



TOP TECH

# PLATO-HA Series

## Automatic grinding & polishing



*Perfect Surface.  
Always*

## P20G-1-A/B/C series

- Exchangeable grinding head of A, B, and C type
- Adjustable rotational speed of both head and platen
- Multiple choices of platen application
- Employing diamond discs (Optional) ensures the flatness
- Compatible with dispenser (Optional)

**Patent**

## Introduction & feature



### Intuitive design and metal button operating panel

Equipped with durable high-quality metal buttons makes the design Intuitive.

### Rotational speed of the head is adjustable

The grinding head is equipped with brushless motor with rotation speed from 10~170rpm.



### Automatic drying function

The graphic visualization drying function can make the cleaning process more fast in order to avoid the cross contamination during the operating process.

### Dispenser (Optional)

External dispenser can precisely control polishing process and replicate the same procedure.



### Low speed grinding and polishing function

Grinding speed can be adjusted to a minimum of 10 rpm. With external dispenser, it can meet the need of long-time polishing without deformation.



A type  
Individual force



B type  
Individual force with calibration



C type  
Central force with calibration

**Superior industrial plastic body**

### Exquisite Appearance

Streamline appearance design and glossy film surface finishing makes the mechanical appearance artistic and exquisite.

### Modular design

The combined control box can be fixed behind the machine or be placed next to the machine with quick-change design, which is easy to clean and can maximize the space.

### Individual pressure (A type and B type)

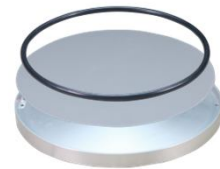
The press force is 1.4~5kg which can be controlled based on the material of the specimen.

### Central pressure (C type)

The press force is 3~5kg which can be controlled based on the material of the specimen.

### Various choices of platen

Platen size of 8" and 10" are suitable for any consumables application.



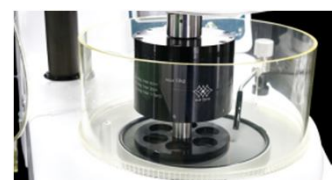
### Telescopic water set

Clean the machine conveniently.



### Various anti-splash application

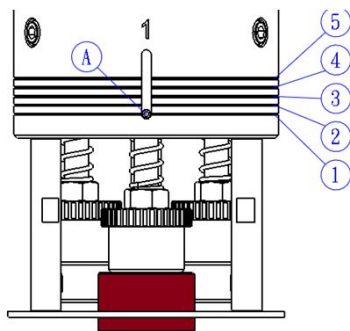
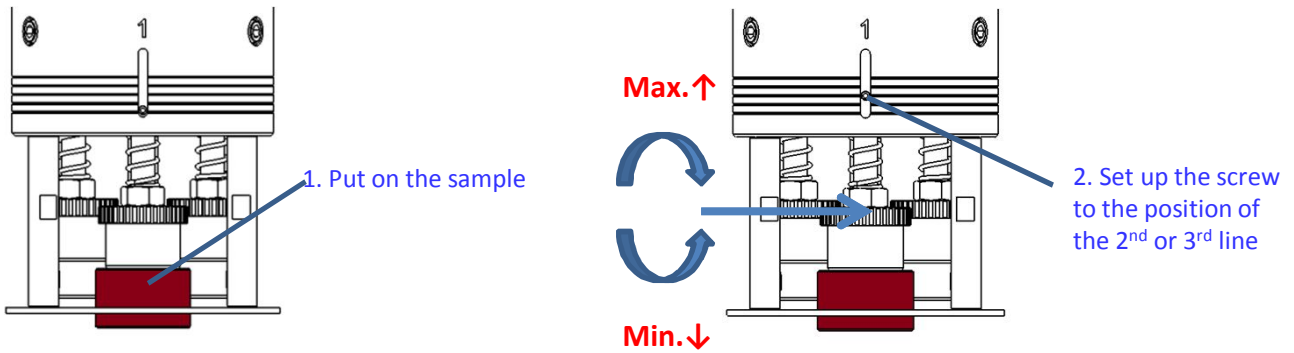
Various anti-splash covers can be applied based on the method of polishing process.





