World Leader in Superabrasive Finishing Systems

LAPPING / POLISHING

WTD Series Wafer Thinning Device

WTD-100V model shown.

The WTD is available in sizes to handle 3", 4" and 6" wafers and is sized to pair with industry standard lapping equipment.

The new Hyprez® Wafer Thinning Device is designed to accurately control thickness and parallelism of thin and delicate parts during lapping and polishing operations.

This device is capable of accepting a variety of product configurations and can be used with a parts carrier to process multiple parts in one cycle resulting in decreased manufacturing costs.

The WTD consists of two primary components:

- A vacuum chuck with a hardened steel support ring and digital indicator to monitor part thickness.
- A powerful vacuum system featuring a dial gauge to monitor pressure along with a quick-connect for fast changeovers, maximizing ease of operation.

In addition, the free weight platform can be used as a device stand.

Robust and durable, the WTD is portable and easy to use. Upon request, Engis can provide wear resistant contact surfaces or customized sub-fixtures to accommodate your specific parts handling requirements.

Engis also offers a complete line of custom fine grinding, lapping and polishing machine tool systems designed to process a variety of unique and demanding applications.

WAFER THINNING APPLICATIONS:

- Optical components: $LiNbO_3$, CaF_2, MgF_2, Si, Ge, KTP, DKDP, etc.
- Planarization of MEMS structures
- Lapping and polishing of semiconductor wafers: InP, Sapphire, GaSb, InSb, SoS
- Thinning of high grade metal substrates: Titanium, Nickel, Copper, etc.

Other Products Available from Engis:

- Hyprez Superabrasive powders
- Hyprez lapping machines
- Hyprez composite lap plates
- Hyprez diamond and colloidal lapping & polishing slurries
- Hyprez diamond compounds and lubricants
- Conditioning rings

ENGIS CORPORATION
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www.engis.com

WTD-003-0813

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Wafer Thinning Device Specifications

MODEL		WTD-75V	WTD-100V	WTD-150V
VACUUM FIXTURE	Wafer Size:	75mm (3”)	100mm (4”)	150mm (6”)
	Sub Jig Diameter Max Part Clearance:	120mm (4.72”)	120mm (4.72”)	172mm (6.75”)
	Gauge resolution:	1µm (.00004”)	1µm (.00004”)	1µm (.00004”)
	Force Control:	Spring Tension & Die Weight	Spring Tension & Die Weight	Spring Tension & Die Weight
	Maximum Force	3.7kg (8.15lb)	3.7kg (8.15lb)	4.7kg (10.37lb)
	Dimensions:	Ø170mm x 244 mmH (6.7 x 9.61”)	Ø170mm x 244 mmH (6.7 x 9.61”)	Ø222mm x 244 mmH (8.7 x 9.61”)
	Weight:	7.3kg (16.1lb)	7.3kg (16.1lb)	9.9kg (21.8lb)
VACUUM PUMP	Volts: (Can be ordered in either 110 or 220)	110 or 220 Single Phase 60 Hz	110 or 220 Single Phase 60 Hz	110 or 220 Single Phase 60 Hz
	Watts:	150	150	150
	Vacuum Meter:	-760 mm Hg R 1/4	-760 mm Hg R 1/4	-760 mm Hg R 1/4
	Weight	7.5 kg (16.5lb)	7.5 kg (16.5lb)	7.5 kg (16.5lb)

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“Systems Approach”

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