

CHILLING & FILTERING EQUIPMENT

THE CHILLMATES INDOOR/OUTDOOR	Interface with fining/polishing machines to maintain constant temperatures
SLURRYSAVER 495 & 595	Provide constant agitation allowing for quick start up & tighter baumé control
EDGEMATE COOLANT FILTERING SYSTEMS	Increase edger efficiency & diamond life
LRS LEAD REMOVAL SYSTEM	Purifies, removes hazardous contaminants & returns clean, lead-free water
ULTRA-FILTRATION SYSTEMS	Reduces waste volume up to 98% without chemical additives
MEGAVAP LIQUID ELIMINATION SYSTEM	Reduces waste volume for extraordinary savings

Full line of HKS Centrifuges, Separators, and Compactors

CENTRIFUGES	From one generator or 3-5 edge treatment machines to centralized, fully automatic systems for an entire facility
COMPACTORS & CUTTERS	Cutting & compressing plastic chips dramatically reduces waste
COMPACT DUAL PROCESSORS	Centrifuge & Compactor for maximum efficiency

Large variety of in-stock Pumps, Tanks, and Filters

TABLETOP MACHINERY

UNIVERSAL RD CHAMFERING	For rounded parts from a wide range of materials
DAMA CHAMFERING BEVELER 450 OR 750	High-facet quality beveling & accuracy of straight or prismatic bodies
BENCH-TOP GENERATORS	Multiple sizes available
"WET-CUT" CUT-OFF MACHINES	SPHERICAL SURFACE GRINDER
AE-100 ABRASIVE HAND EDGER	DIAMOND HAND EDGER
AUTO LENS EDGE POLISHER	AUTO GROOVER
FIBER OPTIC POLISHER	AUTOMATIC LENS DRILL
PATTERN MAKER	BLOCKER
AUTO STIRRER & MISTER	DIP COATING POTS & Accessories
WAX DROPPERS 1 pt. - 2 qts. capacities	ULTRASONIC CLEANERS 1 qt. - 1.5 gals.

ACCESSORIES

We continually expand our line to include the most advanced ancillary production items

PRO*STIR	Narrow-neck rod and blade stirring apparatus
HB 710 EXTRUSION GUN	Ergonomic, sturdy structure for strong bonds for all industries

DOUBLE-SIDED LAPPING & POLISHING MACHINES

High Speed • High Pressure • Maximum Processing • Up to 200 RPM per plate • SOMOS machines

	PLATE DIAMETER	MAXIMUM CARRIER DIAMETER
MDF 400 PR	15.7"	7.2"
TPM 400 A	15.7"	7.2"
TPM 630 PR	24.8"	10.0"
TPM 1200 S	47.2"	19.5"
TPM 1600 S	63.0"	26.0"
TPM 2300 S	90.55"	32.0"

PRECISION MACHINERY

SPHERICAL GENERATOR	12" diameter capacity
PELLET GRINDERS	4", 10", 20" capacity
HIGH SPEED POLISH MACHINES	1, 2, & 4 spindles
MULTI SPINDLE PRECISION GRINDING & POLISHING	4", 12", 16" capacity
OVER-ARM / SPINDLE MACHINES	6" - 96"
CONTINUOUS LAP & POLISH	Machines 36" - 144" capacity Laps up to 144" / Designed to your specs

EDGE TRANSFER SPINDLE	
BENCH GRINDING & POLISHING	
HAND ROUGHING BENCHES	
ULTRA-SONIC MACHINING SYSTEM	
DRY BLAST MACHINERY	Unlimited applications
AGITATED PITCH POTS	Variety of sizes ranging from 1 - 50 gallon capacity

DAMA PRECISION MACHINERY

Swiss-engineered processing machinery for the precision optics industry

DAMA CHAMFERING BEVELER 450 OR 750	High-facet quality beveling & accuracy of straight or prismatic bodies
ROUNDING MACHINE	RMD 100, 200, & 500
SMOOTHING & POLISHING	SPF 200, 300, 500, & 650
BALL CUP LATHE MACHINE	KD 400 & 1000

UNIVERSAL PHOTONICS has been at the forefront of innovative polishing applications for nearly a century. Our extensive line of premium consumables and variety of high efficiency equipment have been engineered to consistently deliver higher tolerances and yields.

We specialize in total polishing systems, including polishes and pads. Our R&D team will work with you to develop a customized system for your unique application. All projects are treated with professional confidentiality.

For further technical information and sales inquiries, please contact your regional sales representative, or our friendly, expert account services staff.



