

PLATO-R SERIES

Air-Pressure Grinding & Polishing



*Perfect Surface.
Always*

FS-R/FS-R-M

- Grinding/polishing by air pressure source with supplying of stable down force, which ensures the better flatness of grinding/polishing
- Touch panel and intuitive HMI control
- Quick-released design of grinding head is easy to clean, and avoids cross-contamination in the preparation process
- Multiple choices of platen applications (Option)
- Employing diamond discs (Option) ensures the flatness
- Compatible with dispenser (Option)
- FS-R-M can set the grinding depth with micrometer adjustment

Introduction & Feature



Air pressure force

Supplying of stable down force ensures the better flatness of grinding/polishing.

Sample Pistons

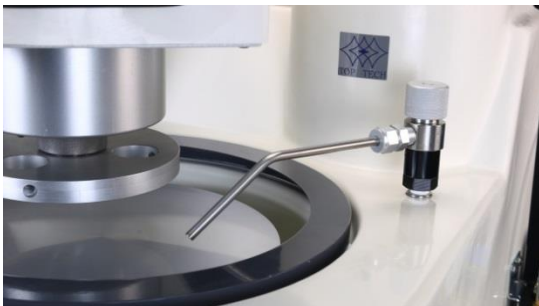
Sample pistons will lower down lightly to prevent the surface of the specimen from damage.

Quick-released sample holder

Quick-released design of sample holder is easy to clean, and is able to avoid the cross-contamination during the preparation process.

Individual Force & Central Force

The Individual force is flexible for sample preparation, while the central force is suitable for irregular shape sample grinding. The sample holder can be customized according to the shape or the size of the sample, which will ensure the better flatness.

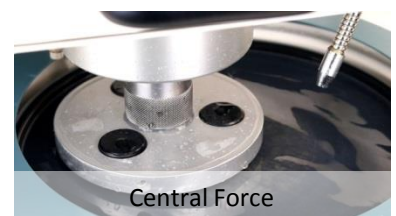


Fiber-Reinforced Plastic (FRP) body cover

FRP body cover design is easier for maintenance and durable.

Platen speed and rotational direction adjustable

According to the sample of material to adjust the rotational speed and direction, which ensures with better effect of grinding/polishing.



Multi-functional control panel

HD & colorful touch panel with intuitive HMI design is able to access the different parameters quickly, and is also equipped 100 set of parameter memory function.



Dosing system (Option)

Equipped dosing system can distribute aluminum suspension or diamond suspension, which greatly reduces the usage of the labor force.



High effective brushless motor

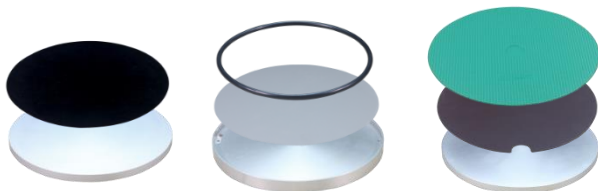
Low rotational speed and high torque ensures the precision of grinding/ polishing, and also has a longer lifespan.

Micrometer adjustment design (FS-R-M)

The micrometer adjustment device is an optional function, which can set the grinding depth to avoid over grinding and affect the observation.

Multiple choices of platens are suitable for various consumables

Platen can be rapidly replaced. According to the feature of the consumables, such as PSA back SiC papers, plain back SiC papers, diamond discs, and polishing cloths, to apply with suitable platens.



Compatible with dispenser (Option)

Opting for a dispenser can distribute diamond suspension or aluminum suspension automatically.



Accessories (Optional)



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



Item	Spec.	Order no.
Grinding Platen (Patent)	10"	CP0602
	12"	CP0603
Polishing Platen	10"	P25A00010201
	12"	P30E010503
Magnetic Platen and Paper Hold (Patent)	10"	CP0502
	12"	CP0503



Item	Spec.	Order no.
Magnetic Pad (Option)	10"	S080102
Magnetic Pad (Option)	12"	S080103



Item	Spec.	Order no.
Carrier Plate (Option)	10"	S090102
Carrier Plate (Option)	12"	S090103

Working Table (Optional)



