

PLATO-HA Series

Automatic Grinding & Polishing



FS-ABC Ø300mm



FRS-ABC Ø300mm



*Perfect Surface.
Always*

FS-ABC Ø300mm/FRS-ABC Ø300mm

- Exchangeable grinding head of A type, B type, or C type
- 12" platen is able to grind and polish with bigger diameter mounting sample
- Multiple choices of platen applications (Option)
- Employing diamond discs (Option) ensures the flatness
- Compatible with dispenser (Option)

Introduction & feature

Exchangeable grinding head for A type, B type, or C type

Exchangeable grinding head can be selected based on the demand of the sample preparation. This has increased the variety selections for the sample preparation.

Individual pressure (A type and B type)

The individual pressure force is 1.4~5kg, which can be adjusted according to the sample of material.



A type
Individual force



Central pressure (C type)

The central pressure force is 3~5kg, which can be adjusted according to the sample of material.



C type
Central force
with calibration

Fiber-reinforced plastic (FRP) body cover

The FRP body cover design is easier for maintenance and durable.

Intuitive display design

Intuitive display design is easy to learn for operators.

Platen speed and direction adjustable

Adjust the platen speed and rotational direction based on the sample materials.

High effective brushless motor

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

Expand platen is for a wider size sample grinding/ polishing

Different from the restriction of 8" and 10" platens, platen size of Ø300mm (12") increases the sample size for grinding or polishing.

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.



DI500



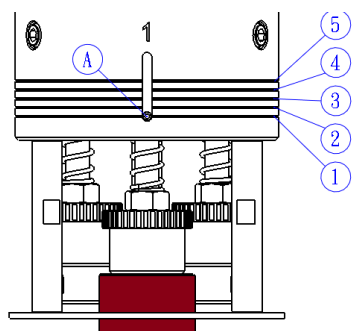
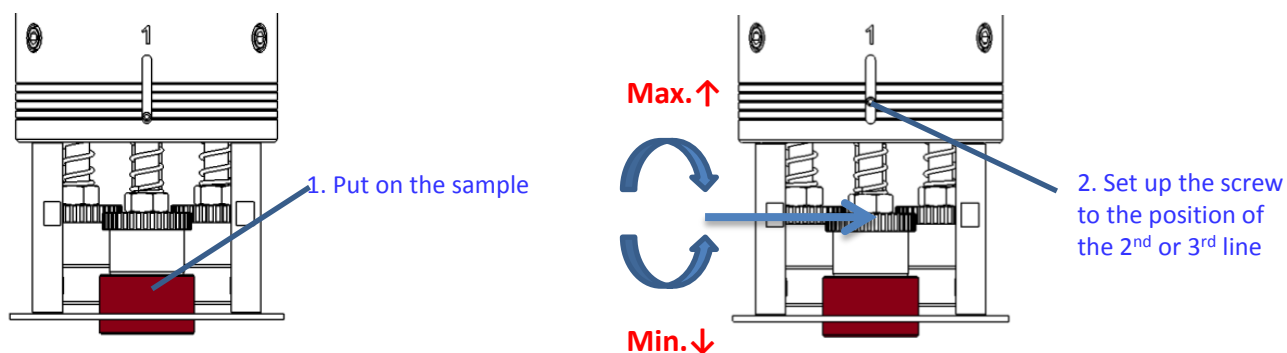
DI2000

Flexible operation with dual platens (FRS-ABC)

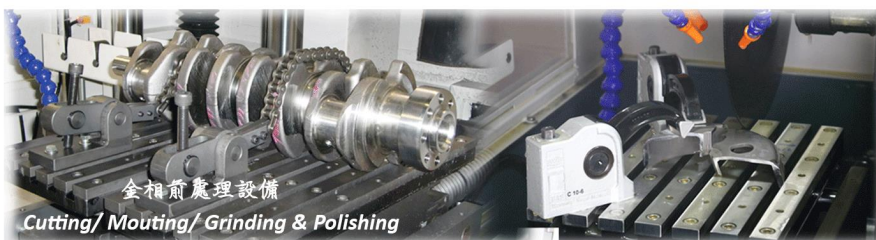
Dual platens increase the efficiency of the application for platens. Grinding and polishing can be able to process at the same time.