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NAME THE APPLICATION We Provide The Solution

ADVANCED SURFACING PRODUCTS & TECHNOLOGY
WWW.UNIVERSALPHOTONICS.COM

A world-leader in critical-surfacing preparation materials, UNIVERSAL PHOTONICS brings over 7000 products to meet the requirements of *ANY* surfacing application and the *technical expertise* for *COMPLETE PROCESSING SOLUTIONS*.

Here are the broader categories of our extensive product line. If you can't find what you're looking for please contact us directly. Chances are we have it! **516-935-4000**

POLISHING COMPOUNDS

CERIUM & RARE EARTH OXIDES <i>Wide range available to meet requirements of most applications</i>	The RHODITES - Optimal stock removal		
	UNICER Series - Premium grade, white powders with wide range performance		
	CEROX powders	OPALINE ULTRA-PURE	CE-RITE POWDERS
THE HASTILITES <i>Range of formulas to deliver low to sub angstrom finishes</i>	CERIUM	CERIUM / ZIRCONIUM	DIAMOND / ALUMINA
	NANO ALUMINA	NANO SILICON CARBIDE	
	CERIUM / NANO POLYCRYSTALLINE ALUMINA		
ALUMINUM OXIDES	ALUMTX Fast & economical, various nanometer sizes		
	RHODAX High purity		
ZIRCONIUM OXIDES	ZIROX POWDERS & SLURRIES	ZOX PG	
CHROMIUM OXIDE	XP1198CP - High purity		
COLLOIDAL SUSPENSIONS	ALUMINA	CERIA	ZIRCONIA
	SILICA: <i>NEW</i> UNICOL Monodispersed solutions		
PLASTIC LENS POLISHES	CTP	ACCELERON SUPREME	RHODOL XT
	CUT-TO-POLISH	XLPA Fast final polishing	
	AMERICAL PLUS	LIBERATOR II	UNI-BRITE
EVERFLO SURFACING ADDITIVE	Advanced suspension agent to reduce scratching, polishing time, & cleanup		
S3 (SUPER SMOOTH SURFACTANT)	Hi-performance additive to reduce distortion in mid to high spacial frequency		

POLISHING MATERIAL & PADS

POLYURETHANE (LP UNALON)	Unique micro-cellular foam elastomer engineered to deliver superior flatness & high removal rates		
	Available in sheet, disc, ring, block, & plug form with various grooving & PSA configurations, including custom		
V2 WHEELS	Highly polished edges using only WATER. NO Cerium required. Slurryless polishing for a variety of glass		
POROMERIC PADS	UNI-NAP Series	UNALUX Series	
SYNTHETIC PADS	PRIMA 50, 4, 10	SUBA	UNALUX Series
FELTS	Pads, Rings, Wheels, & Bobs		
OPHTHALMIC PADS	Polycarbonate	CR-39	Mid/High Index
	Polishing Pads	Specialty Pads	
	Glass	Edging & Blocking	

ABRASIVES

ALUMINUM OXIDE	UNALUM: FUSED ALOX All-purpose grinding & lapping		
	RHODES AUMINA Hi-quality, Low cost		
	MICROGRIT	OPTICAL POWDER General Use	CRYSTAL FINISH Powders
SILICON CARBIDE	UNASIL	UNASIL GREEN	
BORON CARBIDE	Regular	Washed	
GARNET	ROUGE	DRESSING STICKS	
UNILAP - ABRASIVE LAPPING FILM			
UNILAP C60 DISPERSING AGENT	Cutting fluid & rust inhibitor specially formulated for free abrasive lapping & smoothing		

DIAMOND ABRASIVE & DIAMOND PRODUCTS

DIAMOND POWDERS, COMPOUNDS, & SLURRIES			
HASTILITE DITRON	Water-based, alpha alumina & diamond slurries		
HASTILITE POLYTRON	Diamond precision & strength at a fraction of the cost		
DIAMOND DRILLS	Core Drills	Impregnated Drills	Central Feeds
UNILAP	Diamond Film		
DIAMOND WHEELS	DIAMOND PELLETS		
DIAMOND DISCS	Metal	Resin	

COATINGS & ADHESIVES

COATINGS	PROTECTOKOTE	X-59 Strippable	PRECOTE #33	
	PZ453 Coating	SURFACE SAVER TAPE	PZ459 Quick Dry	
ADHESIVES	X-19 CEMENT	X-14 CEMENT	DURAHOLD	DURABOND