TF01

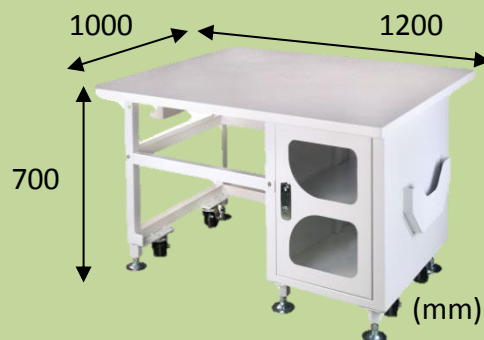
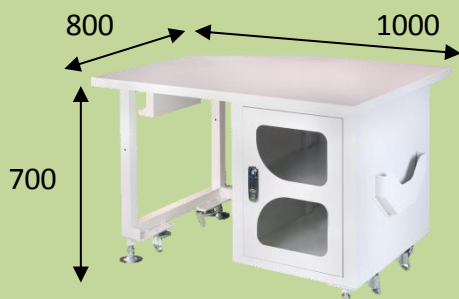
TF02

size(L*W*H)

1000*800*700 mm

1200*1000*700 mm

Sample



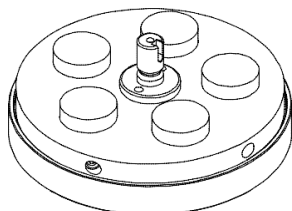
Specifications

Model	FS-R		FS-R (Micrometer)	
Platen Size (mm)	Ø254 (10")	Ø304.8 (12")	Ø254 (10")	Ø304.8 (12")
Platen Quantity	1			
Sample Quantity	3 or 5			
Noise Level (dB)	63~67			
Sample Size	Ø25 / Ø32 / Ø40 (Special sample size can be customized)			
Individual Force (kg)	1~8			
Central Force (kg)	6~25			
Platen Motor Power (W)	750			
Platen Rotational Speed (rpm)	50~600 (Special rotational speed can be customized)			
Head Motor Power (W)	90			
Head Rotational Speed (rpm)	80 (Special rotational speed can be customized)			
Timer (s)	Max. 60000 (1000min)			
Memory Mode (set)	100 (Set Time and rotational speed)			
Machine Dimension WxDxH (mm)	500x800x750		500x800x860	
Machine Weight (kg)	110	120	112	122
Water Inlet Pipe Size (mm)	10mm pipes (Inlet Ø10 — Outlet Ø15)			
Water Outlet Pipe Size (mm)	32mm pipes (Inlet Ø32 — Outlet Ø36)			
Power Supply (V)	AC 220 1Ø			
Accessories	Grinding Platen 1pc, O-ring 1pc, Anti-Splash Cover 1pcs, Silicon Carbide Paper 8pcs, Polishing Cloth 2pcs, Aluminum Oxide Powder 100g, PU Pipe 6m, P20F0026A Dosing system, Leveler 1pc			
Option	P20F0027 Dispenser Set- single bottle, P20F0028 Dispenser Set- four bottles, P20Z06-R1 Manual Leveler Platform			

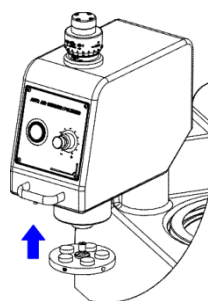


Appendix 1 Calibration (FS-R-M)

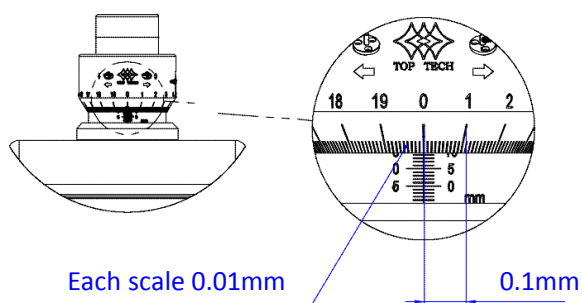
1. Put the sample holder into the leveler



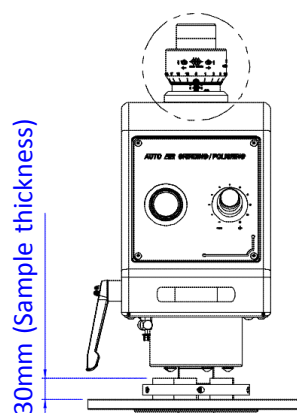
2. Install the sample holder back to the head.



