic oil free of dirt and grit.

Stress-Relieved Main Casting:

- All components of the main machine casting, such as base, table, saddle, column, etc., are all annealed TWICE with particular attention to remove all metallurgical stress.

Lubrication:

- Spindles:
 - Ultra high-grade sealed bearings and special formulated grease lubrication are partnered to provide long service life and lowest maintenance required.
- Table Longitudinal Ways:
 - The table longitudinal ways are automatically lubricated with oil supplied from the hydraulic unit via a cartridge type oil filter, which filters contaminate particles larger than 10 microns and prevents premature deterioration of the oil.
 - The filter not only keeps the oil in a clean condition, but also automatically keep the exact oil film thickness as soon as the hydraulic system is activated. No lubrication shortage would occur.

Grinding Spindle:

- The high precision high rigidity spindle is of a cartridge-type design, which provides easier accessibility and service when maintenance is needed.
- Multiple high-precision anti-friction axial and radial bearings are utilized specifically for absolute minimal play and run-out.
- A special type of grease-for-life bearing lubrication is accurately applied and sealed in house for long production hours of trouble free grinding.
- Spindle run-out is tested at better than 0.0025mm (0.0001") T.I.R.
- Spindles are quiet and vibration free.



PSGC-60120NC
Shown with Optional Equipment

Low-Friction Coated Surface:

- Most of the slideways consist of one cast iron precision scraped surface in contact with a specially designed anti-friction coated surface to provide smooth fluid motion.

PROGRESS

Saddle Type Grinders-PSGS Series

Slideways:

Models	Cross	Longitudinal
1535M	Double V Ways	V-Flat Ways
1545M	Double V Ways	V-Flat Ways
2045M	Double V Ways	V-Flat Ways

* M : All 3 Axes Manual Operated



PSGS-2045M



PSGS-2550AH
(with window type splash guard)

Shown with Optional Equipment

Specification:

Model		PSGS-1535M	PSGS-1545M	PSGS-2045M	
General Capacity	Max. Travel (Cross x Longitudinal)	mm	170x380	175x480	220x485
	Spindle Center Height from Table	mm	420		
	Max. Height from Table Top to Bottom of Standard Wheel	mm	330		
	Grinding Surface of Table	mm	150x350	150x450	200x450
Longitudinal Movement	Hydraulic Table Speed (60Hz)	m/min	Manual		
Cross Movement	Intermittent Cross Feed-Approx. (Electro-Mechanical)	mm/feed	Manual		
	Continuous Cross Feed-Approx. (Electro-mechanical) (50/60Hz)	mm/min	Manual		
	Hand Feed Per Revolution	mm	5		
	Hand Feed Per Division	mm	0.02		
Vertical Downfeed	Rapid Traverse Approx. (Option) (50Hz)	mm/min	Manual		
	Hand Feed Per Revolution	mm	1		
	Hand Feed Per Division	mm	0.005		
Grinding Wheel	Dimension (O.D x W x I.D)	mm	180x13x31.75		
	Spindle Speed (50/60Hz)	r.p.m.	3000/3600		
Motor	Spindle Motor		1.1kW/1.5HP		1.5kW/2HP
	Hydraulic Motor		Manual		
Weight	Net Weight	kg	670	780	800
	Gross Weight	kg	800	1020	1140
Machine Size	Dimension (L x W x H)	m	1x1.15x1.8	1.21x1.18x1.8	1.51x1.57x1.9

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REPUTATION

Saddle Type Grinders-PSGS Series

Slideways:

Models

1545H / 1545AH

2550AH

3060AH / 3060BH

4080AHR

Cross

Double V Ways

Double V Ways

Double V Ways

Double V Ways

Longitudinal

V-Flat Ways

Double V Ways

Double V Ways

Double V Ways

- Longitudinal: Hydraulic
- Cross: Automatic
- Vertical: Manual Standard
- Rapid Up/Down: Optional
- Auto Down Feed: Optional