A type

Individual Force (A and B type) Adjustment



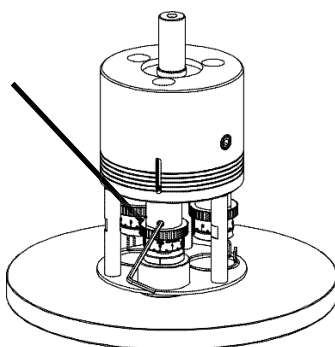
(A)	Standard type (Kg)	Powerful type (Kg)
5	3.0	5.0
4	2.6	4.5
3	2.2	4.0
2	1.8	3.5
1	1.4	3.0
Mounting sample	1. Copper, aluminum 2. Small sample	1. Tungsten steel, steel, titanium, alloy steel... 2. Big sample
Sample height	5mm~25mm Recommended height: 20mm	



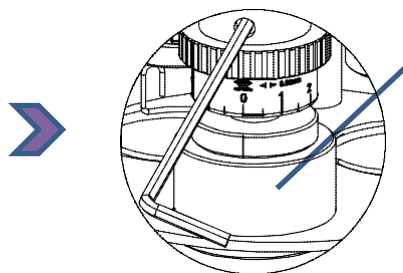
B type

Individual Calibration Adjustment

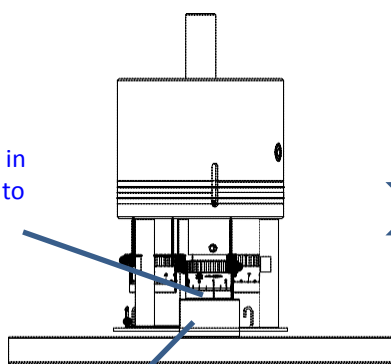
1. Use a hex wrench to loose screws



2. Press the sample with the bumper

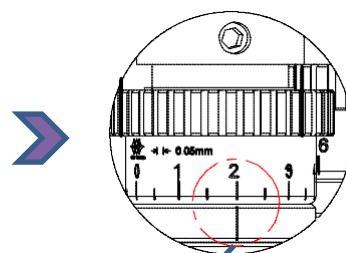
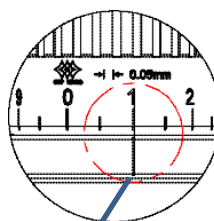


3. Turn the bumper in clockwise direction to the end



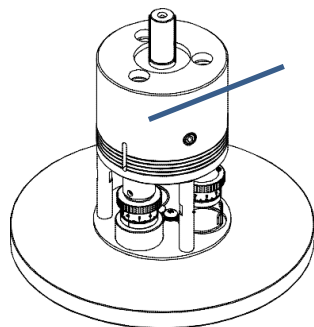
20mm
(sample thickness)

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

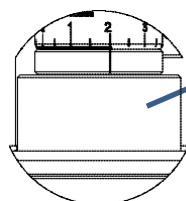


5. Set the depth you would like to remove. Rotate from home point 1 to 2 which means you would like to remove 0.1mm.
Tighten the screws after setting.
(Each scale of the micrometer is 0.05mm)

6. Start grinding



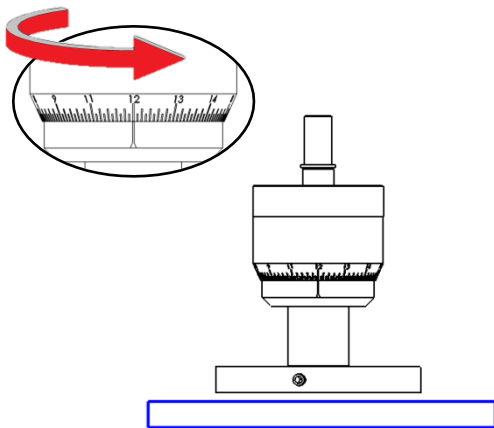
7. Sample thickness become 19.9mm after grinding



