

PLATO-HA Series

Automatic grinding & polishing



*Perfect Surface.
Always*

P20G-2-A/B/C series

- Exchangeable grinding head A, B, and C
- Adjustable rotational speed of both head and platen
- Dual platens
- Multiple platens 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.

Dispenser (Optional)

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



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.

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 material 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)

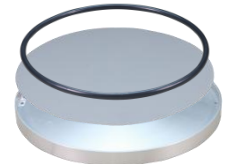
The press force is 1.4~5kg which can be controlled based on the material of the specimen.

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.



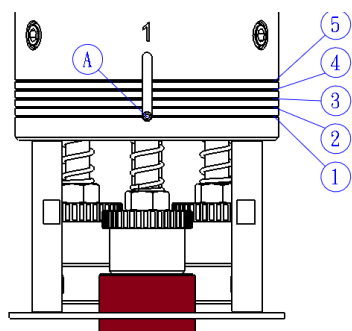
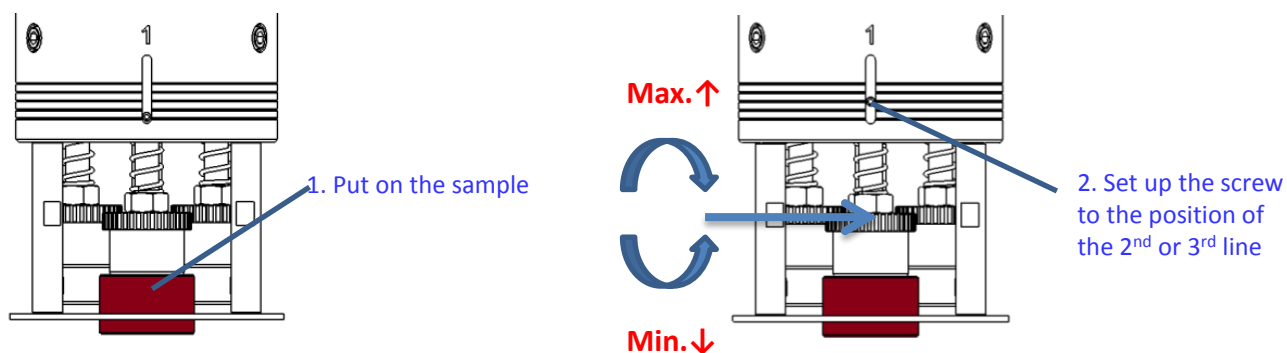
Various anti-splash application

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

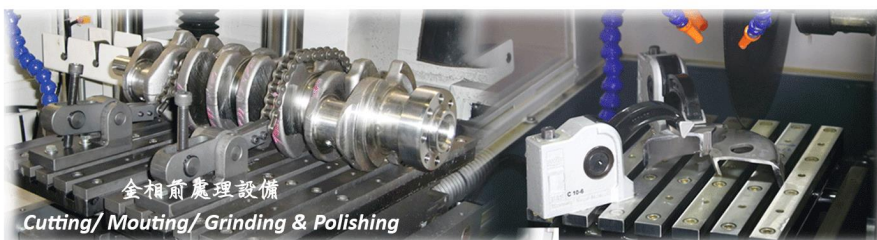


A type

Individual Force (A and B type)



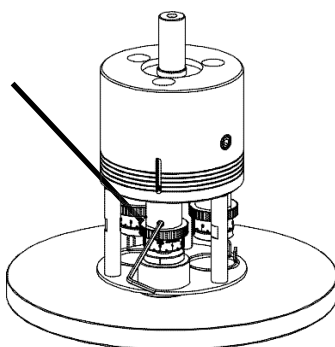
(A)	Standard type (Kg)	Powerful type (Kg)
5	3.0	5.0
4	2.6	4.5
3	2.2	4.0
2	1.8	3.5
1	1.4	3.0
Mounting sample	1. Copper, aluminum 2. Small sample	1. Tungsten steel, steel, titanium, alloy steel... 2. Big sample
Sample height	5mm~25mm Recommended height: 20mm	



