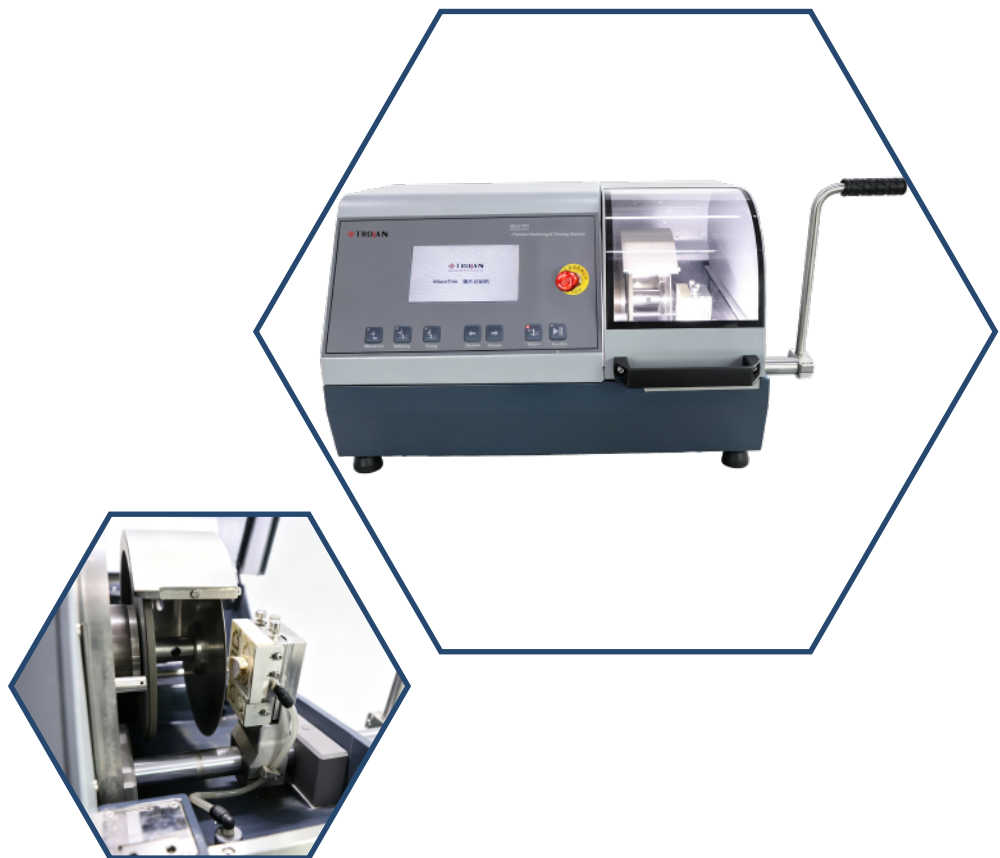


Micro Thin Precision Sectioning & Thinning Machine

SECTIONING



2026
08 / 10

TROJAN (SUZHOU) MATERIAL TECHNOLOGY CO.,LTD

Micro Thin Precision Sectioning & Thinning Machine

MicroThin is a versatile benchtop cutting and grinding machine designed for precision thin-section preparation. It combines diamond cutting with cup-wheel grinding for rapid sectioning and precise thickness reduction. An integrated vacuum system securely holds specimen slides during cutting and grinding, while the precision servo system provides motorized control of cutting and grinding thickness. MicroThin is ideal for precise thinning of petrographic, medical, ceramic, concrete, and other material specimens.



Features:

- ◆ Diamond Cutting Wheel: Ø200×22×1.2mm;
- ◆ CBN Grinding Wheel: Ø200×28×10 mm;
- ◆ Accommodates up to three 46×27mm specimen slides;
- ◆ Integrated cutting and grinding for rapid sectioning and precision thinning;
- ◆ Precision servo system with motorized thickness control;
- ◆ Integrated vacuum system for secure holding of slide-mounted specimens;
- ◆ 7-inch touchscreen with digital thickness setting and display;
- ◆ Custom parameter storage for repeatable preparation;
- ◆ Optional manual cutting stage for rapid manual sectioning.



Technical Data:

Model		MicroThin
Cutting	Cut-off Wheel Diameter	Ø203mm
	Arbor Diameter	Ø22mm
	Wheel Speed	500–2800rpm
	Maximum Specimen Thickness	15mm
Grinding	Grinding Wheel Diameter	Ø203mm
	Arbor Diameter	Ø28mm
	Wheel Speed	500–2800rpm
	Maximum Specimen Thickness	5mm
Motor	Spindle Motor	750W, 2800rpm
	Feed Motor	400W, control accuracy: ±5µm
Specimen	Glass Slide Size	46×27mm
Manual Cutting	Cutting Stage Size	140×370mm
	Maximum Specimen Size	140×160mm See cutting stage dimensional drawing
	Maximum Cutting Cross-section	60×60mm