## A type

### Individual Force (A and B type)



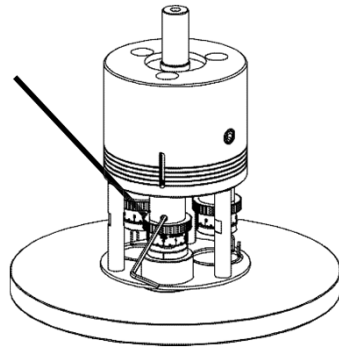
(A)	Standard type (Kg)	Powerful type (Kg)
5	3.0	5.0
4	2.6	4.5
3	2.2	4.0
2	1.8	3.5
1	1.4	3.0
Mounting sample	1. Copper, aluminum 2. Small sample	1. Tungsten steel, steel, titanium, alloy steel... 2. Big sample
Sample height	5mm~25mm Recommended height: 20mm	



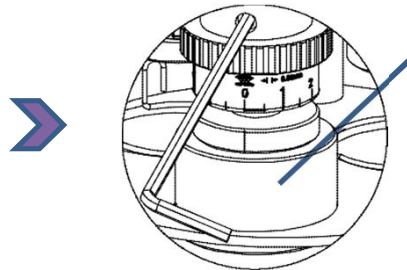
## B type

### Calibration Adjustment

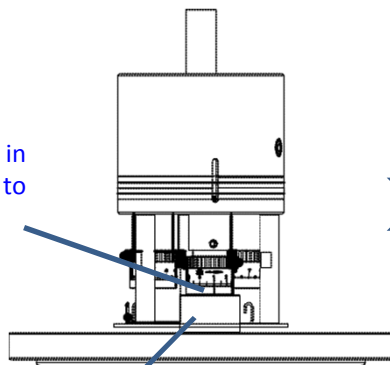
1. Use a hex wrench to loose screws



2. Press the sample with the bumper

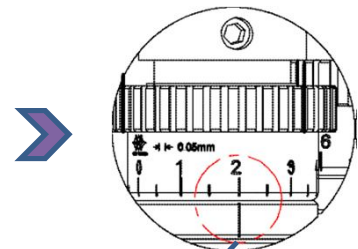
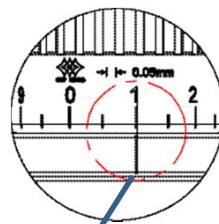


3. Turn the bumper in clockwise direction to the end



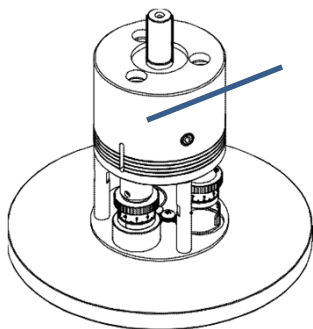
20mm  
(sample thickness)

4. Rotate the bumper to the end. The number that micrometer reads is the home point

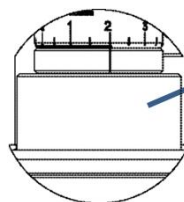


5. Set the depth you would like to remove. Rotate from home point 1 to 2 which means you would like to remove 0.1mm. Tighten the screws after setting. (Each scale of the micrometer is 0.05mm)

