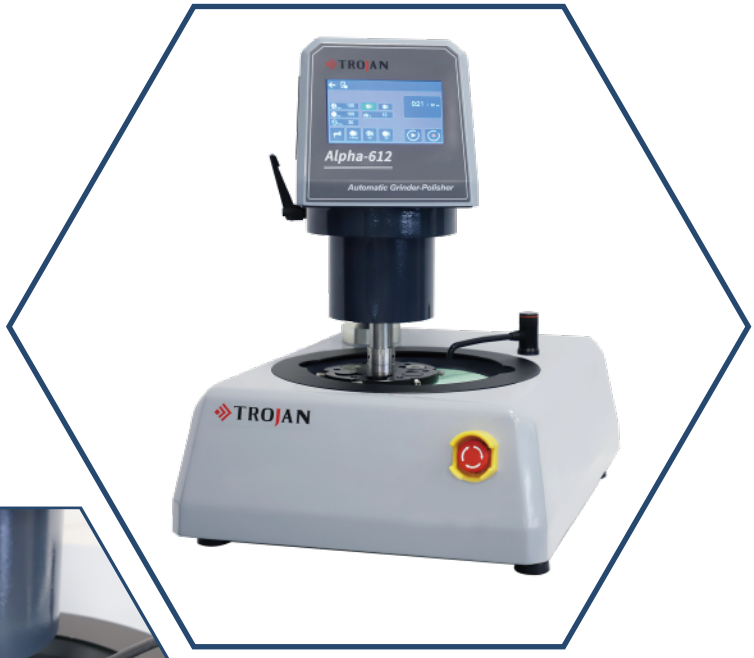
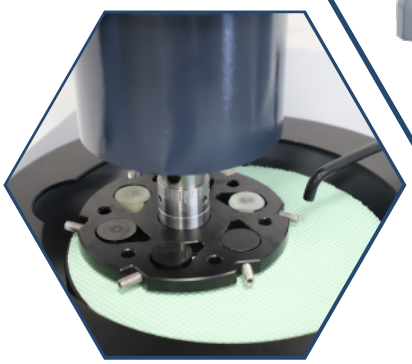
TROJAN
Discover the Truth of Material

Alpha - 612
Automatic Grinder and Polisher

GRINDING/POLISHING





2024
10 / 11

TROJAN (SUZHOU) MATERIAL TECHNOLOGY CO.,LTD

Alpha-612 Automatic Grinder and Polisher

The Alpha-612 is a single platen automatic grinder polisher. The grinding head and the grinding platen are driven by two independent motors, suitable for grinding platen with a diameter of 200mm -300mm. The Alpha 612 has central loading pressurization method and can be equipped with an optional 4 sets of peristaltic pump dripping system. Twenty sets of commonly used grinding processes can be set and stored in the system, enabling highly repeatable test results easily and quickly.

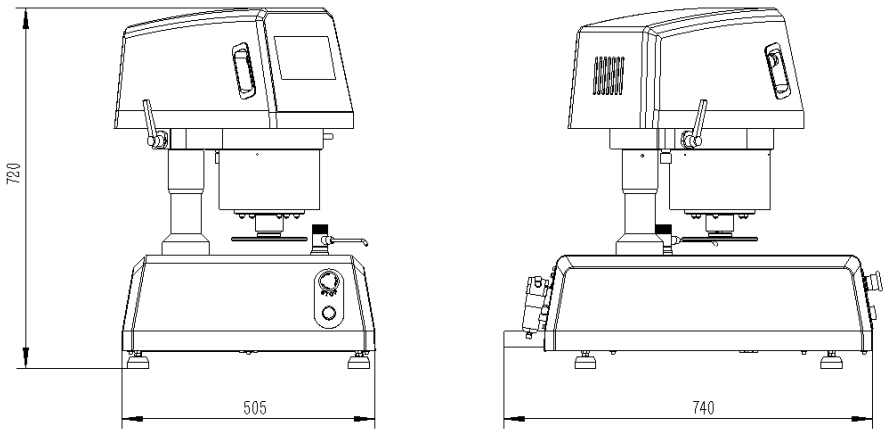


Features:

- Cast aluminum shell, SMC standard loading cylinder, designed to be more reliable and durable;
- 7-inch touch screen panel, the interface is simple and easy to understand;
- Adopt two-hand protection button to control the lifting and lowering of the clamping platen;
- Can be equipped with central loading pressurization;
- Dripping system with 4 sets of peristaltic pumps is available;
- Built-in 20 groups of common grinding and polishing process parameters and user-defined parameters can also be stored;
- Large diameter side drainage system, not easy to block and drain quickly;
- Pluggable faucet facilitates cleaning and maintenance of the disk;
- Built-in automatic temperature-sensing cooling fan to reduce failure rate and enhance working life.