* H : Hydraulic Longitudinal

* AH : Auto-cross + Hydraulic Longitudinal

* BH : Big Column + Hydraulic Longitudinal

* AHR : Auto-cross + Hydraulic Longitudinal + Rapid Up/Down



Shown with
Optional Equipment

PSGS-4080AHR
(14" wheelhead)



PSGS-2550AH
(14" wheelhead)

Specification:

Model		PSGS-1545H / PSGS-1545AH	PSGS-2550AH	PSGS-3060AH	PSGS-3060BH	PSGS-4080AHR	
General Capacity	Max. Travel (Cross x Longitudinal)	mm	180x485	280x600	340x700	460x900	
	Spindle Center Height from Table	mm	420	500		600	
	Max. Height from Table Top to Bottom of Standard Wheel	mm	330	322(410)		422	
	Grinding Surface of Table	mm	150x450	250x500	300x600	300x600	400x800
Longitudinal Movement	Hydraulic Table Speed (60Hz)	m/min	3-25	1-25(0.3-25)			
Cross Movement	Intermittent Cross Feed-Approx. (Electro-Mechanical)	mm/feed	0.15-7.5	0.1-10			
	Continuous Cross Feed-Approx. (Electro-mechanical) (50/60Hz)	mm/min	900/1100	1000			
	Hand Feed Per Revolution	mm	5	4			
	Hand Feed Per Division	mm		0.02			
Vertical Downfeed	Rapid Traverse Approx. (Option)(50Hz)	mm/min		220			
	Hand Feed Per Revolution	mm		1			
	Hand Feed Per Division	mm		0.005			
Grinding Wheel	Dimension (O.D x W x I.D)	mm	180x13x31.75	355x25x127	355x38x127		
	Spindle Speed (50/60Hz)	r.p.m.	3000/3600	1500/1800			
Motor	Spindle Motor		1.1kW/1.5HP	2.2kW/3HP	3.7kW/5HP	3.7(5.6)kW/5(7.5)HP	
	Hydraulic Motor		0.75kW/1HP			2.2kW/3HP	
Weight	Net Weight	kg	850	1350	1650	1900	2800
	Gross Weight	kg	1100	1700	2100	2500	3400
Machine Size	Dimension (L x W x H)	m	1.51x1.57x1.9	1.7x1.87x1.8	1.95x1.87x1.8	1.95x1.95x1.9	2.55x2.1x1.9

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REPUTATION

Saddle Type Grinders-PSGS Series



PSGS-3060N
(14" wheelhead)

Shown with
Optional Equipment



PSGS-50100AHR
(14" wheelhead)

Specification:

Model		PSGS-3060N	PSGS-4080N	PSGS-50100AHR	
General Capacity	Max. Travel (Cross x Longitudinal)	mm	340x700	460x900	560x1090
	Spindle Center Height from Table	mm	500		600
	Max. Height from Table Top to Bottom of Standard Wheel	mm	382		422
	Grinding Surface of Table	mm	300x600	400x800	500x1000
Longitudinal Movement	Hydraulic Table Speed	m/min	1-25		
Cross Movement	Intermittent Cross Feed	mm/feed	0.1-10		0.1-15
	Continuous Cross Feed	mm/min	1000		
	Hand Feed Per Revolution	mm	0.1mmx1/x5/x10		5
	Hand Feed Per Division	mm	0.001mmx1/x5/x10		0.02
Vertical Downfeed	Rapid Traverse	mm/min	300		
	MPG Per Revolution		0.1mmx1/x5/x10		
	MPG Per Division		0.001mmx1/x5/x10		
Grinding Wheel	Dimension (O.D x W x I.D)	mm	355x38x127		
	Spindle Speed (50/60Hz)	r.p.m.	1500/1800		
Motor	Spindle Motor		3.7kW/5HP		7.5kW/10HP
	Cross Servo Motor		0.75kW/1HP		-
	Vertical Servo Motor		0.75kW/1HP		
	Hydraulic Motor		0.75kW/1HP	2.2kW/3HP	2.2kW/3HP
Weight	Net Weight	kg	2500	4300	4500
	Gross Weight	kg	3000	5000	5200
Machine Size	Dimension (L x W x H)	m	2.91x2.05x2.20	3.5x2.68x1.95	3.78x3.12x1.95

