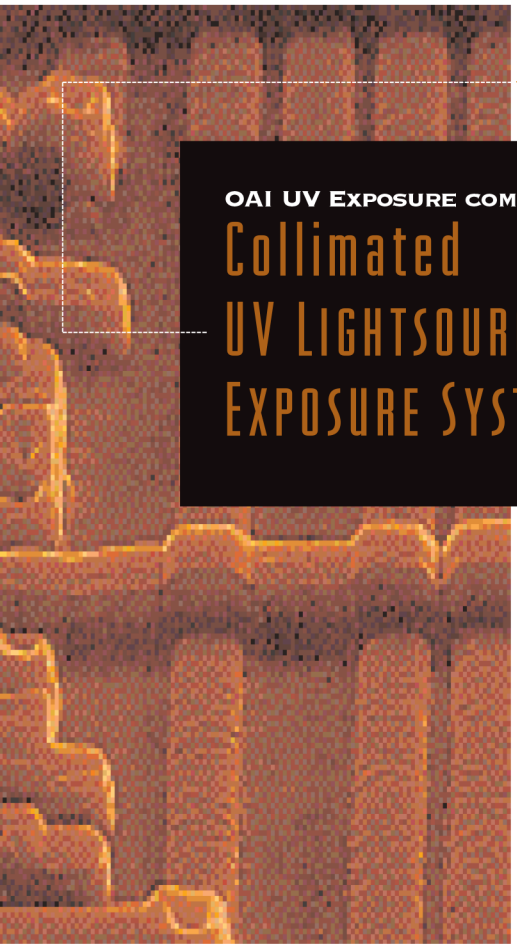


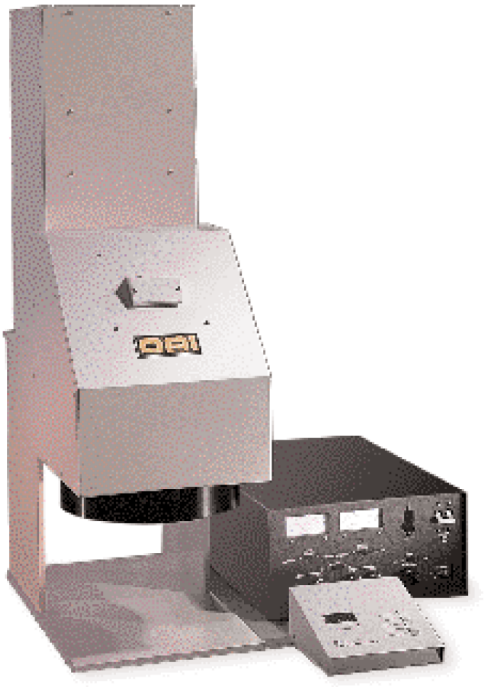
OAI UV Exposure components

Collimated UV Lightsources and Exposure Systems.

Constant Intensity Controller sensor detects any change in intensity and instantly adjusts lamp output to better than ±2%.

The adjustable Optical Integrator can be adjusted to provide a smaller, more intense exposure if required.

OAI's free-standing, UV Flood Exposure Systems may be configured for Deep UV, Mid UV or Near UV. Systems include intensity control, dual wavelength sensors, and a precision exposure timer. Designed with flexibility in mind, a system may be used as a stand-alone unit, incorporated onto a wafer spin track, or in a variety of other configurations using one or two lamp housings and various light path orientations. Single or multi-level, high resolution lithography may be achieved in Deep UV with spectrums peaked at 220, 260 or 310 nanometers. Systems from 200 to 2,000 watts are available for the Near UV and 500 to 2,000 for the Deep UV.



OAI UV Exposure System

Applications

Photopolymer exposure

Multi-level resist processing

Image reversal

Edge Bead removal

Image stabilization

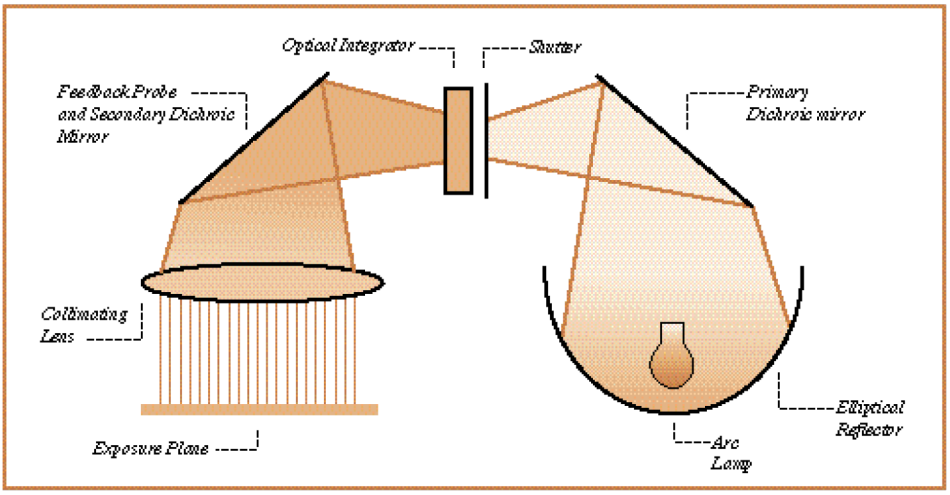
Photoresist profile modification

Wafer spin track in-line processing

Flat panel displays

Energy from the lamp is directed to the primary dielectric mirror which reflects the desired energy and filters out unwanted radiation. The adjustable optical integrator enhances energy uniformity and allows for control of both energy and beam divergence. Energy is uniformly distributed and collimated at the exposure plane. The energy transmitted through the secondary mirror is measured by an optical detector tuned to the desired wavelength and transmitted to the Constant Intensity Controller which compensates for lamp deterioration and power fluctuations and controls the light within ±2%. The dual channel controller is settable for 0 to 999 seconds in 0.1 or 1.0 second increments.

OAI UV Exposure Systems are known for long-term reliability and high efficiency. They are designed to facilitate conversion from one wavelength region to another and are available with a wide variety of bandpass mirror sets.



Specifications

Lens Diameter	**5"**	**7"**	**10"**	**12"**	**14"**	**16"**				
Exposing Beam Size										
Diameter	**4"**	**6"**	**8"**	**10"**	**12"**	**14"**				
Square		**4"**	**6"**	**8"**	**10"**	**12"**	**14"**	**16"**	**18"**	**20"**
Uniformity (within diameter)	**±5%**	**±5%**	**±5%**	**±5%**	**±5%**	**±5%**	**±6%**	**±6%**	**±6%**	**±6%**
Collimation (1/2 angle)	**2.6**	**2.3**	**2.0**	**1.6**	**1.4**	**1.2**	**1.0**	**0.8**	**0.6**	**0.4**

Spectrum (specify)

Near UV: **365*nm*, 405*nm* and 436*nm***
Mid UV: **310*nm***
Deep UV: **220*nm* and 260*nm***

Lamp Power (specify) **200*W*, 350*W*, 500*W*, 1000*W*, 2000*W***
3.5KW and 5KW are available by special order

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