Dimension Figure

Unite: mm



Technical Data:

Model		Alpha-612
Head	Loading force	Central loading
	Central pressure	20-360N
	Power	220V, 750W
	Speed	20-150rpm
	Direction	CCW/CW
Grinding disc	Power	220V, 750W
	Speed	50-600rpm
	Diameter	10″/254 (8″/203mm, 12″/305mm optional)
	Direction	CCW
Capacity and mixing function	Type	Peristaltic pump, DC24V, 10W
	Flow	Maximum flow rate: 52ml/minute
	Amount	4
Clamping Disk	Center loading	Standard: 8xΦ32mm(10xΦ25.4mm, 6xΦ40mm, 6xΦ50mm optional)
Environment	Temperature	-10˚C - 60˚C
	Humdity	0-95%RH
Dimension	WxDxH	740x505x720mm
Weight		65kg

Control Panel Introduction:

Home Screen:

❶ Procedures selection

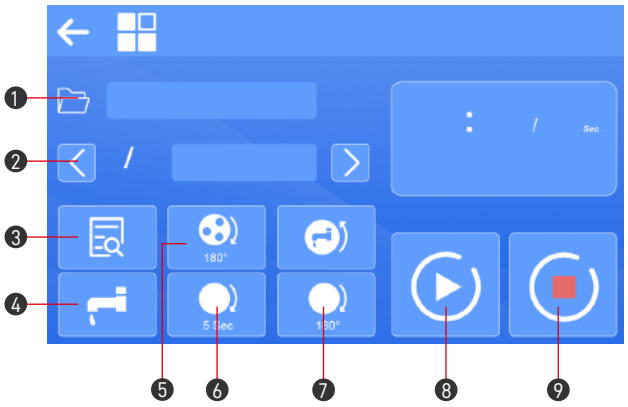
❷ Automatic mode (Run selected procedure)

❸ Manual mode

❹ Parameters settings

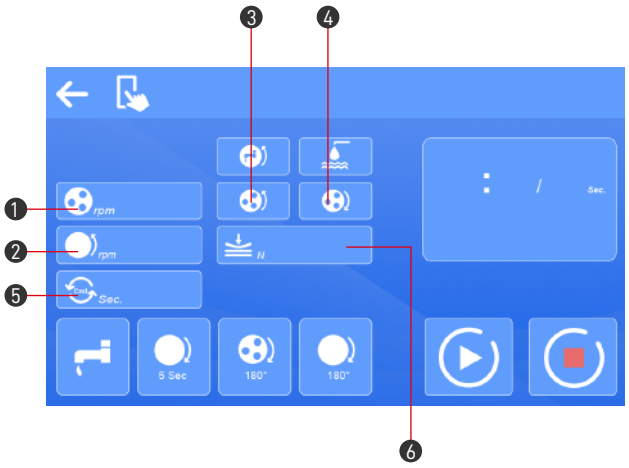


Control Panel Introduction:



Automatic mode:

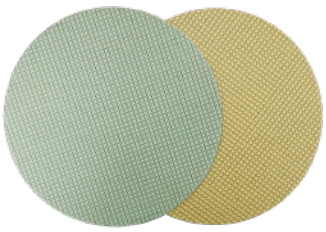
1. Select program
2. Select subroutine
3. Preview program
4. Turn on or off the faucet manually
5. Place the sample by manually rotating the clamping disk by 180°
6. Manual dumping
7. Rotate the working platen by 180° for sample removal
8. Start
9. Stop



Manual modeL:

1. Speed setting for working platen（20-150）RPM
2. Speed setting for clamping disk（50-600）RPM
3. Forward rotation
4. Reverse rotation
5. Setting for running time（0-9999）sec
6. Pressure setting, central pressure: (20-360) N. Individual pressure: (5-60) N

Related Consumables & Accessories:



DiaRe Diamond Disc



Abrasive Paper



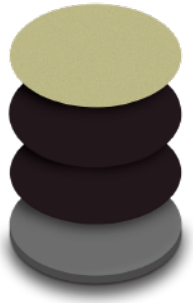
Polishing Cloth



Diamond Suspension



Alumina/Silica suspension



Adapter Plate System

Standard Accessories:

1	Working wheel		10”（254mm)	1pc
2	Specimen holder & levelling plate–Tear drop		8×Φ32mm	1set
3	Inlet pipe		Φ8 PU pipe + filter	1pc
4	Outlet pipe		Corrugated pipe with Φ32mm inner diameter and Clamp	1pc
5	Air inlet pipe		Φ6mm PU pipe	1pc
6	Disposable liner tray			1pc
7	Abrasive paper		180#(250mm),400#(250mm),800#(250mm), 1200#(250mm),2500#(250mm)	10 pcs each
8	Magnetic disk		Magnetic disk (250mm)	1pc
9	Adapter system		AD–PB (250mm)	1pc
10	Polishing cloth		ET–JP (250mm) YS–JP (250mm)	1 pc each
11	Power cord		1.5m	1pc