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ORIENT

Column Type Grinders-PSGC Series

Slideways: Specifications in blue are for CNC models only
Models

50100AHR(CNC) / 50120AHR(CNC) / 50150AHR(CNC)
60120AHR(CNC) / 60150AHR(CNC) / 60220AHR(CNC) / 60250AHR(CNC)

* AHR : Auto-cross + Hydraulic Logitudinal + Rapid Up/Down

- Longitudinal: Hydraulic
- Cross: Automatic (CNC Controlled System)
- Vertical: Rapid Up/Down, Manual (CNC Controlled System)
- Auto Down Feed: Optional
- Controller: FANUC

Cross
Double V Ways
Double V Ways

Longitudinal
Double V Ways
Double V Ways



PSGC-60120AHR

Shown with Optional
Equipment

Specification:

Model			PSGC-50100AHR PSGC-50100CNC	PSGC-50120AHR PSGC-50120CNC	PSGC-50150AHR PSGC-50150CNC	PSGC-60120AHR PSGC-60120CNC	PSGC-60150AHR PSGC-60150CNC	PSGC-60220AHR PSGC-60220CNC	PSGC-60250AHR PSGC-60250CNC
General Capacity	Max. Travel (Cross x Longitudinal)	mm	560x1150	560x1350	560x1650	660x1350	660x1650	660x2350	660x2650
	Spindle Center Height from Table	mm	700						
	Max. Height from Table Top to Bottom of Standard Wheel	mm	522						
	Grinding Surface of Table	mm	500x1000	500x1200	500x1500	600x1200	600x1500	600x2200	600x2500
Longitudinal Movement	Hydraulic Table Speed (60Hz)	m/min	1-25						
Cross Movement	Intermittent Cross Feed-Approx. (Electro-Mechanical)	mm/feed	0.1-15						
	Continuous Cross Feed-Approx. (Electro-mechanical) (50/60Hz)	mm/min	2000/2400						
	Hand Feed Per Revolution	mm	5						
	Hand Feed Per Division	mm	0.02						
Vertical Downfeed	Rapid Traverse Approx. (Option) (50Hz)	mm/min	220						
	Hand Feed Per Revolution	mm	0.25						
	Hand Feed Per Division	mm	0.002						
Grinding Wheel	Dimension (O.D x W x I.D)	mm	355x50x127						
	Spindle Speed (50/60Hz)	r.p.m.	1500/1800						
Motor	Spindle Motor		7.5(11)kW/10(15)HP						
	Hydraulic Motor		3.7kW/5HP						
Weight	Net Weight	kg	5800	6100	7000	8200	9300	10800	12500
	Gross Weight	kg	6900	7500	8500	9600	10900	13900	15600
Machine Size	Dimension (L x W x H)	m	3.2x2.7x2.96	4x2.7x2.96	4.7x2.7x2.96	4x2.83x2.96	4.7x2.83x2.96	6.2x2.83x2.96	7.2x2.83x2.96
CNC Specifications	Max. Travel (Cross x Longitudinal)	mm	530x1150	530x1350	530x1650	630x1350	630x1650	630x2350	630x2650
	Spindle Center Height from Table	mm	650						
	Max. Height from Table Top to Bottom of Standard Wheel	mm	472						
	Hydraulic Table Speed (60Hz)	m/min	2-25						
	Continuous Cross Feed (Electro-Mechanical) Approx.	mm/min	0-5000						
	Micro Cross Infeed	mm	0.001						
	Rapid Traverse Approx. (Option) 50Hz	mm/min	0-500						
	Micro Vertical Infeed	mm	0.001						

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* A table mounted wheel dresser is available. This would reduce any standard longitudinal table travels by approx. 300 mm.

* Machines are shown with optional equipments.

