



Press Release

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Jenoptik at SEMICON WEST 2010: Dedicated microoptical solutions for Semiconductor & Flat Panel Display Equipment Industry

Jenoptik has expanded its process capabilities in CaF₂ (single crystal Calcium Fluoride) for applications in the semiconductor market. These solutions, along with the full range of custom microoptics, will be presented in San Francisco (CA), USA.

Highly efficient microoptics from DUV to IR

Due to high transparency and excellent lifetime stability, CaF₂ is the material of choice for excimer lasers used in the lithography market as well as other high power applications in the deep ultra violet (DUV). The Microoptics business unit of Jenoptik's Optical Systems division strengthens its position as world leader in DUV microoptics by offering custom specific CaF₂ microoptics.

The complete product range of CaF₂ microoptics includes diffractive and refractive solutions such as gaussian homogenizers, refractive fly's eye homogenizers, diffractive lenses, lens arrays for fill factor enhancement, as well as DOEs for mask inspection and illumination. Our capabilities are ideal for DUV applications in the semiconductor & flat panel display industry, which typically require excellent uniformity, efficiency and high power.

Due to our flexible technology base, the CaF₂ microoptical solutions can be designed with significantly reduced complexity. Our refractive homogenizers and fly's eye lens arrays can be designed with rectangular apertures, which reduces the number of required elements to homogenize an anamorphic or rectangular field. We can provide these solutions using substrates from 75-150 mm diameter and thicknesses from 0.5 – 6 mm thick. ([Download for Datasheet](#))



Image

CaF₂ –Gaussian Diffuser

Ask the experts and visit Jenoptik at Semicon West 2010, San Francisco from July 13 – 15, 2010 in South Hall, Booth 2413.

About Microoptics business unit

The Microoptics business unit offers a complete portfolio of microoptical products featuring excellent performance. Based on a broad range of technology skills, customers can choose from a variety of options – from the design and flexible rapid prototyping to the manufacturing of small and large batches of refractive, diffractive or hybrid microoptical solutions.

Capabilities to handle a huge variety of materials including CaF₂, fused silica, GaP, ZnSe, glass, Ge, Silicon, Sapphire and plastics enable us to cover a broad range of wavelengths from DUV to IR.

We also provide the platform to successfully address a diversity of applications for semiconductor & flat panel display and laser materials processing equipment as well as life science, defense and civil system applications.

Where new and highly efficient solutions are required, OEMs and system integrators can rely on Jenoptik's Microoptics business unit. With fabrication sites in Germany and in the USA and sales representatives worldwide, we are globally and conveniently positioned to serve our customers.

[\(more information\)](#)



About Semiconductor & Flat Panel Display Equipment Market

Jenoptik is a leading provider of customized optical and microoptical systems, modules and components that serve the entire wavelength range from EUV and DUV to the infrared. Customers in the semiconductor and flat panel display equipment industry benefit from our design and solution competence. Our portfolio consists of cutting edge technologies for optics and microoptics manufacturing. Our experience with lifetime performance at high laser powers, photo contamination in the UV, solutions for the homogenization of light as well as UV-stable coatings unexcelled.

About Jenoptik Optical Systems division

With its Optical Systems division, the Jenoptik Group is one of the few manufacturers in the world to produce precision optics and systems designed to meet the highest quality standards. Besides optomechanical and optoelectrical systems, modules and assemblies, the Optical Systems division is a development and production partner for optical, microoptical and coated optical components - made of optical glasses, IR materials as well as polymers.

The product portfolio also includes systems and components for life sciences as well as lighting & energy applications, modules and system solutions for digital image capture and processing as well as cameras for digital microscopy.

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