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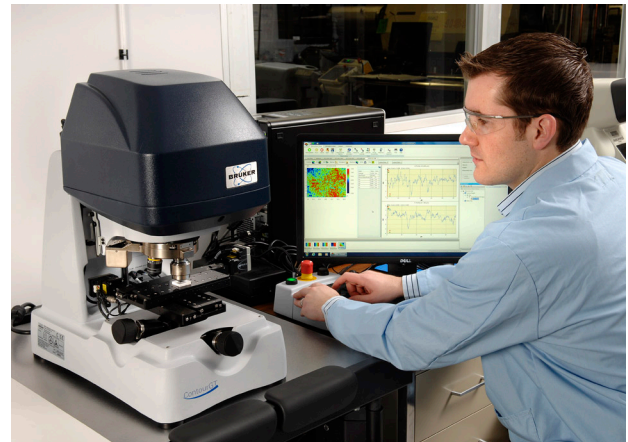
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**G-S PLASTIC OPTICS Expands Metrology Capabilities  
with Bruker® Interferometric Optical Microscope**

**(January 16, 2013) Rochester, NY --** G-S PLASTIC OPTICS, a business unit of the Germanow-Simon Companies, is pleased to announce its acquisition of a Bruker® ContourGT®-K1 3D Interferometric Optical Microscope. This unique metrology system is optimized for characterizing the micro-structure of molded plastic optical elements, and the single point diamond-turned mold inserts that determine the surface structure of those molded optical elements. It also provides the ability to optically profile the surface shape of mold inserts and molded optical elements in a non-contact/non-destructive manner.

Minimizing the surface roughness of optical elements is crucial to reducing detrimental light-scattering in optical systems, and the resulting reduction in image contrast and light-gathering capability of those optical components. In the case of molded optical elements, the surface roughness of the molded surfaces is determined largely by the micro-structure of the single point diamond turned optical mold inserts that form the molded plastic element's optical surface during the molding process. Because scattering from surface micro-structures increases exponentially as wavelength decreases, the surface structure of molded optical surfaces becomes even more crucial in shorter-wavelength light gathering or imaging scenarios such as those involving high-brightness LEDs.



The Bruker ContourGT-K1 uses advanced white-light phase shifting interferometric techniques to obtain maximum dynamic range and an enhanced ability to measure large changes in vertical surface height between consecutive data points or pixels. Therefore, the ContourGT-K1 system is well suited for characterizing molded diffractive elements and lenslet arrays. By characterizing the peak-to-valley, average, and RMS roughness of each mold insert and resulting molded elements, and through visualizing that micro-structure in 3D, we are able to identify and reduce the systematic and random manufacturing process variations that can contribute to increased light scattering, resulting in molded plastic optical elements delivering industry-leading optical performance and image fidelity.

The ContourGT-K1 also provides the capability to optically profile optical surfaces including spherical, aspherical, and random surface shapes, supplementing our existing Zygo phase shifting spherical wavefront interferometer, Zeiss Contact Profilometer and OGP Flash 302 Multi-Sensor Measurement System.

Andy Germanow, President of G-S PLASTIC OPTICS, commented, "We know that to provide the very best technical performance to our valued clients, we must utilize the most powerful manufacturing processes and instrumentation available. We made the investment to add this advanced metrology system to our arsenal so that we continue to produce the industry's best-performing molded polymer optical elements."

**About G-S PLASTIC OPTICS**

G-S PLASTIC OPTICS specializes in the custom manufacture of precision polymer optics for use in imaging, scanning, detection, and illumination applications worldwide. The company, located in Rochester, NY and founded in 1916, produces injection molded aspheric imaging optics and mirrors from 170 mm to less than 2mm in diameter. In addition, the company has in-house capability to provide custom designed diamond turned and injection molded prototypes, thin film and reflective coatings, and integrated optical solutions to meet a wide range of military, medical, commercial, and consumer markets. G-S PLASTIC OPTICS is registered with the Directorate of Defense Trade Controls (DDTC) as a military product manufacturer.

For more information, contact [info@gsoptics.com](mailto:info@gsoptics.com) or 1.800.252.5335.