6. Start grinding



7. Sample thickness become 19.9mm after grinding

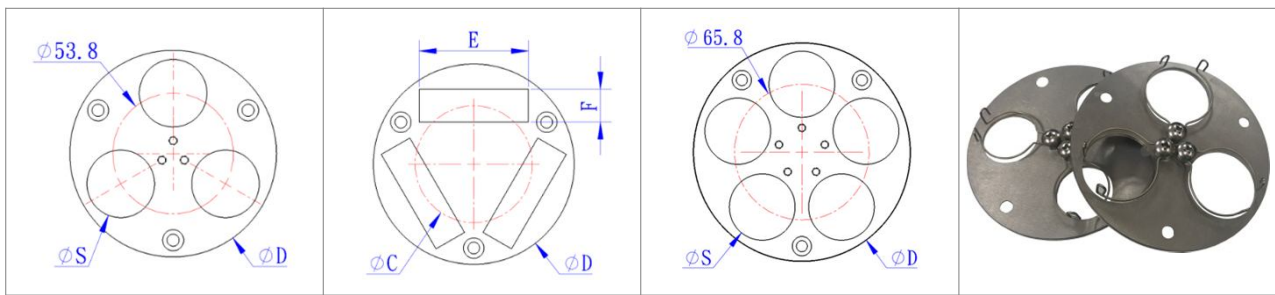


## A & B type Sample Holder (Optional)

### Standard

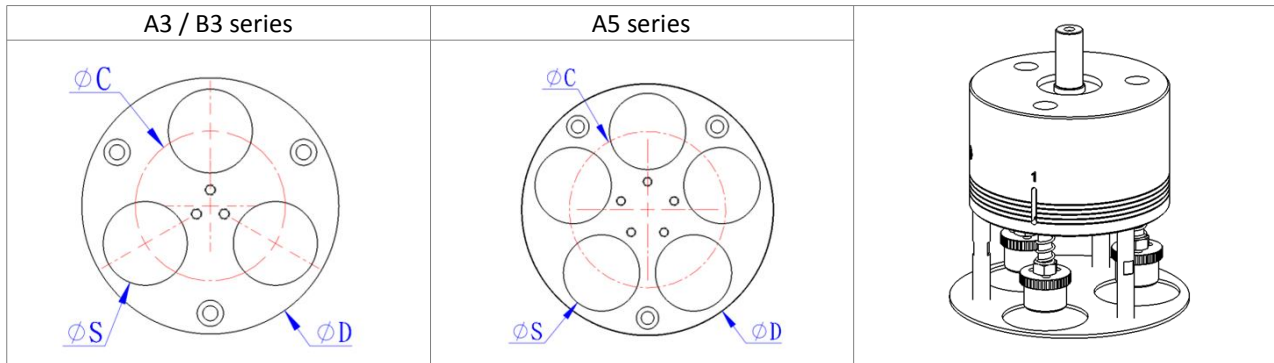
Plate size	Grinding head	Sample size (mm)			Leveler
Ø203.2mm Ø254mm Ø304.8mm	A3/B3	Ø25(25.4)	Ø32(31.75)	Ø40	-
	A5/B5	Ø25(25.4)	Ø32(31.75)	-	

### Optional



NO.	Order No.	Sample (S) mm	Outer dia. (D) mm	Order no.	Sample(S) mm /E x F	Out Dia. (D) mm
A3/B3	P20C0121	30	Ø92	P20C012108	18	Ø92
	P20C012101	32	Ø92	P20C012109	25.4	Ø92
	P20C012102	40	Ø105	P20C012111	35	Ø96
	P20C012103	20	Ø92	P20C012112	50x15	Ø92
	P20C012104	25	Ø92	P20C012113	10	Ø92
	P20C012105	38	Ø105	P20C012114	24	Ø92
	P20C012106	23	Ø92	P20C012115	31.75	Ø92
	P20C012107	26	Ø92	P20C012116	38.1	Ø105
A5/B5	P20C0201-A	32	Ø106	P20C020103-A	25	Ø106
	P20C020101-A	30	Ø106	P20C020104-A	28	Ø106

## A & B type special sample holder



### A3/B3 series- Special type

Order no.	Spec.(S) mm	Outer Dia.(D) mm	PCD(C) mm	Remark
P20C012110	3 samples-60mm	Ø155	Ø80	
P20C012110-1	3 samples-50mm	Ø140	Ø80	
P20C012110-2	3 samples-45mm	Ø135	Ø80	


### A5/B5 series- Special type

Order no.	Spec.(S) mm	Outer Dia.(D) mm	PCD(C) mm	Remark
P20C020105A	5 samples-40mm	Ø122	Ø74	

#### Remark:

1. The standard and special sample holder is not allowed to share the same grinding head.
2. It is requested to purchase an additional grinding head for special sample holder

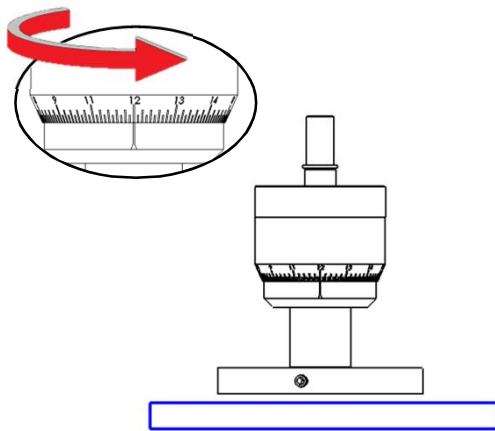
### Spring holder (Optional)

Order no.	Capacity (mm)	Qty.	
HU02034A	Ø30 - Ø32	1 set	
HU02034A-1	Ø38 - Ø40	1 set	
HU02034A-2	Ø25 - Ø26	1 set	

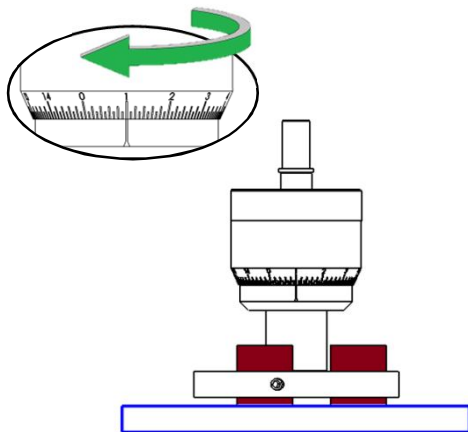
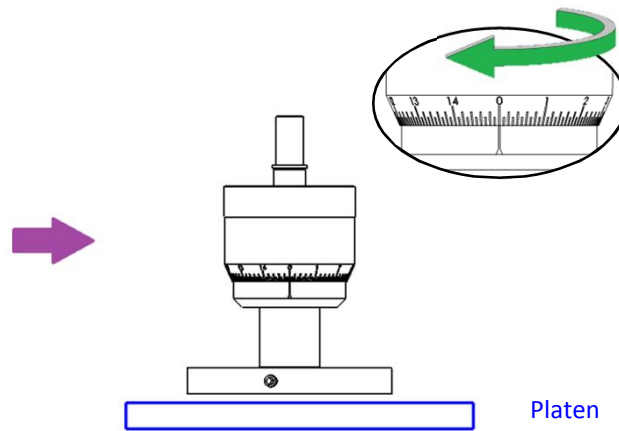
## C type

