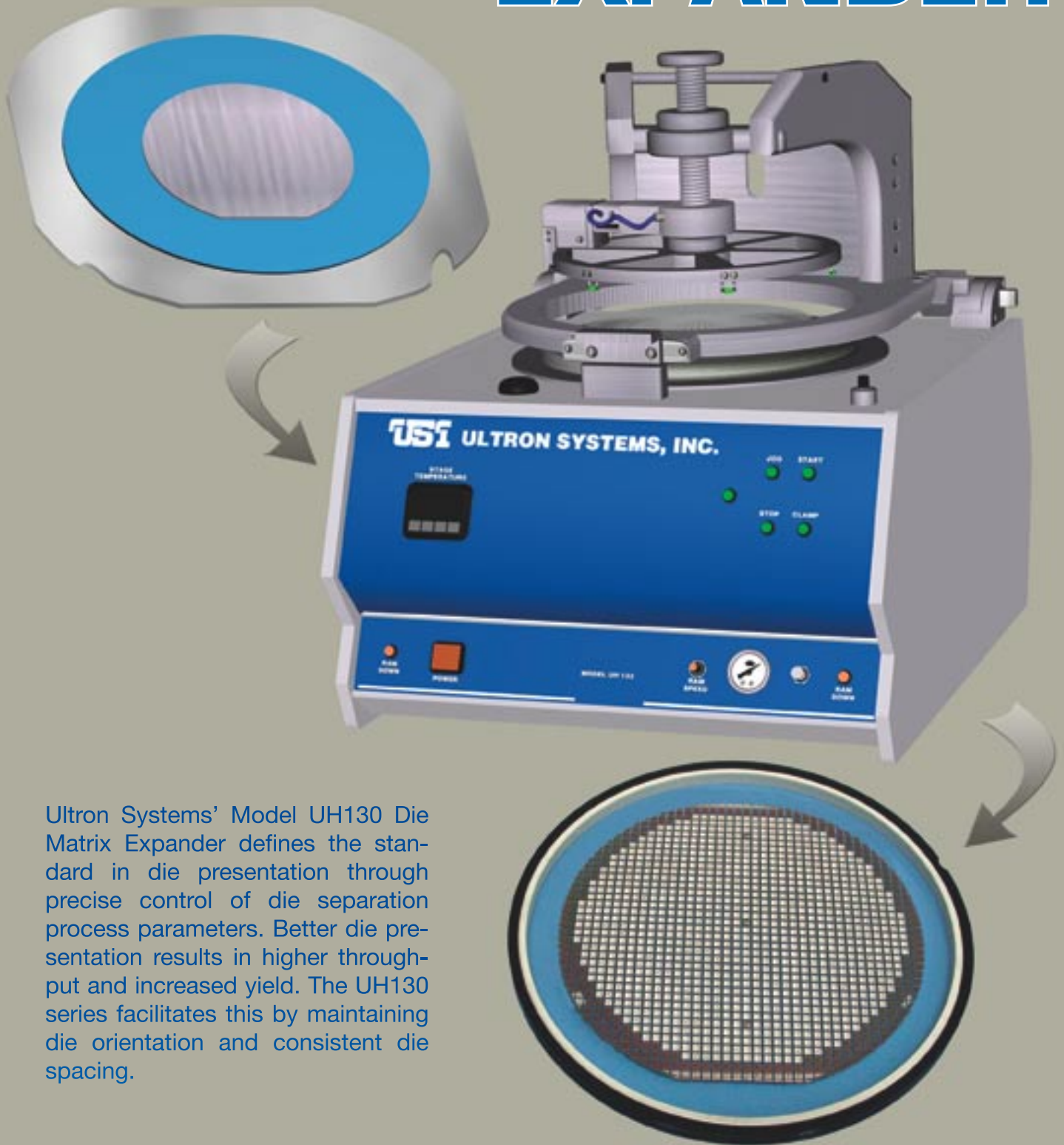


**MODEL  
UH130**

# DIE MATRIX EXPANDER



Ultron Systems' Model UH130 Die Matrix Expander defines the standard in die presentation through precise control of die separation process parameters. Better die presentation results in higher throughput and increased yield. The UH130 series facilitates this by maintaining die orientation and consistent die spacing.



**ULTRON SYSTEMS, INC.**

# MODEL UH130

# DIE MATRIX EXPANDER

**Flexible** - The Model UH130 accommodates up to 300 mm wafers/film frames and features a 3-inch stroke with speed control and adjustable ram height.

**Accurate/Precise** - The heated wafer ram is regulated by a digital temperature controller and stops at a user preset height, resulting in consistent repeatability of expansion.

**Convenient** - The unit features a compact tabletop form factor and is extremely easy to operate. Virtually all operator variables have been eliminated.