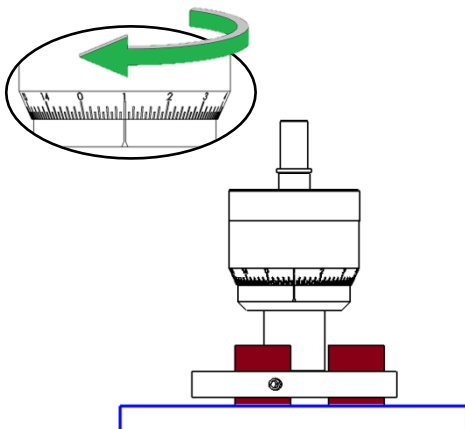
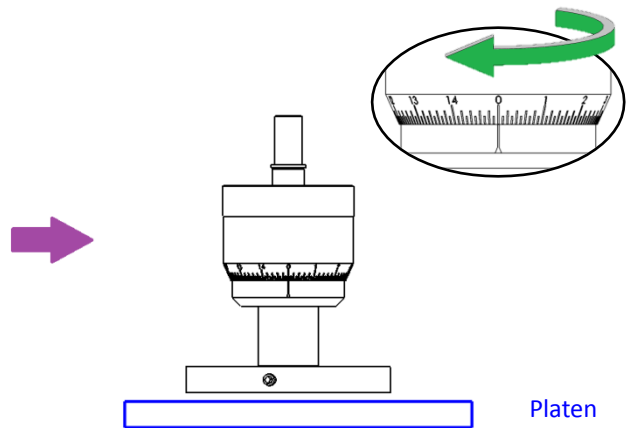
C type

Central Force & Central Calibrate

1. Rotate the micrometer to the top

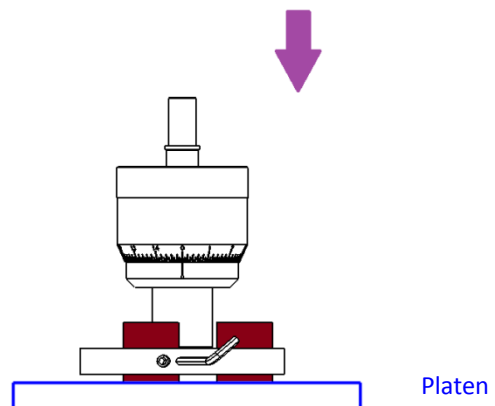


2. Return to zero



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)



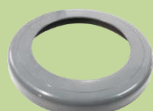
Grinding Platen



Polishing Platen



Magnetic Platen
and Paper Hold



Anti-Splash Cover
(Standard)



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

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

Item	Spec.	Order no.
Anti-Splash Cover (Standard)	12"	P30E0107

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

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

Working Table (Optional)



TF01

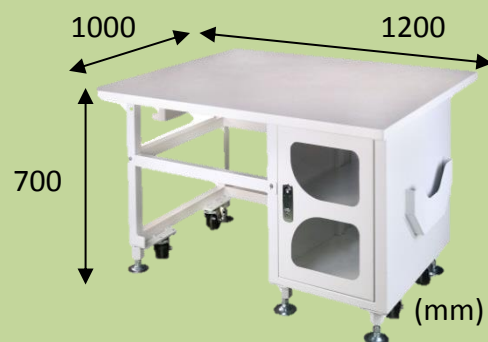
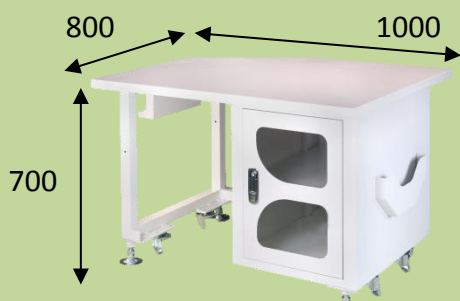
TF02

size(L*W*H)