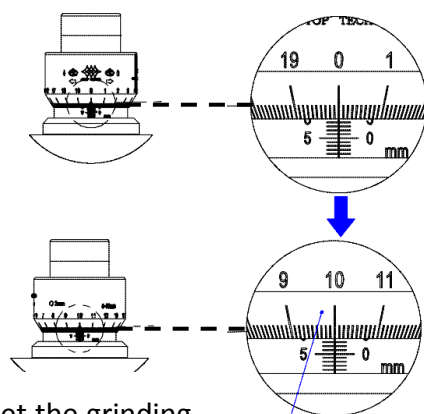
3. Reset to zero



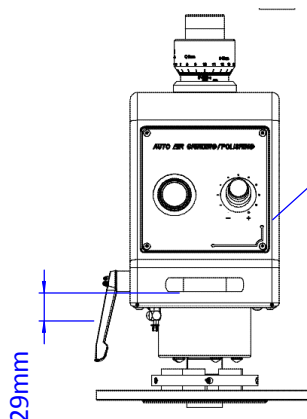
4. Rotate clockwise to set the removal rate



5. Set the grinding depth 1 mm



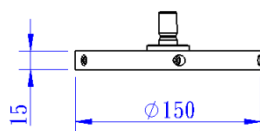
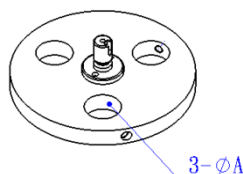
6. Sample become 29mm after grinding



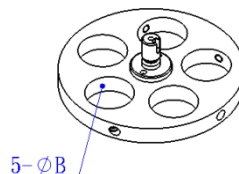
Appendix 2 Leveler

(Individual force & central force)

R3



R5



R3 series		Leveler	R5 series	
A(mm)	Order No.		Order No.	B(mm)
25	-	P30FA0305	P25FA04020820A	25
30	P25FA04020804A	P30FA0305	P25FA04020804A-2	30
31.75	P25FA04020805A-1	P30FA0305	P25FA04020803A-1	31.75
32	P25FA04020805A	P30FA0305	P25FA04020803A	32
38	P25FA04020813A	P30FA0305		38
38.1		P30FA0305	P25FA04020806A	38.1
40	P25FA04020805A-2	P30FA0305	P25FA04020802A	40
45	P25FA04020811A	P30FA0305	P25FA04020809A	45
50	-	P30FA0305	P25FA04020815A	50
50.8		P25FA0305	P25FA04020814A	50.8

Remark:

1. Appendix 2 : Sample holder can be applied to individual force or central force.
2. Central force must use with leveler together (Standard).



Appendix 3 Sample Holder

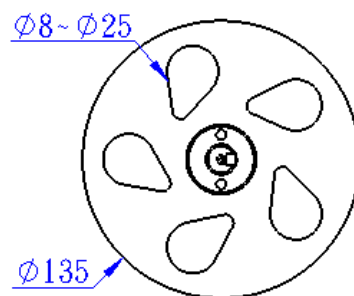
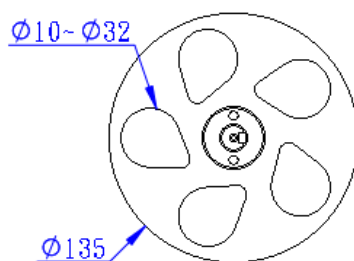
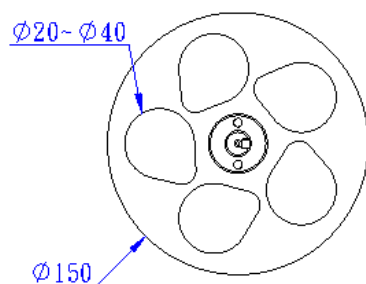
customized or optional

R Series (Central force) - Customized

P25FA04020807A

P25FA04020821A

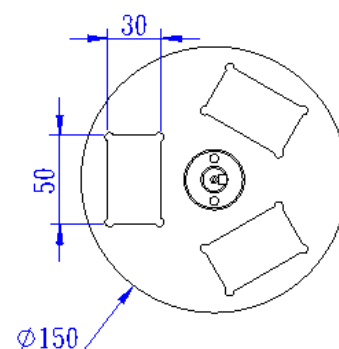
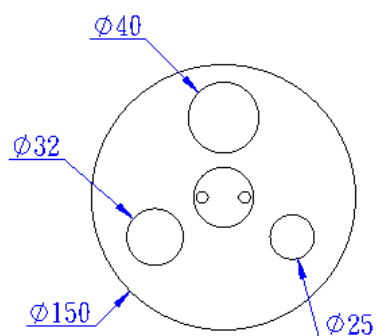
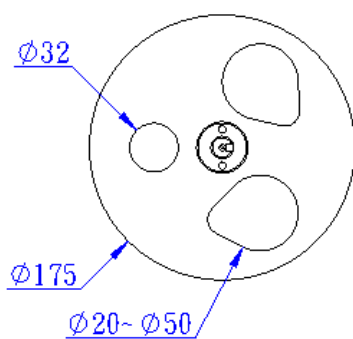
P25FA04020822A