ORIENT

Column Type Grinders-PSGC Series



PSGC-60120AHR

Shown with Optional
Equipment

Specification:

Model		PSGC-70150AHR	PSGC-70200AHR	PSGC-70250AHR	PSGC-70300AHR	PSGC-80150AHR	PSGC-80200AHR	PSGC-80250AHR	PSGC-80300AHR	PSGC-90150AHR	PSGC-90200AHR	PSGC-90250AHR	PSGC-90300AHR
General Capacity	Max. Travel (Cross x Longitudinal) mm	760x1650	760x2150	760x2650	760x3150	860x1650	860x2150	860x2650	860x3150	960x1650	960x2150	960x2650	960x3150
	Spindle Center Height from Table mm	700											
	Max. Height from Table Top to Bottom of Standard Wheel mm	522											
	Grinding Surface of Table mm	700x1500	700x2000	700x2500	700x3000	800x1500	800x2000	800x2500	800x3000	900x1500	900x2000	900x2500	900x3000
Longitudinal Movement	Hydraulic Table Speed (60Hz) m/min	1-25											
Cross Movement	Intermittent Cross Feed-Approx.(Electro-Mechanical) mm/feed	0.1-15											
	Continuous Cross Feed-Approx.(Electro-Mechanical) mm/min	2000/2400											
	Hand Feed Per Revolution mm	5											
	Hand Feed Per Division mm	0.02											
Vertical Downfeed	Rapid Traverse Approx. (Option) (50Hz) mm/min	220											
	Hand Feed Per Revolution mm	0.25											
	Hand Feed Per Division mm	0.002											
Grinding Wheel	Dimension (O.D x W x I.D) mm	355x50x127											
	Spindle Speed (50/60Hz) r.p.m.	1500/1800											
Motor	Spindle Motor	7.5(11)kW/10(15)HP											
	Hydraulic Motor	3.7kW/5HP											
Weight	Net Weight kg	10000	10800	11600	12400	10200	11100	12000	12900	10500	11500	12500	13500
	Gross Weight kg	11500	12300	13100	13900	11700	12600	13500	14400	12000	13000	14000	15000
Machine Size	Dimension (L x W x H) m	4.7x2.4x2.6	6.0x2.4x2.6	7.2x2.4x2.6	8.5x2.4x2.6	4.7x2.5x2.6	6.0x2.5x2.6	7.2x2.5x2.6	8.5x2.5x2.6	4.7x2.6x2.6	6.0x2.6x2.6	7.2x2.6x2.6	8.5x2.6x2.6

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TECHNOLOGY

Over Arm Type Grinders-PSGO Series

Slideways:

Models

60150AHR

75150AHR / 75220AHR / 75300AHR

Cross

Dovetail-Type Gibbed Ways

Dovetail-Type Gibbed Ways

Longitudinal

Double V Ways

Double V Ways

* AHR : Auto-cross + Hydraulic Logitudinal + Rapid Up/Down

- Longitudinal: Hydraulic
- Cross: Automatic
- Vertical: Rapid Up/Down, Manual
- Auto Down Feed: Optional



PSGO-75150AHR

Shown with Optional Equipment

Specification:

Model			PSGO-60150AHR	PSGO-75150AHR	PSGO-75220AHR	PSGO-75300AHR
General Capacity	Max. Travel (Cross x Longitudinal)	mm	660x1650	810x1650	810x2350	810x3150
	Spindle Center Height from Table	mm	700(950)			
	Max. Height from Table Top to Bottom of Standard Wheel	mm	520			
	Grinding Surface of Table	mm	600x1500	750x1500	750x2200	750x3000
Longitudinal Movement	Hydraulic Table Speed (60Hz)	m/min	1-25			
Cross Movement	Intermittent Cross Feed-Approx. (Electro-Mechanical)	mm/feed	0.1-15			
	Continuous Cross Feed-Approx. (Electro-mechanical) (50/60Hz)	mm/min	2000/2400			
	Hand Feed Per Revolution	mm	5			
	Hand Feed Per Division	mm	0.02			
Vertical Downfeed	Rapid Traverse Approx. (Option) (50Hz)	mm/min	200			
	Hand Feed Per Revolution	mm	0.25			
	Hand Feed Per Division	mm	0.0025			
Grinding Wheel	Dimension (O.D x W x I.D)	mm	355x50x127			
	Spindle Speed (50/60Hz)	r.p.m.	1500/1800			
Motor	Spindle Motor		7.5(11)kW/10(15)HP			
	Hydraulic Motor		5.6kW/7.5HP			
Weight	Net Weight	kg	9350	11000	12500	14400
	Gross Weight	kg	10800	12300	14000	16000
Machine Size	Dimension (L x W x H)	m	5.1x2.5x2.6	5.1x2.5x2.6	6.6x2.5x2.6	8.4x2.5x2.6