### Central force & Central calibrate

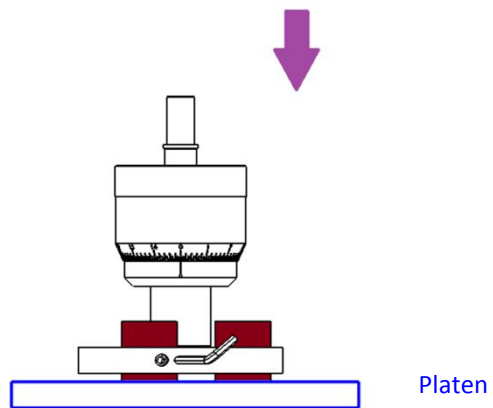
1. Rotate the micrometer to the top



2. Return to zero



4. Set the depth you would like to remove



3. Put on the sample and tighten the screws

5. Start grinding

Micrometer (Central calibrate)

- ✓ Each scale of the micrometer is 0.01mm
- ✓ Max. sample thickness is 4mm

Remark:

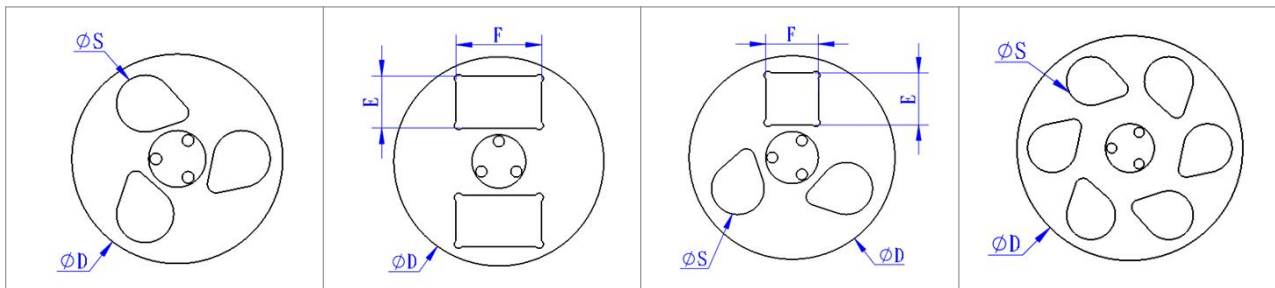
1. Plain-back SIC paper: Max. depth advise for grinding each time is 0.2mm.
2. Adhesive SIC paper: Max. depth advise for grinding each time is 0.5mm.



## C type Sample Holder (Optional)

### Standard

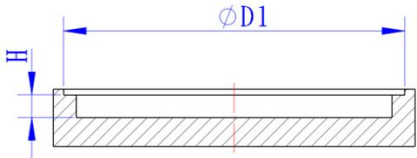
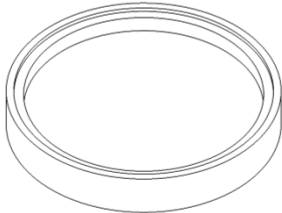
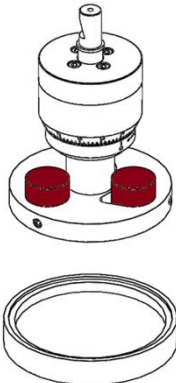
Plate size	Grinding head	Sample size (mm)		Standard accessories
Ø203.2mm	C3	Ø25 or Ø25.4	Ø32 or Ø31.75	
Ø254mm Ø304.8mm	C4	Ø25 or Ø25.4	Ø32 or Ø31.75	