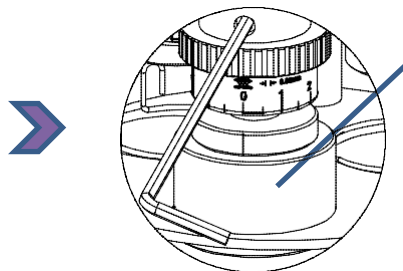
B type

Calibration Adjustment

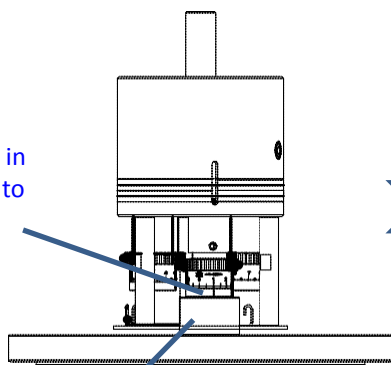
1. Use a hex wrench to loose screws



2. Press the sample with the bumper

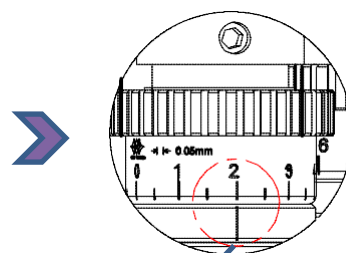
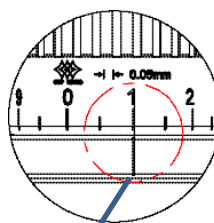


3. Turn the bumper in clockwise direction to the end



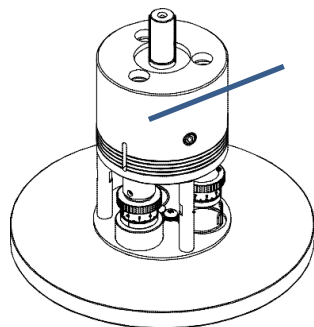
20mm
(sample thickness)

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

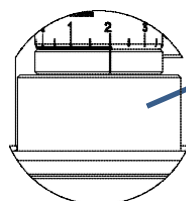


5. Set the depth you would like to remove. Rotate from home point 1 to 2 which means you would like to remove 0.1mm.
Tighten the screws after setting.
(Each scale of the micrometer is 0.05mm)

6. Start grinding



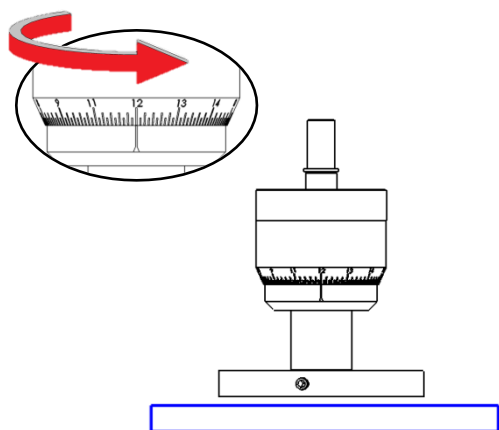
7. Sample thickness become 19.9mm after grinding



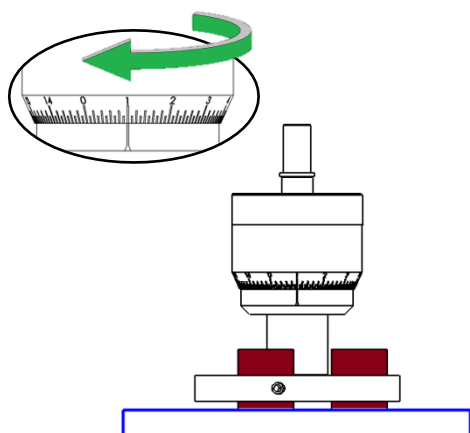
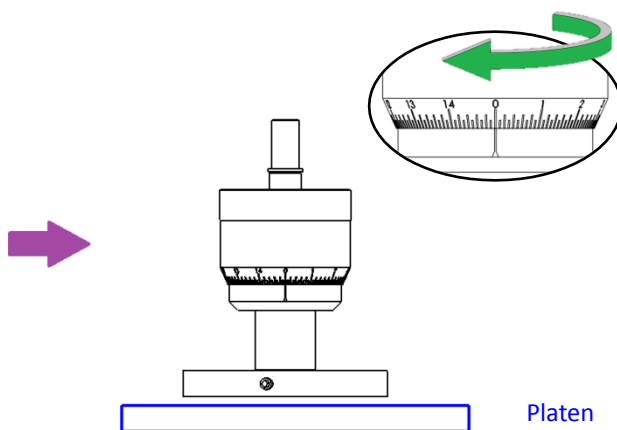
C type

Central force & Central calibrate

1. Rotate the micrometer to the top

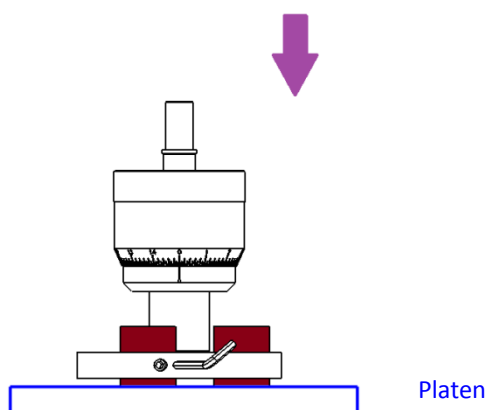


2. Return to zero



4. Set the depth you would like to remove

5. Start grinding



3. Put on the sample and tighten the screws

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.