P25FA04020812A

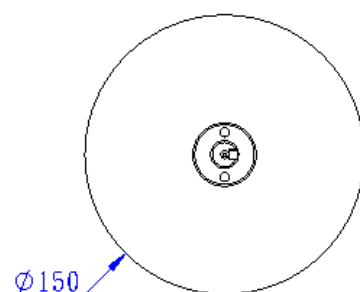
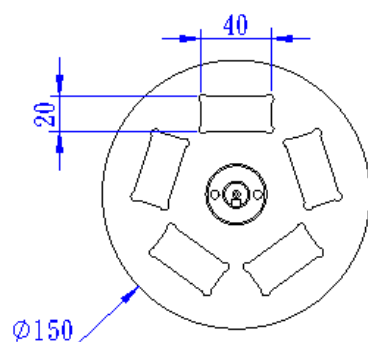
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P25FA04020808A



P25FA04020818A

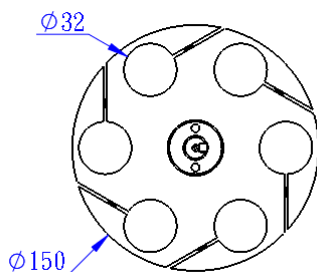
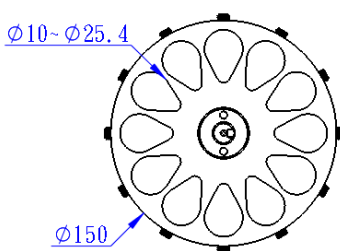
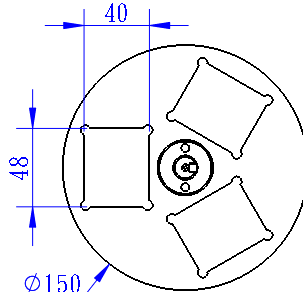
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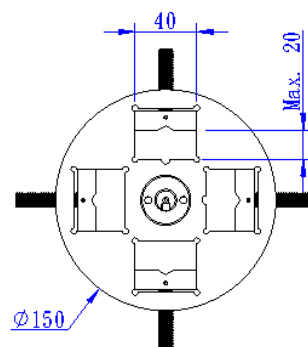
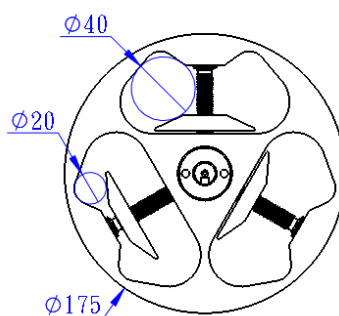
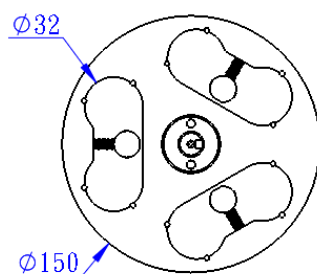


Appendix 4 Sample Holder

customized or optional

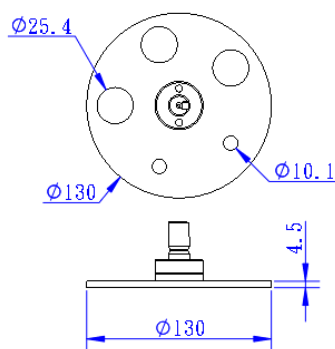
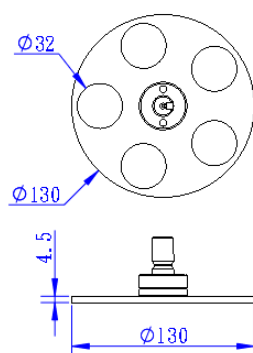
R Series (Central force) - Customized