Optional Accessories:

1	Working wheel		8”（203mm）or 12”（305mm)
2	Circlip		8”（203mm）or 12”（305mm)
3	Magnetic disk		Magnetic disk (200mm or 300mm)
4	Adapter System		AD–PB (200mm or 300mm)
5	Specimen holder & levelling plate–Tear drop		9xΦ25.4mm, 9xΦ32mm, 6xΦ40mm, 6xΦ50mm, or other customized
6	Leveling base		Φ180mm or Φ200mm

Optional Accessories:

7	Universal fixture		Φ160mm
8	Irregular fixture		
9	FLAT Levelling device		FLAT-1
10	ADS-4 Automatic		500mlx4, flow Rate :8-52ml/minute
11	ADS-8 Automatic		Flow Rate :8-52ml/minute
12	Air Compressor		220V, 1.1 kW, Exhaust Pressure: 0.8 MPa, Capacity: 24 L

Purchase list:

MET-F Metallographic Grinding Foil:

FEPA(Grit)	8in (200mm)	10in (250mm)	12in (300mm)	Package
120	03.18.110	03.18.210	03.18.310	100pcs
180	03.18.120	03.18.220	03.18.320	100pcs
240	03.18.130	03.18.230	03.18.330	100pcs
320	03.18.140	03.18.240	03.18.340	100pcs
400	03.18.150	03.18.250	03.18.350	100pcs
600	03.18.160	03.18.260	03.18.360	100pcs
1200	03.18.170	03.18.270	03.18.370	100pcs

Silicon Carbide Abrasive Paper:

FEPA(Grit)	8in PSA (200mm)	10in PSA (250mm)	12in PSA (300mm)	8in Plain Back (200mm)	10in Plain Back (250mm)	12in Plain Back (300mm)	Package
120	03.04.203	03.04.503	03.04.803	03.03.103	03.03.403	03.03.703	50pcs
180	03.04.204	03.04.504	03.04.804	03.03.104	03.03.404	03.03.704	100pcs
400	03.04.207	03.04.507	03.04.807	03.03.107	03.03.407	03.03.707	100pcs
800	03.04.209	03.04.509	03.04.809	03.03.109	03.03.409	03.03.709	100pcs
1200	03.04.211	03.04.511	03.04.811	03.03.111	03.03.411	03.03.711	100pcs
2000	03.04.213	03.04.513	03.04.813	03.03.113	03.03.413	03.03.713	100pcs
2500	03.04.214	03.04.514	03.04.814	03.03.114	03.03.414	03.03.714	100pcs
2400	03.04.215	03.04.515	03.04.815	03.03.115	03.03.415	03.03.715	100pcs
4000	03.04.216	03.04.516	03.04.816	03.03.116	03.03.416	03.03.716	100pcs

Aluminum Oxide Abrasive Paper:

FEPA(Grit)	8in PSA (200mm)	10in PSA (250mm)	12in PSA (300mm)	8in Plain Back (200mm)	10in Plain Back (250mm)	12in Plain Back (300mm)	Package
60	03.02.401	03.02.500	03.02.801	03.01.101	03.01.401	03.01.701	50pcs
120	03.02.403	03.02.503	03.02.803	03.01.103	03.01.403	03.01.703	100pcs
180	03.02.404	03.02.504	03.02.804	03.01.104	03.01.404	03.01.704	100pcs
240	03.02.404-1	03.02.504-1	03.02.804-1	03.01.104-1	03.01.404-1	03.01.704-1	100pcs
320	03.02.405	03.02.505	03.02.805	03.01.105	03.01.405	03.01.705	100pcs
400	03.02.406	03.02.506	03.02.806	03.01.106	03.01.406	03.01.706	100pcs
800	03.02.408	03.02.508	03.02.808	03.01.108	03.01.408	03.01.708	100pcs
1200	03.02.410	03.02.510	03.02.810	03.01.110	03.01.410	03.01.710	100pcs

Purchase list:

DiaNi Electroplated Diamond Grinding Disc:

FEPA(Grit)	8in (200mm)	10in (250mm)	12in (300mm)	Package
80	04.21.110S	04.21.210S	04.21.310S	1PC
120	04.21.120S	04.21.220S	04.21.320S	1PC
200	04.21.125S	04.21.225S	04.21.325S	1PC
400	04.21.130S	04.21.230S	04.21.330S	1PC
800	04.21.140S	04.21.240S	04.21.340S	1PC
1200	04.21.150S	04.21.250S	04.21.350S	1PC

DiaRe Resin-Bonded Diamond Grinding Disc:

FEPA(Grit)	8in (200mm)	10in (250mm)	12in (300mm)	Package
120	04.22.120S	04.22.220S	04.22.320S	1PC
200	04.22.125S	04.22.225S	04.22.325S	1PC
400	04.22.130S	04.22.230S	04.22.330S	1PC
800	04.22.140S	04.22.240S	04.22.340S	1PC
1500	04.22.150S	04.22.250S	04.22.350S	1PC
3000	04.22.160S	04.22.260S	04.22.360S	1PC
5000	04.22.170S	04.22.270S	04.22.370S	1PC

POS/POH Fine Grinding Disc:

Description	8in (200mm)	10in (250mm)	12in (300mm)	14in (350mm)	Package
POS	04.09.110	04.09.115	04.09.120	04.09.125	1pc
POH	04.09.130	04.09.135	04.09.140	04.09.145	1pc

Polishing Cloth:

		8in(200mm)	10in(250mm)	12in(300mm)	Package
Coarse Polishing	NL-CP White Chemical Fiber Polishing Cloth (PSA)	05.06.610	05.06.620	05.06.630	10pcs
	GF-JP White Synthetin Silk Polishing Cloth (PSA)	05.10.010	05.10.020	05.10.030	10pcs
Intermediate Polishing	SC-JP White Silk Polishing Cloth (PSA)	05.05.510	05.05.520	05.05.530	10pcs
	YS-JP White Fiber Polishing Cloth (PSA)	05.07.710	05.07.720	05.07.730	10pcs
	CS-JP Blue Synthetin Silk Polishing Cloth (PSA)	05.12.110	05.12.120	05.12.130	10pcs
	SR-ZP Red Synthetic Fibric Polishing Cloth (PSA)	05.02.150	05.02.160	05.02.170	10pcs
Final Polishing	ET-JP White Synthetic Velvet Polishing Cloth (PSA)	05.03.210	05.03.220	05.03.230	10pcs
	YR-JP Brown Synthetic Rayon Polishing Cloth (PSA)	05.04.310	05.04.320	05.04.330	10pcs
	Final Red Final Precision Polishing Cloth(PSA)	05.13.110	05.13.120	05.13.130	10pcs
	ZN-ZP Black Polyurethane Polishing Cloth (PSA)	05.01.110	05.01.120	05.01.130	10pcs

Adapter System:

	AD-PSA Adapter Disc	AD-Foil Adapter Disc	AD-PB Adapter Disc	Magnetic disc	Package
8in (200mm)	04.08.410	04.08.422	04.08.310	04.08.010	1pc
10in (250mm)	04.08.413	04.08.430	04.08.320	04.08.020	1pc
12in (300mm)	04.08.420	04.08.432	04.08.330	04.08.030	1pc

Diamond polishing suspension and paste:

Diamond Suspension		Micrometer	Diamond Paste		Diamond Spray
Monocrystalline (500ml)	Polycrystalline (500ml)		Monocrystalline (5g)	Polycrystalline (10g)	Monocrystalline (350ml)
06.01.110-1	06.02.210	0.25um	-	-	-
06.01.120-1	06.02.220	0.5um	-	-	06.03.115
06.01.130-1	06.02.230	1um	06.10.030 (Gray)	06.10.110 (Black)	06.03.320
-	-	2.5um	-	-	06.03.325
06.01.140-1	06.02.240	3um	06.10.040 (Gray)	06.10.130 (Black)	-
-	-	3.5um	-	-	06.03.330
-	-	5um	-	-	06.03.335
06.01.150-1	06.02.250	6um	06.10.050 (Gray)	06.10.160 (Black)	-
06.01.160-1	06.02.260	9um	06.10.060 (Gray)	06.10.190 (Black)	-
-	-	10um	-	-	06.03.340

Purchase list:

Precision polishing suspension and polishing powder:

	0.05μm	0.3μm	1μm	Package
AO-W Alumina Polishing Suspension	06.04.210	06.04.220	06.04.230	500ml
AO-P Alumina Polishing Powder	06.13.011	06.13.021	06.13.031	500g
Super Alumina Polishing Suspension	06.04.410/414	–	–	500ml/1.9L
Super Alumina Polishing Powder	06.14.010	06.14.020	–	1LB

Colloidal Silica Polishing Suspension:

SO-T401	SO-A439	SO-A539	Package
06.05.310	06.07.310	06.07.522	500ml
06.05.320	06.07.320	06.07.520	1000ml
06.05.350	06.07.322	06.07.524	1.9L

Polishing lubricants:

PL-W Polishing Lubricant	PL-WB Water-free Blue Low-viscosity Polishing Lubricant	Package
–	06.09.640	500ml
06.09.510	06.09.650	1000ml
06.09.520	06.09.630	5000ml

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