

**Launch of new pellicle compatible with ArF exposure  
and doubling of capacity for semiconductor pellicles**

– augmenting product lineup for compatibility with all exposure light sources –

Asahi Kasei E-materials has launched a new pellicle which is compatible with ArF exposure systems, and is doubling its production capacity for pellicles for semiconductor applications. By reinforcing both its product lineup and its supply capability, Asahi Kasei E-materials will continue to meet heightening pellicle requirements as semiconductor manufacturing processes advance.

Pellicles are protective membranes used in the production of LCD panels and semiconductors to prevent the adherence of dust on photomasks, which could cause defective image transfer in the photolithographic exposure process. Asahi Kasei E-materials is the world's leading supplier of pellicles for LCD applications, and the only supplier of pellicles compatible with the 10th-generation (10G) LCD panel production process—the world's largest photomask pellicles. It also supplies a broad lineup of pellicles for semiconductor applications which meet various customer needs, ranging from conventional pellicles for g-line (visible light) and i-line (ultraviolet) exposure to pellicles for KrF (deep ultraviolet) exposure.

As ultra-fine processing technology for semiconductor manufacturing further advances, the exposure light source has increasingly shifted to excimer lasers based on KrF and ArF, whose shorter wavelengths enable the formation of finer features than with g-line and i-line exposure. With the addition of its new pellicle compatible with ArF exposure, Asahi Kasei E-materials now has pellicles available which are compatible with every wavelength of exposure light commercially employed in the semiconductor manufacturing industry.

At the same time, Asahi Kasei E-materials is applying improvements to its production technology to achieve a two-fold increase in capacity for production of pellicles for semiconductor applications at its facility in Nobeoka, Miyazaki. With its capacity expanding to 220,000 units/year, Asahi Kasei E-materials will maintain stable supply even as demand for pellicles for semiconductor applications increases significantly.

***Features of the pellicle compatible with ArF exposure***

- 1) Superior durability with high light transmission
- 2) Extreme cleanliness to minimize contamination
- 3) High yield in the photolithography process

***Outline of the production facility***

Location:	Nobeoka, Miyazaki, Japan
Product:	Pellicles for semiconductor applications
Capacity:	220,000 units/year (upon expansion)
Expanded operation:	October 2010