COOLANTS & CHEMICALS

COOLANTS	DIAMOND KOOL	RHODES HD	DRI-KOOL powder	HP Quartz
	BLUEKOOL	NBQF Coolant	F2GF Coolant	EcoKool
CLEANERS	UNI-CLEAR I citrus-based		UNI-CLEAR VOC Free	
	UNI-CLEAR II degreaser		K-89 fast acting & easy to use	
DEFOAMERS	X DEFOAMER	UNI-DEFOAMER	NS280 silicon-free defoamer	

OPTICAL PITCH: POLISHING

PITCH <i>Custom blends available to meet unique needs</i>	750 BURGUNDY HARD	835 BURGUNDY MED	850 BURGUNDY SOFT	
	450 SEMI-HARD	1366A READY-TO-USE		
CP POLISHING PITCH	Wide variety of premium formulations and hardness values including custom for continuous polishing			
SP POLISHING PITCH	New generation of polishing pitch represents the latest advancement in synthetic polymer technology			
BP POLISHING / BLOCKING PITCH	Designed for continuous polishing as well as part blocking			
GUGOLZ	Variety of hardness grades available			
CYCAD	Available in variety of formulas			

OPTICAL BLOCKING

PITCH <i>Custom blends available to meet unique needs</i>	#1 General Purpose	XC-1 Hi-production		
	#257 Hi-curve Lens	PX-200 Precision	#16 Summer	
BP POLISHING / BLOCKING PITCH	Designed for continuous polishing as well as part blocking			
WAXES	#75175 Low Melt	QUARTZ STICKY	SS-66 RED STICKY	
	#300 Mounting	#430 Spot Wax	CENTERING WAX	
	#4, #5, & #6 Stacking Waxes		WHITE STICKY	
	RED SEALING	UNI-WAX #10 & #40		
CEMENTS	#30C CRYSTAL	#856 CREME	CEMENTING FOIL	
	BULLDOG ENGRAVERS		DOP CEMENT	
	UNIMET SAWING	SUPERHOLD Hi-Tack	DIAMOND D	
WATER SOLUBLE THERMOPLASTIC WAX	UNIBOND 5.0	UNIBOND 6.5	UNIBOND 8.5	

OPTICAL PITCH: RAW MATERIAL / BLENDING

BEEFWAX Refined or Commercial	CARNAUBA	CERESINE		
OPTICAL QUALITY ROSIN	FLAKE SHELLAC	PARAFFIN		

OPTICAL TOOLING

STOCK & CUSTOM FABRICATION AVAILABLE				
LAPS	SPOT BLOCKS	BRASS GAUGES	TAPERS	TRUING DISCS

CDGM Glass

STRIP GLASS	360mm X 160mm X 40mm			
Environmentally Friendly (ECO glass)	Low Softening Point (Low Tg glass)	UV High Transmittance	Non-ECO	
<i>GLASS BANKS, BALL LENSES, BOROSILICATE, LARGE BLOCKS, & MORE</i>				
• Quality Assured	• Fast Turnaround	• CDGM Price Advantage		

CARRIERS: LAPPING, GRINDING, & POLISHING

• Ranging up to 45" OD	• 3-5 Day Turnaround	• Custom Configurations		
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TESTING APPARATUS

SCRATCH & DIG	Accurate in varying light & angles of view			
INFRARED THERMOMETERS	Digital non-contact results, 1/2 second response			
SPHEROMETER RINGS	Available as complete set or individually			
UNILAMPS	Full line of monochromatic green lamps for testing optical surfaces			
INSPECTION LAMPS	LED, Halogen, and Fiber Optic light sources			
REFRACTOMETERS	Handheld, 1.435 - 1.520 nD, 0.001 range			
SLURRY / BAUMÉ MEASUREMENT KIT	Hydrometer 0° - 25°, pH paper, graduated			
MIRROR BLANKS / OPTICAL FLATS	Pyrex blanks, wavelength certified test flats			

ACCESSORIES

<i>We continually expand our line to include the most advanced ancillary production items</i>				
ROUGE & EMERY BRUSHES	Assorted ovals, flats, rounds, nail type scrubs			
LENS TISSUE	Variety of types and classes			
CLOTH	Cheesecloth, diaper, poly wipes, etc.			
SPONGES	Synthetic, standard pore, rectangular	Natural, Grade A, clean, large uniform sizes		

CONTACT LENS PROCESSING

POLISHING & BLOCKING PITCH	We manufacture & distribute a wide range of specialty pitch & waxes			
LENS POLISH	Variety of formulas, purity, & particle sizes			
POLISH MATERIALS & PADS	UNI-V1 White-flock Pad			
	UNI-CLOTH Strong silk fiber material			