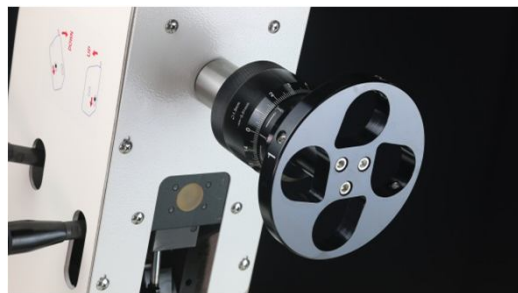


Order no.	Sample Qty.	Sample(S) mm ( E x F )	Outer Dia. (D) mm	Platens mm
FA000101	3	Ø15 ~ Ø32	Ø118	Ø200/Ø250/Ø300
FA000101-1	-	-	Ø118	Ø250/Ø300
FA000201	3	Ø15 ~ Ø50	Ø154	Ø250/Ø300
FA000301	3	Ø15 ~ Ø45	Ø144	Ø250/Ø300
FA000401	3	Ø5 ~ Ø40	Ø134	Ø250/Ø300
FA000501	3	30x30	Ø118	Ø200/Ø250/Ø300
FA010202	4	Ø15 ~ Ø40	Ø134	Ø250/Ø300
FA010202-1	4	Ø15 ~ Ø41	Ø134	Ø250/Ø300
FA010203	3	2- Ø32 & 1-□32	Ø125	Ø200/Ø250/Ø300
FA010205	4	Ø15 ~ Ø50	Ø154	Ø250/Ø300
FA020101	6	Ø15 ~ Ø32	Ø148	Ø250/Ø300
FA030101	2	31x51	Ø125	Ø200/Ø250/Ø300
FA040201	5	Ø15 ~ Ø40	Ø150	Ø250/Ø300
FA0501	1	□ 42.7	Ø70	Ø200/Ø250/Ø300
FA0502	1	43x3.5	Ø58	Ø200/Ø250/Ø300

## Leveler (Optional)

### Leveler

				
Order no.	D1 x H(mm)	Applicable sample holder (D1) mm	Remark	
FA000111	Ø119x7.9	Ø118		
FA000202	Ø155x7.9	Ø154		
FA000302	Ø145x7.9	Ø144		
FA010201	Ø135x7.9	Ø134		
FA010204	Ø126x7.9	Ø125		
FA020102	Ø149x7.9	Ø148		
FA030102	Ø127x7.9	Ø125		
FA040202	Ø150x7.9	Ø150		



## Accessories (Optional )



Item	Order no.
Dispenser-one bottle type	P20F0027
Dispenser-four bottle type	P20F0028

Item	Order no.
Dosing system	P20F0026A

Item	Spec.	Order no.
Grinding Platen ( <b>Patent</b> )	8"	CP0601
	10"	CP0602
Polishing Platen	8"	P20D00020101
	10"	P25A00010201
Magnetic Platen and Paper Hold ( <b>Patent</b> )	8"	CP0501
	10"	CP0502

Item	Spec.	Order no.
Anti-Splash Cover (Manual)	8"	PA0108-1
	10"	PA0108
Anti-Splash Cover (Auto)	8"	PA0108-3
	10"	PA0108-4
Anti-Splash Cover (Full Cover)	-	PA0108-2
Anti-Splash Cover (Movable)	-	PA0110A

Item	Spec.	Order no.
Magnetic Pad	8"	S080101
	10"	S080102

Item	Spec.	Order no.
Carrier Plate	8"	S090101
	10"	S090102

**Working Table (Optional)**



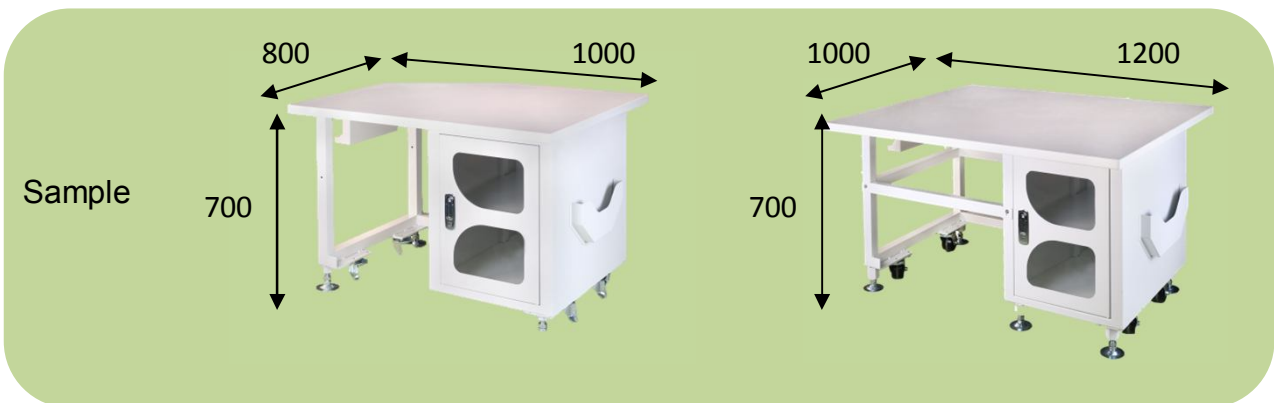
TF01

TF02

size(L\*W\*H)