Accessories (Optional)



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

Item	Order no.
Dosing system	P20F0026A-1

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

Item	Spec.	Order no.
Anti-Splash Cover (Flat)	8"	PA0108-1-V01
	10"	PA0108-V01
Anti-Splash Cover (Standard)	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

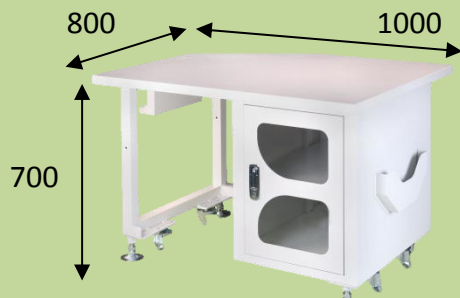
TF02

size(L*W*H)

1000*800*700 mm

1200*1000*700 mm

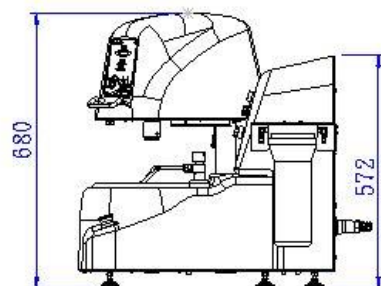
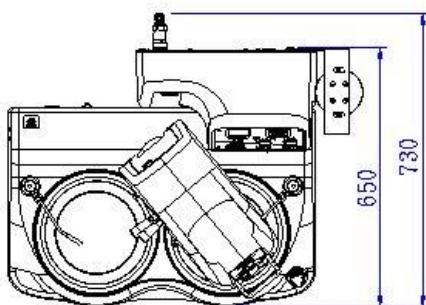
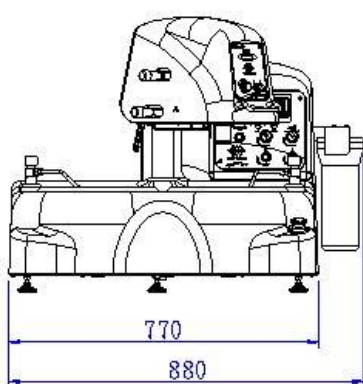
Sample



(mm)

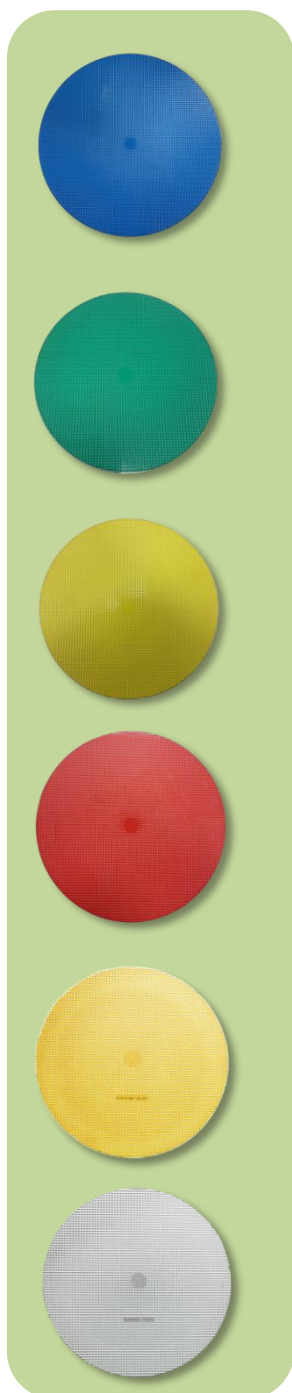
Specification

Model	P20G-2-A3	P20G-2-B3	P20G-2-C3	P25G-2-A3	P25G-2-B3	P25G-2-C3
	P20G-2-A5	P20G-2-B5	P20G-2-C4	P25G-2-A5	P25G-2-B5	P25G-2-C4
Platen Size (mm)	Ø203.2 (8″)			Ø254 (10″)		
Platen Quantity	2					
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)	880x650x680					
Machine Weight (kg) AC110V 1Ø	96			98		
Machine Weight (kg) AC220V 1Ø	86			88		
Standard Accessories	Grinding Platen 1pc, O-Ring 1pc, Polishing Platen 1pc, Anti-Splash Cover 4pcs, Silicon Carbide Paper 8 pcs, Polishing Cloth 2pcs, 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 -1 Dosing System					



Consumable (Optional)

