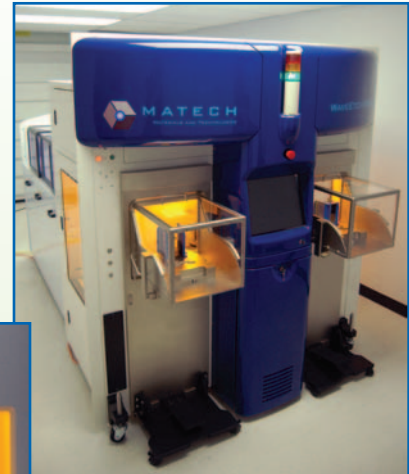
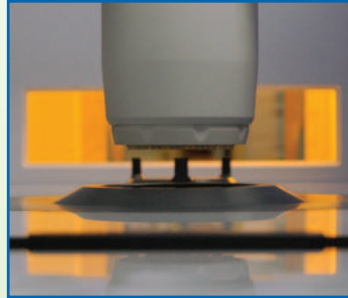


THE WAVEETCH™ 456-G2 AND 812

Ultra uniform single-sided wafer
thinning and stress relief systems



MATECH's exclusive technologies, such as its patented Linear Scan™ and Dynamic Confinement™, are embodied in the WAVEETCH™ family of wet processing systems. These innovative technologies account for the system's outstanding uniformity and true single sided processing capabilities.

The WAVEETCH™ tools are capable of running virtually any wet process, single-sided, with better uniformity, and with tighter process control.

WAVEETCH™ systems consume only a fraction of the chemicals compared to standard spin or spray technologies.

All WAVEETCH™ systems incorporate MATECH's WaveSoft™ suite of process and system control software. All of the machine's features, devices, chemical mixing and handling, as well as all the tool's options, are controlled from a single, integrated user friendly interface as integral parts of the process.

The modular design of the G2 series offers simple and cost effective expansion, as well as built-in redundancy, to keep your process running even in the most adverse circumstances.

COMMON APPLICATIONS

WAFER STRESS RELIEF

WAFER THINNING

WAFER/MASK CLEANING

OXIDE REMOVAL

NITRIDE REMOVAL

OTHER FILM REMOVAL

PATTERN ETCH

STRIPPING

MATECH

641 Sheafe Rd., Suite A
Poughkeepsie, NY 12601

Contact us at: **845.463.2799** or
visit our website at www.matech.com.



MATECH™

Materials and Technologies Corp.
innovation through materials research

UNIFORMITY

Our patented Linear Scan™ technology allows for better than ±2% typical material removal uniformity (TTV).

FLEXIBILITY

The **WAVEETCH™** is a fully automated, modular, cassette-to-cassette, true single-sided thinning and stress relief process tool for wafers of up to 300 mm in diameter.

CAPABILITY

The **WAVEETCH™** systems are capable of achieving final thicknesses of 10 µm or less. This is done without disturbing or contaminating the non-process side of the substrates. The **WAVEETCH™** is the only *true* single sided wet processing and process thinning tool in the industry.

APPLICATIONS

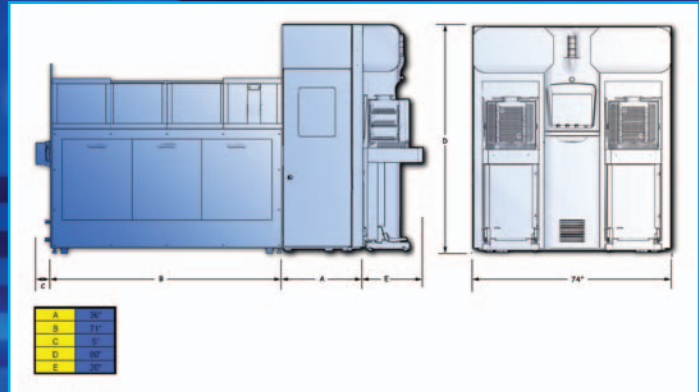
Our technologies are ideally suited for applications such as RFID tags, III-V, II-VI, optoelectronics, photovoltaics, focal plane arrays, CCD's, lasers, smart cards, flash devices, memory, MEMS, bumped wafers and hybrid/3D-integration, among others.

PERFORMANCE

The **WAVEETCH™** systems have an equal or higher throughput than competing technologies, **plus** superior uniformity, larger process windows and tighter process control.

COST OF OWNERSHIP AND RETURN ON INVESTMENT

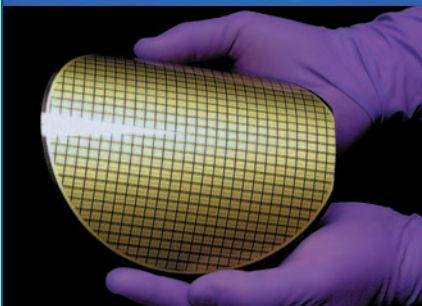
Lower capital cost along with our minimal chemical consumption (as compared to traditional spray or spin tools) provides the **WAVEETCH™** with distinct advantages when calculating cost of ownership (COO) and return on investment (ROI). Extremely low chemical consumption and the use of inexpensive stock chemicals contribute to best-in-class COO and environmental friendliness.



THE WAVEETCH™

SPECIFICATIONS

MAIN APPLICATIONS	THINNING, STRESS RELIEF
MINIMUM FINAL THICKNESS	10 µm OR LESS DEPENDING ON APPLICATION
TTV	± 2% TYPICAL
WET PROCESSING TECHNOLOGY	LINEAR SCAN™
BACKSIDE PROTECTION	DYNAMIC CONFINEMENT™ TRUE SINGLE SIDED
WAFER SIZES WAVEETCH™ 812 WAVEETCH™ 456 G-2	25-300MM 25-300MM
WAFER HANDLING	HIGH PERFORMANCE VACUUM CHUCK/END EFFECTOR (OTHER OPTIONS AVAILABLE)
CHEMICAL FEED	BOTTLES OR BULK DELIVERY
AUTOMATION	FULLY AUTOMATED, FULLY INTEGRATED, DRY-IN DRY-OUT WET PROCESSING SYSTEM
SOFTWARE	WAVESOFT™ PROCESS AUTOMATION SUITE STANDARD
ELECTRICAL	120 VAC, 1 PHASE, 30 A
DIMENSIONS WAVEETCH™ 812 WAVEETCH™ 456 G-2	W74", H80", D132" (INCLUDING FRONT END) W74", H80", D132" (INCLUDING FRONT END)



MATECH

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