1000\*800\*700 mm

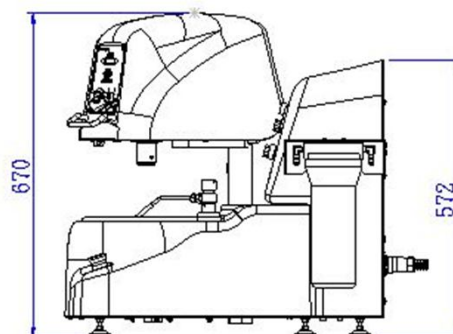
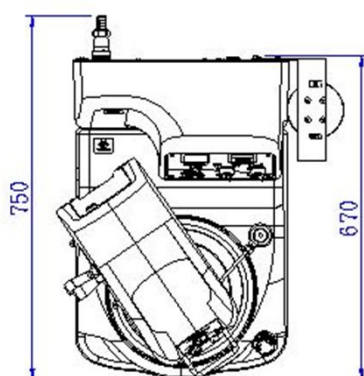
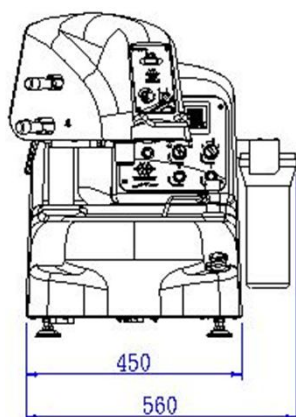
1200\*1000\*700 mm



(mm)

## Specification

Model	P20G-1-A3	P20G-1-B3	P20G-1-C3	P25G-1-A3	P25G-1-B3	P25G-1-C3
	P20G-1-A5	P20G-1-B5	P20G-1-C4	P25G-1-A5	P25G-1-B5	P25G-1-C4
Platen Size (mm)	Ø203.2 (8")			Ø254 (10")		
Platen Quantity	1					
Grinding Method	Individual force	Individual force with calibration	Central force with calibration	Individual force	Individual force with calibration	Central force with calibration
Grinding Quantity (pcs)	3 or 5		3 or 4	3 or 5		3 or 4
Sample Size (mm)	Ø25/Ø32/Ø40 (Special sample size can be customized)		Ø15~Ø32 Ø20~Ø40	Ø25/Ø32/Ø40 (Special sample size can be customized)		Ø15~Ø32 Ø20~Ø40
Force (kg)	1.4~5		3~5	1.4~5		3~5
Platen Motor Power (W)	400					
Platen Rotational Speed (rpm)	1~600 (Effective Rotational Speed 10~600)					
Head Motor Power (W)	50					
Head Rotational Speed (rpm)	10~170					
Timer (min: s)	99:59					
Water Inlet (mm)	Inner Dia.: 3/8" (Ø9.53mm), Outer Dia.: 19/32" (Ø15.08mm)					
Water Outlet (mm)	Inner Dia.: 1-19/64" (Ø32.94mm), Outer Dia.: 1-29/64" (Ø36.91mm)					
Machine Dimension WxDxH (mm)	560x670x670					
Machine Weight (kg) AC110V 1Ø	69			70		
Machine Weight (kg) AC220V 1Ø	59			60		
Standard Accessories	Grinding Platen 1pc, O-ring 1pc, Anti-Splash Cover 2 pcs, Silicon Carbide Paper 8 pcs, Polishing Cloth 2 pcs, Aluminum Oxide Powder 100g, Filter 1 set, 500g Dispenser 1 pc, Leveler (C type only)					
Option	P20F0027 Dispenser Set for One Bottle, P20F0028 Dispenser Set for Four Bottles, PA0108-1 8" Anti-Splash Cover (Manual), PA0108 10" Anti-Splash Cover (Manual), PA0108-3 8" Anti-Splash Cover (Auto), PA0108-4 10" Anti-Splash Cover (Auto), PA0108-2 Anti-Splash Cover (Full-Cover), PA0110A Anti-Splash Cover (Movable), P20F0026A Dosing System					





## Consumables (Optional)

### Diamond Disc



Order no.                      size                                      Magnetic Pad                      Pack(pcs/box)

Order no.	size	Magnetic Pad	Pack(pcs/box)
Disc no.1	Equivalent to the grinder paper #120		
SAA09CA54020	8"(200mm)	●	1
SAA09CA54040	10"(250mm)	●	1