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HONEST

Rotary Type Grinders-PSRC Series

- Cross: Criss Cross Grinding (MPG on request)
- Vertical: Auto Down Feed AD1



PSRC-800S (Window Type Splash Guard)



Shown with Optional Equipment

PSRC-600S
(Full-Closed Splash Guard)

Specification:

Model		PSRS-200S	PSRS-300S	PSRS-400S	PSRC-500S	PSRC-600S	PSRC-800S	PSRC-1000S
General Capacity	Max. Grinding Radius mm	120	160	220	290	340	450	550
	Spindle Center Height from Table mm	300	350	400	500			
	Max. Height from Table Top to Bottom of Standard Wheel mm	210	220	220	322			
	Table Diameter mm	200	300	400	500	600	800	1000
Rotary Table	Max. Speed r.p.m.	10-100			10-60(Hyd. Table 10-80)		10-60	
	Table Motor	120W(0.4kW)	120W(0.75kW)	1kW/1.3HP	1.5kW/2HP(Hyd. Table 2kW)		3.5kW	
Cross Movement	Continuous Cross Feed (Approx.) mm/min	1100			50-1500			
	Hand Feed Per Revolution	—			0.1mmx1/x5/x10			
	Hand Feed Per Division	—			0.001mmx1/x5/x10			
Vertical Downfeed	Rapid Traverse Approx. (Option) (50Hz) mm/min	220						
	Hand Feed Per Revolution	0.1mmx1/x5/x10						
	Hand Feed Per Division	0.001mmx1/x5/x10						
Grinding Wheel	Dimension (O.D x W x I.D) mm	180x13x31.75	355x38x127		355x50x127			
	Spindle Speed (50/60Hz) r.p.m.	2850/3450	1450/1750		1500/1800			
Motor	Spindle Motor	1.1kW/1.5HP	3.7kW/5HP		3.7(7.5)kW/5(10)HP		7.5(11)kW/10(15)HP	
Weight	Net Weight kg	850	1400	1650	4500	5000	6500	7000
	Gross Weight kg	930	1600	1800	5500	6000	8000	8500
Machine Size	Dimension (L x W x H) m	1.4x1.5x2.1	1.6x1.6x2.1	1.8x1.6x2.1	2.5x1.9x2.6		4.1x2.2x2.5	

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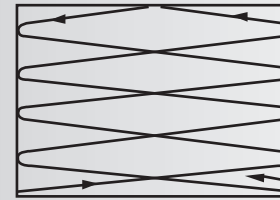
* Equipment marked with () is available at additional extra charge. Other special applications may be provided upon specific requests from customers. Please contact us for more details.

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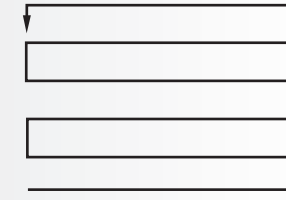
Features and Attachment

Criss Cross Grinding (Standard – for PSGC Series)

1. The advantage of criss cross grinding is that the cross feed speed is infinitely variable, yielding a wide range of cross feed movement.
2. Table longitudinal movement and wheel head cross feed movement are synchronized and engaged simultaneously.
3. During table longitudinal movement, hydraulic table speed and spindle speed can be accommodated to get brilliant grinding results. This helps to grind very thin workpieces efficiently.



