

SemiPOL High Precision Quantitative Grinding Machine

GRINDING/POLISHING



2024
10 / 16

TROJAN (SUZHOU) MATERIAL TECHNOLOGY CO.,LTD

SemiPOL High Precision Quantitative Grinding Machine

SemiPOL are capable of performing precise grinding and polishing of various materials (integrated circuits, semiconductor wafers, optical components and optical fibers, petrographic structures, precision metal parts, etc.) for microscopic (SEM, FIB, TEM, etc.) analysis. The target accuracy can reach micron level. It is mainly used for parallel grinding and polishing, quantitative thinning, continuous slicing and other precision applications. With more accessories and fixtures, it can make the grinding and polishing of complex and special-shaped parts easier and more convenient.

SemiPOL can monitor the amount of material removed in real time, or set the amount of material ground and achieve unattended operation. The servo drive motor can control the rotation speed and swing amplitude of the positioning head to improve flatness and finish of grinding and polishing.

Features:

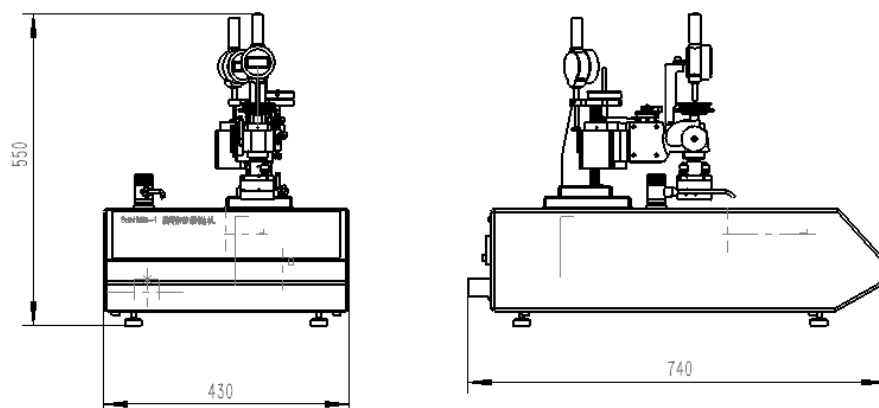
- ◆ 7-inch LCD touch screen panel, displays the removal in real time, the interface is simple and easy to understand, the operation is convenient.
- ◆ 16 sets of process parameters can be saved and edited.
- ◆ Size: 8" (Φ203mm) or 10" (Φ254mm), flatness < 2μm.
- ◆ Sample rotation: 0 ~50rpm, disc rotation: 0 ~350rpm, both are continuously viable speed, both can be forward/reverse.
- ◆ Maximum removal: 10mm, resolution: 1um, stable accuracy: ±2um.
- ◆ The servo drive motor (750 W) provides constant high torque output stably and permanently with a long service life.
- ◆ Built-in automatic temperature sensing cooling fan to reduce failure rate and increase service life.
- ◆ Large diameter side discharge water outlet, not easy to clog and drain quickly.
- ◆ Pluggable faucet, convenient for cleaning and maintenance of the disk.

Technical Data:

Model		SemiPOL
Working disk	Diameter	8"-10" (203/254mm)
	Speed	0-350rpm , continuously viable speed
	Direction	CW/CCW
	Power	750W
	Factory calibration	Flatness < 2um
Sample movement head	Speed	0-50rpm , continuously viable speed
	Direction	CW/CCW
	Rotation	Yes, with adjustable amplitude
	Oscillation	Yes, amplitude and speed are adjustable
	Factory calibration	Perpendicularity<2um;Parallelism<2um
	Maximum removal	10mm
Electricity	Power supply	220VAC
	Panel	7-inch touch screen
Dimension	WxDxH	700x430x580mm
Weight		57kg

Dimension Figure

Unit: mm

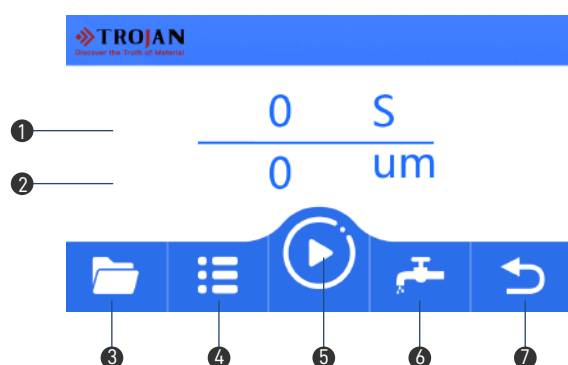


Control Panel Introduction:



Manual mode operation interface:

- ① Time setting
- ② Current removal amount
- ③ Start/ stop
- ④ Save
- ⑤ Back to homepage
- ⑥ Set time
- ⑦ Set operating parameters



Automatic mode operation interface:

- ① Time setting
- ② Current removal amount
- ③ Import program
- ④ Preview program
- ⑤ Run/stop
- ⑥ Cooling water
- ⑦ Back to homepage

Related Consumables & Accessories:



Abrasive Paper














Polishing Cloth



Alumina/Silica suspension

Standard Accessories:

1	Flat Pasting Fixture		Diameter: Φ60mm	1PC
2	Lever dial indicator		Accuracy:0.001mm	1PC
3	Digital dial gauge		Accuracy:0.0005mm	2PCS
4	Water inlet pipe		Ø8PU tube + filter	1PC
5	Water outlet pipe		Ø32 bellows + clamp	1PC
6	Double-sided tape		Width:9mm	1PC
7	Diamond film		1μm、3μm、6μm、 9μm、15μm	1 sheet each
8	Hexagon wrench			1Set
9	Wiper			2PCS
10	Paraffin			5PCS
11	Power cord		1.5m	1PC

Optional Accessories:

1	Teardrop fixture		46-1001 Φ10~Φ40mm
2	Multifunctional fixture		46-1002 15x30mm
3	Side sticking fixture		46-1003 15x15x5mm
4	Side clamping fixture		46-1004 15x15x5mm
5	Flat suction fixture		46-1006 Φ60x10mm
6	Digital height gauge		46-2000 Accuracy :0.0005mm

Purchase list:

Polishing Cloth:

		8in (203mm)	Package
Rough Polishing	YS-JP White Fiber Polishing Cloth(PSA)	05.07.710	10pcs
	GF-JP White Synthetin Silk Polishing Cloth (PSA)	05.10.010	10pcs
Fine Polishing	SR-ZP Red Synthetic Fabric Polishing Cloth (PSA)	05.02.150	10pcs
	SC-JP White Natural Silk Polishing Cloth (PSA)	05.05.510	10pcs
	CS-JP Blue Synthetin Silk Polishing Cloth (PSA)	05.12.110	10pcs
Final Polishing	ZN-ZP Black Polyurethane Polishing Cloth (PSA)	05.01.110	10pcs
	ET-JP White Synthetic Velvet Polishing Cloth (PSA)	05.03.210	10pcs
	YR-JP Brown Synthetic Rayon Polishing Cloth (PSA)	05.04.310	10pcs
	Final Red Final Precision Polishing Cloth(Adhesive Back)	05.13.110	10pcs

Diamond polishing suspension and paste:

Diamond Suspension		
Monocrystalline (500ml)	Polycrystalline (500ml)	Micrometer
06.01.110-1	06.02.210	0.25um
06.01.120-1	06.02.220	0.5um
06.01.130-1	06.02.230	1um
06.01.140-1	06.02.240	3um
06.01.150-1	06.02.250	6um
06.01.160-1	06.02.260	9um

Precision polishing suspension and polishing powder:

	0.05μm	0.3μm	1μm
Alumina Suspension(500ml)	06.04.210	06.04.220	06.04.230
Alumina Polishing Powder(1LB)	06.13.011	06.13.021	06.13.031
	500ml	1000ml	5000ml
SO T401 Non-Crystallizing Silica(50nm)	06.05.310	06.05.320	06.05.330
100C30 silica suspension(50nm)	06.08.310	06.08.311	06.08.312
SO A539 silica suspension(50nm)	06.07.520	06.07.523	-

Polishing lubricants:

	5000ml	500ml	1000ml
PL-W Polishing Lubricants	-	06.09.510	06.09.520
PLW-B Polishing Lubricants	06.09.630	06.09.640	06.09.650



TROJAN (SUZHOU) MATERIAL TECHNOLOGY CO.,LTD

Tel: +86-512-65283666

Email: sales@trojanchina.com

Web: www.trojanworld.com

Add: Building 26, No.228 Gongtang Road, Luzhi Town, Wuzhong Suzhou, China