Order no.	size	Magnetic Pad	Pack(pcs/box)
Disc no.2	Equivalent to the grinder paper #240		
SAA09CA55020	8"(200mm)	●	1
SAA09CA55040	10"(250mm)	●	1

Order no.	size	Magnetic Pad	Pack(pcs/box)
Disc no.3	Equivalent to the grinder paper #600		
SAA09CA56020	8"(200mm)	●	1
SAA09CA56040	10"(250mm)	●	1

Order no.	size	Magnetic Pad	Pack(pcs/box)
Disc no.4	Equivalent to the grinder paper #1200		
SAA09CA58020	8"(200mm)	●	1
SAA09CA58040	10"(250mm)	●	1

Order no.	size	Magnetic Pad	Pack(pcs/box)
Disc no.5	Non-diamond particles, used with diamond suspension For the normal materials		
SAA09CA53020	8"(200mm)	●	2
SAA09CA53040	10"(250mm)	●	2

Order no.	size	Magnetic Pad	Pack(pcs/box)
Disc no.6	Non-diamond particles, used with diamond suspension For the hard and very hard materials		
SAA09CA52020	8"(200mm)	●	2
SAA09CA52040	10"(250mm)	●	2

## FEPA Grinding Paper (Plain Back)



Order No.	Size	Grit	Pack (pcs/box)
	200mm SiC Paper		
S0520002	8" (200mm)	P80	100
S0520003	8" (200mm)	P100	100
S0520004	8" (200mm)	P120	100
S0520005	8" (200mm)	P150	100
S0520006	8" (200mm)	P180	100
S0520007	8" (200mm)	P240	100
S0520008	8" (200mm)	P320	100
S0520009	8" (200mm)	P400	100
S0520010	8" (200mm)	P600	100
S0520011	8" (200mm)	P800	100
S0520012	8" (200mm)	P1000	100
S0520013	8" (200mm)	P1200	100
S0520014	8" (200mm)	P1500	100
S0520015	8" (200mm)	P2000	100



Order No.	Size	Grit	Pack (pcs/box)
	250mm SiC Paper		
S0525002	10" (250mm)	P80	100
S0525003	10" (250mm)	P100	100
S0525006	10" (250mm)	P180	100
S0525007	10" (250mm)	P240	100
S0525008	10" (250mm)	P320	100
S0525009	10" (250mm)	P400	100
S0525010	10" (250mm)	P600	100
S0525011	10" (250mm)	P800	100
S0525012	10" (250mm)	P1000	100
S0525013	10" (250mm)	P1200	100
S0525014	10" (250mm)	P1500	100
S0525015	10" (250mm)	P2000	100

## ANSI Grinding Paper (Plain Back)



Order No.	Size	Grit	Pack (pcs/box)
	200mm SiC Paper		
S0520080060AU	8"(200mm)	#60	100
S0520080120AU	8"(200mm)	#120	100
S0520080180AU	8"(200mm)	#180	100
S0520080240AU	8"(200mm)	#240	100
S0520080320AU	8"(200mm)	#320	100
S0520080400AU	8"(200mm)	#400	100
S0520080600AU	8"(200mm)	#600	100
S0520080800AU	8"(200mm)	#800	100
S0520081000AU	8"(200mm)	#1000	100
S0520081200AU	8"(200mm)	#1200	100



Order No.	Size	Grit	Pack (pcs/box)
	250mm SiC Paper		
S0525100060AU	10"(250mm)	#60	100
S0525100120AU	10"(250mm)	#120	100
S0525100180AU	10"(250mm)	#180	100
S0525100240AU	10"(250mm)	#240	100
S0525100320AU	10"(250mm)	#320	100
S0525100400AU	10"(250mm)	#400	100
S0525100600AU	10"(250mm)	#600	100
S0525100800AU	10"(250mm)	#800	100
S0525101000AU	10"(250mm)	#1000	100
S0525101200AU	10"(250mm)	#1200	100

## FEPA Grinding Paper (PSA Back)



Order No.	Size	Grit	Pack(pcs/box)
	200mm SiC Paper		
S05A20006	8"(200mm)	P180	100
S05A20007	8"(200mm)	P240	100
S05A20008	8"(200mm)	P320	100
S05A20009	8"(200mm)	P400	100
S05A20010	8"(200mm)	P600	100
S05A20011	8"(200mm)	P800	100
S05A20012	8"(200mm)	P1000	100
S05A20013	8"(200mm)	P1200	100
S05A20014	8"(200mm)	P1500	100
S05A20015	8"(200mm)	P2000	100