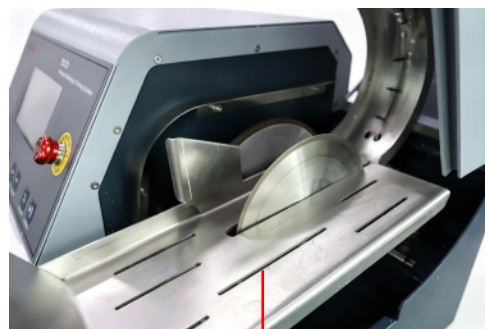
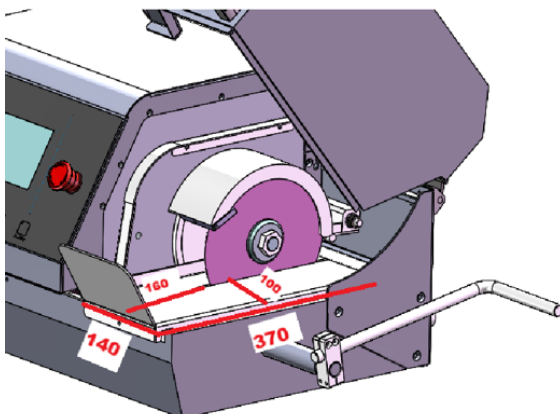
Vacuum System	Vacuum Pump	375W, 0 to -80kPa, adjustable vacuum level
	Filtration	Manual drainage
Water Supply & Drainage	Water Supply	Ø8mm O.D. push-in fitting, pressure <0.3 MPa
	Drainage	Ø32mm I.D. corrugated hose
Dimensions/ Weight	Dimensions (W×D×H), Door Closed	680×460×400mm
	Dimensions (W×D×H), Door Open	680×460×650mm
	Weight	65kg

Machine Configuration and Functional Requirements :

Machine Configuration :



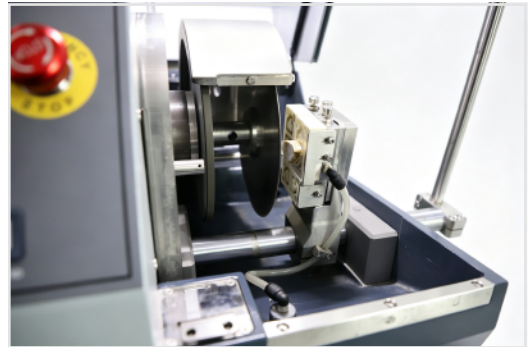
Manual Cutting Stage Dimensions :



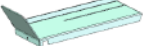
Manual Cutting Stage

Functions:

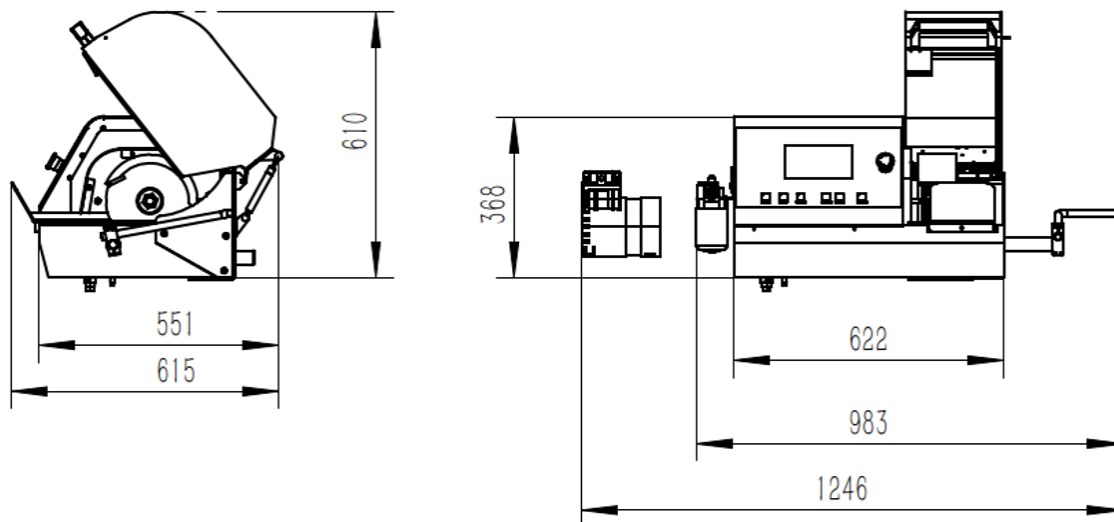
- ◆ Enclosed Design: Fully enclosed design with a transparent safety hood for clear visibility. The vertically opening hood provides easy access while minimizing space requirements;
- ◆ Control System: Programmable motorized control of cutting and grinding removal for precise specimen preparation;
- ◆ Feed System: Motorized feed with 5 μm control accuracy;
- ◆ Control Mode: Manual control;
- ◆ Cooling System: External water supply with independent cooling control for cutting and grinding;
- ◆ Worktable: Removable worktable for convenient manual sectioning during preliminary preparation of slide-mounted specimens, 304 stainless steel worktable for durability and corrosion resistance.



Standard Accessories:

1	MicroThin Main Unit	1 unit		Single-phase, 220 V
2	Oil-Free Vacuum Pump	1 unit		Single-phase, 220V, 370W
3	Specimen Holder-2	3 pcs.		For 46x27mm specimen slides
4	Manual Cutting Stage	1 pc.		
5	Dial Indicator Set	1 set		
6	Diamond Cut-off Wheel	1 pc		Ø203xØ22x1.0mm
7	Diamond Grinding Wheel	1 pc.		Ø203xØ28x6.0mm
8	Dressing Stone	2 pcs.		White fused alumina, 150x12x12mm, 180 grit
9	Cut-off Wheel Wrench Set	1 set		Custom auxiliary rod; standard 30 mm offset box-end wrench
10	Specimen Slide Size	20pcs.		46x27mm
11	Adhesive	1 set		100ml
12	Water Inlet and Drain Hoses	1 set		
13	Operating Manual	1 set		

Overall Dimensions:



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