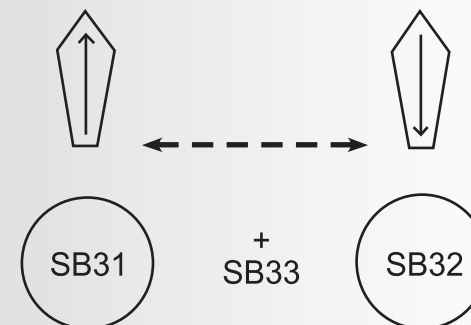
Criss-Cross Grinding



Incremental Grinding

Electric Touch Cross Traverse Setting System (Standard – for PSGC & PSGO Series)

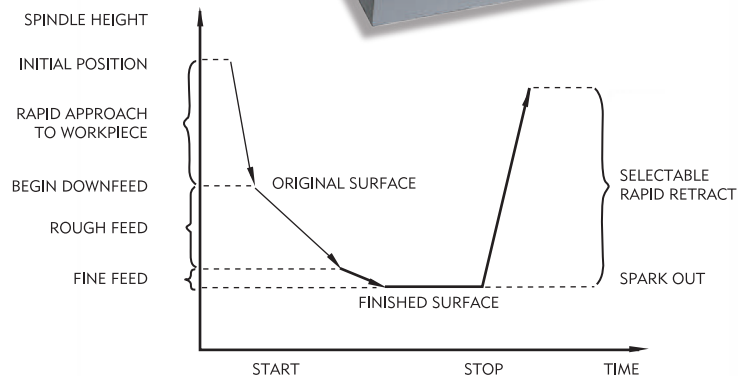
1. The advantage of this user-friendly electronic 'one-touch' system is to pre-set the width of surface cross grinding, which improves production time efficiently with a perfect performance finished.
2. Setting up the system is as easy as below:
Hold **Power Rapid Crossfeed** push-button down until the grinding wheel gets to the ideal starting position.
Press **SB33** push-button (the indicator light on the control panel will flash)
Hold **Power Rapid Opposite Crossfeed** push-button down until the grinding wheel gets to the ideal finishing position.
Press **SB33** push-button (the indicator light on the control panel will flash).
This is the whole setup of electric touch cross traverse setting system.



Optional Features and Attachment

Computerized Auto Down Feed AD1

1. Approach to the workpiece surface for the proper positions automatically and rapidly.
2. Minimum control increment is 0.001mm (0.0001”).
3. Total stock removal resolution is up to 99999 μ m.
4. Total fine feed stock removal resolution is up to 99 μ m.
5. Setting of “Spark-out” grinding is up to 99 passes.
6. Selectable wheelhead retract clearance at job completion for convenient workpiece loading and unloading is up to 300mm (9.9inch).

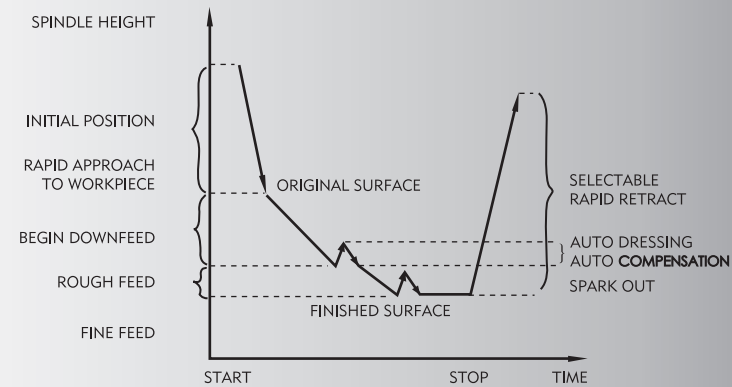


AD1 Grinding Process

Auto Down Feed ADC (Except PSGO Series)

This attachment includes:

- Computerized auto down feed AD 1
- Automatic dresser and auto compensation



ADC Grinding Process



Computerized Auto Down Feed S1

1. Minimum control increment is 0.001mm (1 μ m).
2. Total stock removal resolution is up to 99999 μ m.
3. Total rough feed stock removal resolution is up to 30 μ m.
4. Total fine feed stock removal resolution is up to 10 μ m.
5. Setting of “Spark-out” grinding is up to 10 passes.
6. Selectable wheelhead retract clearance at job completion for convenient workpiece loading and unloading is up to 300mm.