P20Z16A	P20Z16C	P20Z16D
		
P20Z16E	P20Z16F	P25FA04020817A



R Series (Individual force) - Customized

P20Z16B	P20Z16B1
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Consumable (Option)

Diamond Disc



Ordering No.	Description	Magnetic Pad	Package (pc/box)
No. 1	Equivalent to SiC Paper of P120		
SAA09CA54040	10" (254mm)	●	1
SAA09CA54050	12" (305mm)	●	1
No. 2	Equivalent to SiC Paper of P240		
SAA09CA55040	10" (254mm)	●	1
SAA09CA55050	12" (305mm)	●	1
No. 3	Equivalent to SiC Paper of P600		
SAA09CA56040	10" (254mm)	●	1
SAA09CA56050	12" (305mm)	●	1
No. 4	Equivalent to SiC Paper of P1200		
SAA09CA58040	10" (254mm)	●	1
SAA09CA58050	12" (305mm)	●	1
No. 5	Without diamond particles, applied with diamond suspension for polishing (Suitable for general material)		
SAA09CA53040	10" (254mm)	●	2
SAA09CA53050	12" (305mm)	●	2
No. 6	Without diamond particles, applied with diamond suspension for polishing (Suitable for harder material)		
SAA09CA52040	10" (254mm)	●	2
SAA09CA52050	12" (305mm)	●	2

FEPA P SiC Paper (Plain Back)



	Size	Grain Size	Package (pcs/pack)
Ordering No.	Φ 250mm SiC Paper (Plain Back)		
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



	Size	Grain Size	Package (pcs/pack)
Ordering No.	Φ 305mm SiC Paper (Plain Back)		
S0530001	12"(305mm)	P60	100
S0530004	12"(305mm)	P120	100
S0530007	12"(305mm)	P240	100
S0530008	12"(305mm)	P320	100
S0530009	12"(305mm)	P400	100
S0530010	12"(305mm)	P600	100
S0530011	12"(305mm)	P800	100
S0530012	12"(305mm)	P1000	100
S0530013	12"(305mm)	P1200	100
S0530014	12"(305mm)	P1500	100
S0530015	12"(305mm)	P2000	100

FEPA P SiC Paper (PSA Back)



	Size	Grain Size	Package (pcs/pack)
Ordering No.	Φ250mm SiC Paper (PSA Back)		
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

	Size	Grain Size	Package (pcs/pack)
Ordering No.	Φ305mm SiC Paper (PSA Back)		
S05A30004	12"(305mm)	P120	100
S05A30006	12"(305mm)	P180	100
S05A30007	12"(305mm)	P240	100
S05A30010	12"(305mm)	P600	100
S05A30011	12"(305mm)	P800	100
S05A30012	12"(305mm)	P1000	100
S05A30013	12"(305mm)	P1200	100
S05A30014	12"(305mm)	P1500	100
S05A30015	12"(305mm)	P2000	100

ANSI SiC Paper (Plain Back)



	Size	Grain Size	Package (pcs/pack)
Ordering No.	Φ 250mm SiC Paper (Plain Back)		
S0525100060AU-1	10"(250mm)	#60	100
S0525100120AU-1	10"(250mm)	#120	100
S0525100180AU-1	10"(250mm)	#180	100
S0525100240AU-1	10"(250mm)	#240	100
S0525100320AU-1	10"(250mm)	#320	100
S0525100400AU-1	10"(250mm)	#400	100
S0525100600AU-1	10"(250mm)	#600	100
S0525100800AU-1	10"(250mm)	#800	100
S0525101000AU-1	10"(250mm)	#1000	100
S0525101200AU-1	10"(250mm)	#1200	100



	Size	Grain Size	Package (pcs/pack)
Ordering No.	Φ 305mm SiC Paper (Plain Back)		
S0530120060AU	12"(305mm)	#60	100
S0530120120AU	12"(305mm)	#120	100
S0530120180AU	12"(305mm)	#180	100
S0530120240AU	12"(305mm)	#240	100
S0530120320AU	12"(305mm)	#320	100
S0530120400AU	12"(305mm)	#400	100
S0530120600AU	12"(305mm)	#600	100
S0530120800AU	12"(305mm)	#800	100
S0530121200AU	12"(305mm)	#1200	100

ANSI SiC Paper (PSA Back)