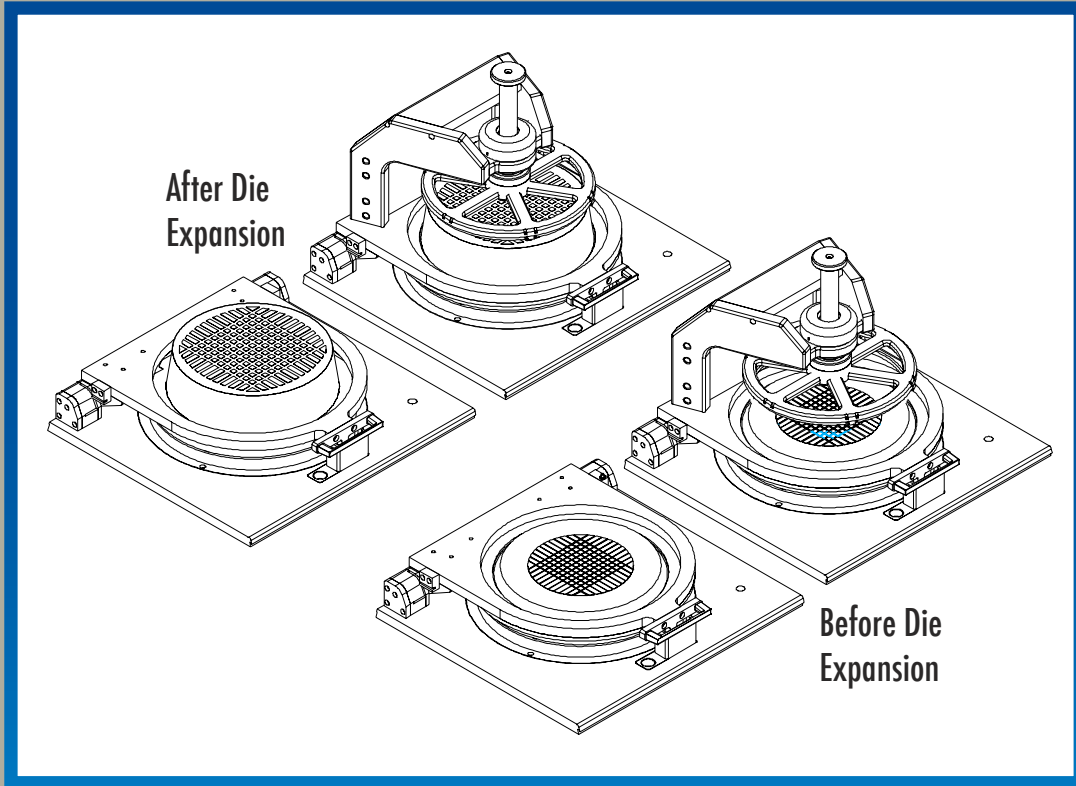
Fully automated and semi-automated processes benefit from reduced alignment times, and yield will be increased as all die are presented well within alignment orientation tolerances. Manual processes benefit from the increased die separation as operators can remove die by hand with greater confidence that adjacent die will not be damaged. Moreover, the consistency and repeatability of the die presentation eliminates an important process variable.

sure that the outer grip ring snaps to the inner grip ring concentrically. Traditional grip ring presses, either by equipment or by hand, cannot guarantee that the outer ring is pressed around the inner ring evenly. While the resulting die presentation is adequate, the die matrix is almost always slightly skewed in one or more areas. An adjustable outer grip ring holder, on the other hand, not only holds the rings concentric to one another, but parallel to each other, as well.

Because a process is only as strong as its weakest step, an outer grip ring holder is available for the Model UH130 Die Matrix Expander to en-

In addition, the amount of die separation can be precisely controlled. To facilitate this, the wafer ram is heated, and its temperature is accurately regulated by a digital temperature controller. The wafer ram stops at a user preset height assuring repeatable results, and its speed is also operator adjustable.





*Close-up of optional motorized cutter and plexi cover.*

## SPECIFICATIONS

Height:	13.25 inches
w/ outer grip ring holder	21 inches
Width:	16.0 inches
Depth:	19.5 inches
Weight:	95 lbs.

## SERVICE REQUIREMENTS

Electrical: 120 VAC; 3A, 50/60 Hz  
 Pneumatic: Air/N<sub>2</sub> @ 60 psi regulated



*Other Ultron Products*

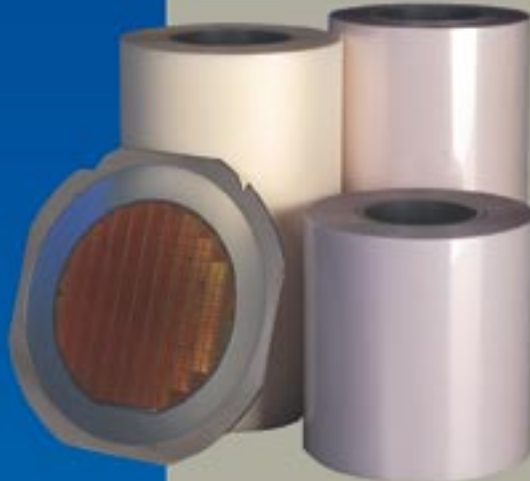
**Models UH114/  
UH114-12  
Wafer/Frame Film  
Applicators**



Offer the highest degree of control and versatility for even the most stringent mounting requirements in affordable and easy to use benchtop packages. The recently redesigned series is even easier to operate and more compact than its predecessors.

All of the models feature uniform, bubble-free lamination and a digital temperature controller for consistent workstage temperatures and repeatable results. Adjustable alignment pins and vacuum cups accommodate almost any type of film frame, including plastic. The workstage height is also adjustable relative to the frame height for different wafer thicknesses.

**UV Adhesive  
Plastic Film  
Series**



Has the advantage of high adhesive strength -- for the securing of wafers/substrates during sawing -- which is significantly reduced after UV light exposure to facilitate die removal. We are proud to offer the widest selection of UV film available to meet your process requirements.

**Models  
UH102/UH102-12  
UV Curing  
Systems**



Are inexpensive solutions for the curing of UV film, yet do not compromise control or versatility. They include a nitrogen blanket to assure complete curing of the UV adhesive, a microprocessor-based programmable controller, a lamp intensity measurement port, and a serpentine-style grid lamp for even, consistent UV-exposure.



**ULTRON SYSTEMS, INC.**

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