Optional Features and Attachment

Auto Down Feed AD3

This convenient attachment includes a built-in Power Rapid-Up (wheel retract) and Rapid Down (wheel approach) function as Fig. 1.



Fig. 1

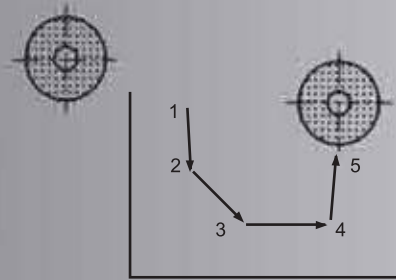


Fig. 2

Operational features as shown in the diagram (as Fig. 2) are:

Point 1: Wheel Starting Position

Point 1-2: Wheel rapidly approaches the workpiece by pressing power push-button

Point 2-3: Auto downfeed is engaged and individual incremental downfeeds per table stroke reversal may be preset by a lever, selectable in 6 steps for: 0.005mm, 0.01mm, 0.015mm, 0.02mm, 0.025mm, 0.03mm in metric or 5 steps for 0.0002", 0.0004", 0.0006", 0.0008" and 0.001" in inch

Point 3-4: Selectable sparkout passes are up to a max of 9 times

Point 4-5: Wheelhead rapidly retracts and shuts-down the spindle motor and hydraulic motor

Point 5: Table stops and parks conveniently at left or right side as desired for easy workpiece loading or unloading

NC Servo Control

1. Approach to the workpiece surface for the proper positions automatically and rapidly.
2. Minimum control increment: 0.001mm (0.0001").
3. Total stock removal resolution is up to 99999 μ m.
4. Total fine feed stock removal resolution is up to 999 μ m.
5. Setting of "spark-out" grinding: up to 99 passes.
6. Pause grinding function during grinding cycles via "HOLD" button.
7. After the grinding process is completed, cycle end modes:
 - a. Spindle motor off
 - b. Hydraulic motor off
 - c. Power off



Standard Accessories

Pictures are for Reference Only



- 1. 1.7" Wheelhead
- 2. Wheel Balancer
- 3. Wheel Balancing Arbor
- 4. Wheel Flange
- 5. Extractor
- 6. Tools
- 7. Tool Box

For Manual Models



- 1. 1.7" Wheelhead
- 2. Wheel Balancer
- 3. Wheel Balancing Arbor
- 4. Wheel Flange
- 5. Extractor
- 6. Table-mounted Diamond Dresser
- 7. Tool box & Tools



- 1. 1.14" Wheelhead
- 2. Wheel Balancer
- 3. Wheel Balancing Arbor
- 4. Wheel Flange
- 5. Extractor
- 6. Table-mounted Diamond Dresser
- 7. Tool box & Tools

Optional Accessories



Electro Magnetic Chuck



Auto-Parallel Dressing Attachment
2 Axes Full Auto
(Electrical Cross + Step Control Down)



Cross Micrometer Attachment (PSGS)
1 division on cross handwheel: 0.002mm
1 revolution on cross handwheel: 0.04mm



Inclinable Electro Magnetic Chuck



Parallel Dressing Attachment (PSGO)

Vertical Micrometer Attachment (PSGS)
1 division on vertical handwheel: 0.001mm
1 revolution on vertical handwheel: 0.01mm
※ For PSGS-2550AH/3060AH/3060BH/4080AHR



Round Electro Magnetic Chuck



Parallel Dressing Attachment
(Manual Type for PSGS, PSGC)
※ With the Exception of PSGS-
1535M, 1545M, 2045M, 1545H, 1545AH



Level Type Wheel Balancer



Window Type Splash Guard (PSGS)
(Cross Travel will Shorten 30-50mm)

Rear Side Coolant Baffle (PSGS)



Dust-Suction Cooling System (PSGS)



Automatic Paper Strip Filter
with/without Magnetic Separator



Cooling System



Cooling System with Magnetic Separator



Wheel Flange



Punch Former



Radius and Angle Dresser



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