Diamond Disc



Ordering No.	Description	Magnetic Pad	Package (pc/box)
No. 1	Equivalent to SiC Paper of P120		
SAA09CA54020	8" (203mm)	●	1
SAA09CA54040	10" (254mm)	●	1
No. 2	Equivalent to SiC Paper of P240		
SAA09CA55020	8" (203mm)	●	1
SAA09CA55040	10" (254mm)	●	1
No. 3	Equivalent to SiC Paper of P600		
SAA09CA56020	8" (203mm)	●	1
SAA09CA56040	10" (254mm)	●	1
No. 4	Equivalent to SiC Paper of P1200		
SAA09CA58020	8" (203mm)	●	1
SAA09CA58040	10" (254mm)	●	1
No. 5	Without diamond particles, applied with diamond suspension for polishing (Suitable for general material)		
SAA09CA53020	8" (203mm)	●	2
SAA09CA53040	10" (254mm)	●	2
No. 6	Without diamond particles, applied with diamond suspension for polishing (Suitable for harder material)		
SAA09CA52020	8" (203mm)	●	2
SAA09CA52040	10" (254mm)	●	2

Consumable (Optional)

FEPA P SiC Paper (Plain Back)



	Size	Grain Size	Package (pcs/pack)
Order No.	Φ 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



	Size	Grain Size	Package (pcs/pack)
Order No.	Φ 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

Consumable (Optional)

ANSI SiC Paper (Plain Back)



	Size	Grain Size	Package (pcs/pack)
Order No.	Φ 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



	Size	Grain Size	Package (pcs/pack)
Order No.	Φ 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

Consumable (Optional)

FEPA P SiC Paper (PSA Back)



	Size	Grain Size	Package (pcs/pack)
Order No.	Φ 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

	Size	Grain Size	Package (pcs/pack)
Order No.	Φ 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

Consumable (Optional)

ANSI SiC Paper (Plain Back)



	Size	Grain Size	Package (pcs/pack)
Order No.	Φ 254mm SiC Paper		
S05A25100600AU	10" (254mm)	#600	100
S05A25100800AU	10" (254mm)	#800	100
S05A25101000AU	10" (254mm)	#1000	100
S05A25101200AU	10" (254mm)	#1200	100

Diamond Suspension



Order No.	Monocrystalline Diamond Suspension		
S0703080902	0.1um	300ml	Dark Gray
S0703030902	1um	300ml	Blue
S0703040902	3um	300ml	Green
S0703050902	6um	300ml	Yellow
S0703060902	9um	300ml	Red
Order No.	Polycrystalline Diamond Suspension		
S0708080402	0.1um	470ml	Black
S0708030402	1um	470ml	Black
S0708040402	3um	470ml	Black
S0708050402	6um	470ml	Black
S0708060402	9um	470ml	Black
S0708070402	15um	470ml	Black

Consumable (Optional)

Oxide and Final Suspension



Order No.	Aluminum Oxide Suspension	
S0707010902	0.05um	300 ml
S0707020902	0.3um	300 ml

Order No.	Final Polishing Suspension (Colloidal Silica)	
S0704C10902	0.04um	300 ml

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

Consumable (Optional)

Polishing Cloths

Nylon

	• Flock polishing cloth used for scratch removal, and polishing as high reflective as possible, suitable for most materials • For fine polishing, it is recommended to use 1-6µm diamond suspension or colloidal silica.			
	Order No.	Size		Packing
	S060101	Ø8"	Ø203mm	10
	S060102	Ø10"	Ø254mm	10

Pellon



- Non-woven, with excellent removal rate and flatness, suitable for steel, composite materials, rocks, etc
- For rough and medium polishing, it is recommended to use 6-9μm diamond suspension.

Order No.	Size		Packing
S060301	Ø8"	Ø203mm	10
S060302	Ø10"	Ø254mm	10

PolyPadL

	• Polyurethane polishing pads, used for removing stains in chemical mechanical polishing, suitable for various metals and glass • For fine polishing, it is recommended to use colloidal silica.			
	Order No.	Size		Packing
	S060701	Ø8"	Ø203mm	10
	S060702	Ø10"	Ø254mm	10

PolyPadH

	• Polyurethane polishing pads, used for removing stains in chemical mechanical polishing, suitable for various metals and glass • For fine polishing, it is recommended to use colloidal silica.			
	Order No.	Size		Packing
	S060801	Ø8"	Ø203mm	10
	S060802	Ø10"	Ø254mm	10

Consumable (Optional)

FinalPad



- Soft fiber synthetic silk used for scratch removal, and polishing as high reflective as possible, suitable for most materials
- For fine polishing, it is recommended to use 1-6 μ m diamond suspension or colloidal silica.

Order No.	Size		Packing
S060901	Ø8"	Ø203mm	10
S060902	Ø10"	Ø254mm	10

Woven



- Woven natural fibers, with excellent removal rate and flatness, suitable for most materials
- For rough and medium polishing, it is recommended to use 3-9 μ m diamond suspension.

Order No.	Size		Packing
S061601	Ø8"	Ø203mm	5
S061602	Ø10"	Ø254mm	5

Top Tech distributors



TOP TECH



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