

Osram and Siemens team up for semiconductor shows

Joint offer for semiconductor



Osram provides customers with cutting-edge lamp technology while keeping high quality aspects in mind

In 2007, customers will notice a change in Osram's presentation at most SEMICON shows. As Osram is now an addition to the Siemens booth, customers visiting just the one stand will benefit from a greater selection of facility and turnkey solutions.

One hundred years of innovation – this was the motto for Osram's centennial celebrations in 2006. In fact Osram engineers developed the first mercury short arc lamps as early as the 1930s. Since then the technology has been further improved and today customers can choose from a product portfolio with power consumptions ranging from 200 watt up to an impressive 16,000 watt. This can only be done in close collaboration with our OEM partners. They have to be deeply involved right from the product development stage to assure that our extensively custom-built solutions will fit their applications.

Mercury short arc lamps have played a big role in semiconductor manufacturing where a share of the lamps' emission spectrum and selected spectral lines are used for wafer exposure. Originally optimized to the g-line (436nm) of mercury and a power consumption of up to 1,000 watt,

further miniaturization of wafer structures has required lamps that are I-line optimized (365nm) with power outputs of up to 5,000 watt.

Osram provides customers with cutting-edge lamp technology while keeping high quality aspects in mind and is one of the major lamp suppliers for leading I-line system providers in Europe and Japan.

Powerful lamps for steppers and scanners

As already mentioned, success in the semiconductor market is based on close collaboration with the system manufacturer during the early development stage.

For many years Osram has been chosen as a major lamp supplier for ASML, a leading supplier of advanced technology systems for the semiconductor industry. This successful partnership started way back in the early nineties with the development of a 350 watt lamp for the first I-line systems and reached its current peak in 2006 when Osram provided a high-pressure 5,500 watt lamp for its latest Twinscan 450E release. As Marc Verdiesen ASML product manager for Twinscan states: "Our customers measure productivity in wafer throughput per hour and the lamp is one of the driving factors for achieving higher productivity through increased lamp intensity and lamp life. Osram's HBO 5510PI was one of the

milestones in achieving our target of providing a system with the highest wafer throughput in the market."

High wattage lamps for large surfaces

Rather than developing microstructures for wafers, the production of LCD and PCB requires the illumination of large surfaces. The increasing size of LCD panels up to 2.4m x 2.7m requires high power lamps, whereby 50,000 watt lamps are now even being considered.

With LCD lamps ranging from 4kW up to 16kW, Osram can support the growing demand for spare parts for LCD illumination systems and is well positioned to lead the market when it comes to improving performance by way of higher intensity, longer life products.

Customers are partners

Osram has technical representatives in all countries in the world where semiconductors, LCDs or PCBs are manufactured and can therefore offer its customers in-time product availability and excellent customer support whenever it is needed. ■

Contact:

Guenther Feuereisen, Osram Berlin
g.feuerisen@osram.com