Order no.	Size	Grit	Pack(pcs/box)
	250mm SiC Paper		
S05A25006	10"(250mm)	P180	100
S05A25007	10"(250mm)	P240	100
S05A25008	10"(250mm)	P320	100
S05A25009	10"(250mm)	P400	100
S05A25010	10"(250mm)	P600	100
S05A25011	10"(250mm)	P800	100
S05A25012	10"(250mm)	P1000	100
S05A25013	10"(250mm)	P1200	100
S05A25014	10"(250mm)	P1500	100
S05A25015	10"(250mm)	P2000	100

## Oxide Powder



Order no.	Aluminum oxide powder	
S0701010102	0.05um	1 lb
S07010201	0.3um	1 lb
S07010211	0.3um	2 lb
S07010301	1um	1 lb
S07010311	1um	2 lb
S07010401	3um	1 lb
S07011201	5um	1 lb

Order no.	Magnesium oxide powder	
S0705030102	1um	1 lb

Order no.	Zirconium oxide powder	
S07061009	0.5um	1 lb
S07061109	1.5um	1 lb

## Polishing Cloth



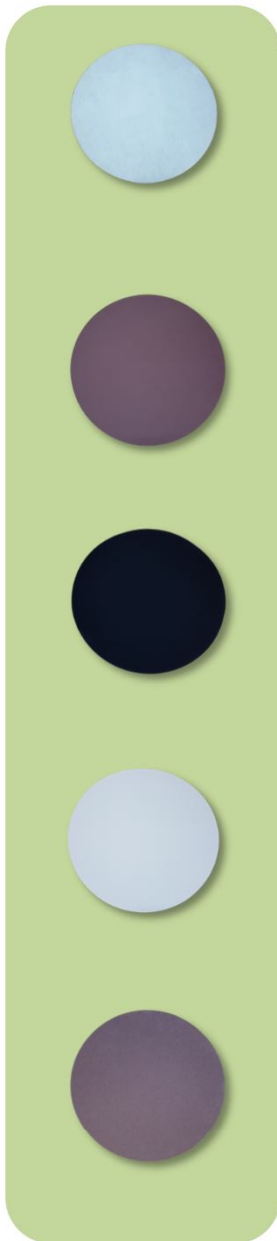
Order no.	Nylon For plane and medium polishing of all materials, such as copper, steel, and alloy		Pack(pcs/box)
S060101	8"	(200mm)	10
S060102	10"	(250mm)	10

Order no.	PolyPad For plane and medium polishing of all materials of metals, such as stainless steel and hard steel		Pack(pcs/box)
S060201	8"	(200mm)	10
S060202	10"	(250mm)	10

Order no.	Pellon For medium polishing of steel, composite material and rock		Pack(pcs/box)
S060301	8"	(200mm)	10
S060302	10"	(250mm)	10



## Polishing Cloth



Order no.	Non-Woven For medium polishing of soft metals, such as copper and aluminum		Pack(pcs/box)
S060401	8"	(200mm)	10
S060402	10"	(250mm)	10

Order no.	MicroPad For medium polishing of all materials, such as aluminum and soft steel		Pack(pcs/box)
S060501	8"	(200mm)	10
S060502	10"	(250mm)	10

Order no.	PolyPadL For fine polishing of metals, such as stainless steel and hard steel		Pack(pcs/box)
S060701	8"	(200mm)	10
S060702	10"	(250mm)	10

Order no.	PolyPadH For fine polishing of metals, such as alloy and stainless steel		Pack(pcs/box)
S060801	8"	(200mm)	10
S060802	10"	(250mm)	10

Order no.	FinalPad For fine polishing of all materials		Pack(pcs/box)
S060901	8"	(200mm)	10
S060902	10"	(250mm)	10

## Diamond Suspension



Order no.	Monocrystalline diamond suspension		
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S0703080902	0.1um	300ml	Gray
S0703030902	1um	300ml	Blue
S0703040902	3um	300ml	Green
S0703050902	6um	300ml	Yellow
S0703060902	9um	300ml	Red

Order no.	Polycrystalline diamond suspension		
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S0708080402	0.1um	470ml	Black
S0708030902	1um	300ml	Milky
S0708030402	1um	470ml	Black
S0708040402	3um	470ml	Black
S0708050402	6um	470ml	Black
S0708060402	9um	470ml	Black
S0708070402	15um	470ml	black

## Oxide and Final Suspension



Order no.	Aluminum oxide suspension	
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S0707010902	0.05um	300 ml
S0707020902	0.3um	300 ml

Order no.	Final polishing suspension	
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S0704C10902	0.04um	300 ml
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# Top Tech distributors



**TOP TECH**



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Agent

We reserve the right to change design without notice.

**NO. EB1-BM02**