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

	Size	Grain Size	Package (pcs/pack)
Ordering No.	Φ 305mm SiC Paper (PSA Back)		
S05A30120600AU	12" (305mm)	#600	100
S05A30120800AU	12" (305mm)	#800	100
S05A30121000AU	12" (305mm)	#1000	100
S05A30121200AU	12" (305mm)	#1200	100

Diamond Suspension



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

Oxide and Final Suspension



Ordering No.	Aluminum Oxide Suspension	Capacity (ml/bottle)
S0707010902	0.05um	300 ml
S0707020902	0.3um	300 ml
Ordering No.	Final Polishing Suspension	Capacity (ml/bottle)
S0704C10902	0.04um	300 ml

Oxide Powder



Order No.	Aluminum Oxide Powder	Capacity (lb/bottle)
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

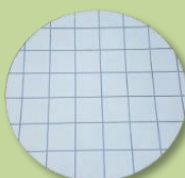
Order No.	Magnesium Oxide Powder	Capacity (lb/bottle)
S0705030102	1um	1 lb

Order No.	Magnesium Oxide Powder	Capacity (lb/bottle)
S07061009	0.5um	1 lb
S07061109	1.5um	1 lb

Polishing Cloths

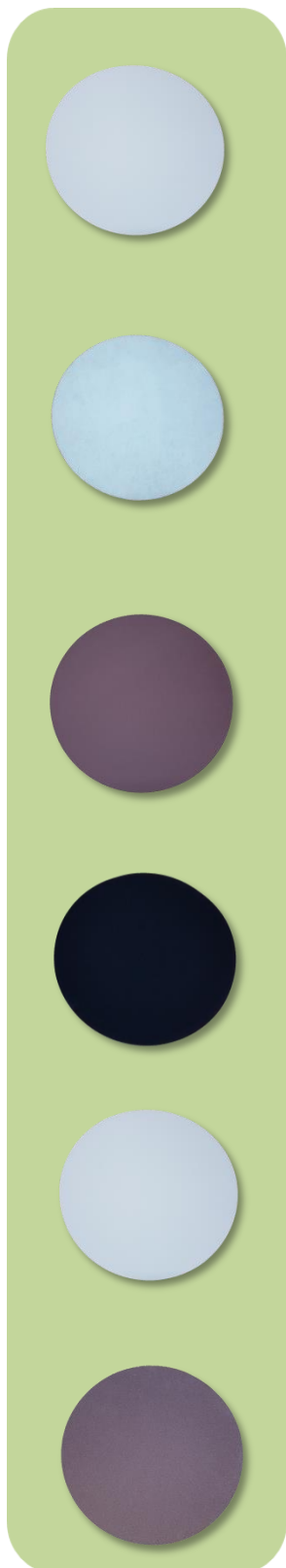


Ordering No.	Nylon Polishing cloth for planar and medium polishing of all materials, such as copper, steel, and alloy	Package (pcs/pack)
S060102	10" (254mm)	10
S060103	12" (305mm)	10



Ordering No.	Nylon Polishing cloth for planar and medium polishing of all materials, such as copper, steel, and alloy	Package (pcs/pack)
S060202	10" (254mm)	10
S060203	12" (305mm)	10

Polishing Cloths



Ordering No.	Pellon Polishing cloth for medium polishing of steel, composite material and rock		Package (pcs/pack)
S060302	10"	(254mm)	10
S060303	12"	(305mm)	10
Ordering No.	Non-Woven Polishing cloth for medium polishing of soft metals, such as copper and aluminum		Package (pcs/pack)
S060402	10"	(254mm)	10
S060403	12"	(305mm)	10
Ordering No.	MicroPad Polishing cloth for medium polishing of all materials, such as aluminum and soft steel		Package (pcs/pack)
S060502	10"	(254mm)	10
S060503	12"	(305mm)	10
Ordering No.	PolyPadL Polishing cloth for fine polishing of metals, such as stainless steel and hard steel		Package (pcs/pack)
S060702	10"	(254mm)	10
S060703	12"	(305mm)	10
Ordering No.	PolyPadH Polishing cloth for fine polishing of metals, such as alloy and stainless steel		Package (pcs/pack)
S060802	10"	(254mm)	10
S060803	12"	(305mm)	10
Ordering No.	FinalPad Polishing cloth for fine polishing of all materials		Package (pcs/pack)
S060902	10"	(254mm)	10
S060903	12"	(305mm)	10

Top Tech distributors



TOP TECH



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Agent

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