1000*800*700 mm

1200*1000*700 mm

Sample



Specification

Model	HA-FS-A3 HA-FS-A5	HA-FS-B3 HA-FS-B5	HA-FS-C3 HA-FS-C4
Platen Size (mm)	Ø304.8 (12")		
Platen Quantity	1		
Grinding Method	Individual Force	Individual Force with Individual Calibration	Central Force with Central Calibration
Noise Level (dB)	52~57		
Sample Quantity (pcs)	3 or 5		3 or 4
Sample Size (mm)	Ø25/Ø32/Ø40 (Special sample size can be customized)		Ø15~Ø32 Ø20~Ø40
Force (kg)	1.4~5		3~5
Platen Motor Power (W)	370		
Platen Rotational Speed (rpm)	50~600 (Special rotational speed can be customized)		
Head Motor Power (W)	25		
Head Rotational Speed (rpm)	60		
Timer (min:s)	Max. 99:59		
Machine Dimension WxDxH (mm)	500x800x670		
Machine Weight (kg)	76		
Water Inlet Pipe Size (mm)	10mm pipes (Inlet Ø10 – Outlet Ø15)		
Water Outlet Pipe Size (mm)	26mm pipes (Inlet Ø26 – Outlet Ø30)		
Power Supply (V)	AC 110/220 1Ø		
Accessories	Grinding Platen 1pc, O-ring 1pc, Anti-Splash Cover 1pcs, Silicon Carbide Paper 8pcs, Polishing Cloth 2pcs, Aluminum Oxide Powder 100g, 500g Dispenser 1pc, Leveler 1pc (C Type)		
Option	P20F0027 Dispenser Set- single bottle, P20F0028 Dispenser Set- four bottles		



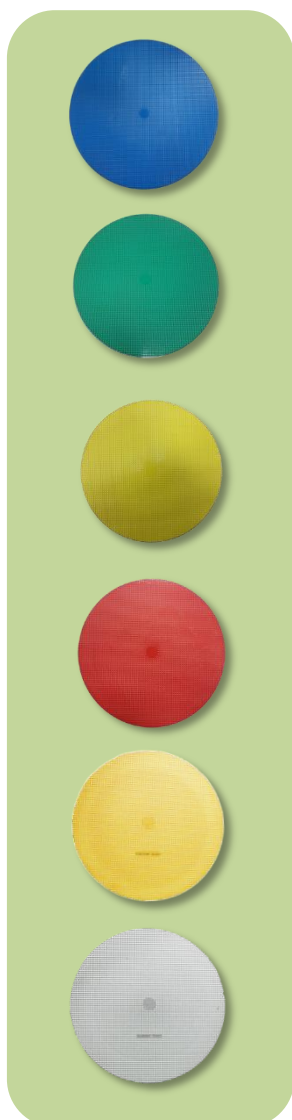
Specification

Model	HA-FRS-A3 HA-FRS-A5	HA-FRS-B3 HA-FRS-B5	HA-FRS-C3 HA-FRS-C4
Platen Size (mm)	Ø304.8 (12")		
Platen Quantity	2		
Grinding Method	Individual Force	Individual Force with Individual Calibration	Central Force with Central Calibration
Noise Level (dB)	54~61		
Sample Quantity (pcs)	3 or 5		3 or 4
Sample Size (mm)	Ø25/Ø32/Ø40 (Special sample size can be customized)		Ø15~Ø32 Ø20~Ø40
Force (kg)	1.4~5		3~5
Platen Motor Power (W)	370		
Platen Rotational Speed (rpm)	50~600 (Special rotational speed can be customized)		
Head Motor Power (W)	25		
Head Rotational Speed (rpm)	60		
Timer (min:s)	Max. 99:59		
Machine Dimension WxDxH (mm)	850x750x660		
Machine Weight (kg)	135		
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 110/220 1Ø		
Accessories	Grinding Platen 1pc, O-ring 1pc, Polishing Platen 1pc, Anti-Splash Cover 2pcs, Silicon Carbide Paper 8pcs, Polishing Cloth 2pcs, Aluminum Oxide Powder 100g, 500g Dispenser 1pc, Leveler 1pc (C Type)		
Option	P20F0027 Dispenser Set- single bottle, P20F0028 Dispenser Set- four bottles		



Consumable (Option)

Diamond Disc



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

FEPA P SiC Paper (Plain Back)



	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.	Φ 305mm 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 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 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

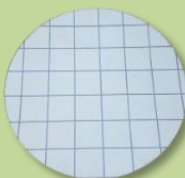


Order No.	Aluminum Oxide Powder	Capacity (lb/bottle)
S0701010102	0.05um	1 lb
S07010201	0.3um	1 lb
S07010211	0.3um	2 lb
S07010301	1um	1 lb
S07010311	1um	2 lb
S07010401	3um	1 lb
S07011201	5um	1 lb

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)
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)
S060203	12" (305mm)	10

Polishing Cloths



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

Top Tech distributors



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Agent

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