PRESS INFORMATION

Lenses for Line Scan Cameras with 5µm/12K

MORITEX SCHOTT: Low distortion optics for high resolution image sensors

SCHOTT AG and MORITEX Corporation
Vision 2009
Stuttgart, Germany
November 3 – 5, 2009
Hall 6, Booth B15

Tokyo (Japan) / Mainz (Germany), October 27, 2009 — MORITEX and SCHOTT will be unveiling their new "ML-L12K5A" series of lenses at Vision 2009. This range was developed to suit the latest generation of CCD sensors in line scan cameras. These lenses ensure extremely low distortion in order to leverage the resolution of 12,000 pixels 5µm in size. This also makes them attractive for high-resolution matrix sensors. Even with a screen diagonal of up to 61.4 mm, they offer an exact, high contrast picture display from the center of the image to the edges.

In high-tech industries, the structures of the goods manufactured are becoming finer and finer. In order to be able to inspect them with high precision, the bar is being raised continuously with respect to digital image processing requirements. The resolution of the sensors continues to increase and become finer. Whereas the best CCD sensors for the line scan cameras used in inspection offered 8000 pixels that are each 7µm in size (7µm/8K) just recently, their resolution has now increased to 5µm/12K.

"The modern sensors used in line scan cameras enable extremely rapid inspections of the highest level," explains Matthias Endig, Product Manager for MORITEX SCHOTT Machine Vision Solutions. "Excellent optical technology is still needed, however, in order to ensure that the conveyor belts at the quality control station can continue to move faster. Otherwise, this will have a negative impact on the quality of inspections," he adds.

The new MORITEX SCHOTT "ML-L12K5A" series of lenses from features a picture diagonal of 61.4 mm and was

developed especially for the new types of camera sensors. The five lens models guarantee high resolution of between 2.1 and 4.2 µm. Here, the optical distortion in the edge regions is only between +0.090 and -0.048 percent. They offer optical magnification of 1.2x to 3x with a focal length of between 98.5 and 112 mm.

The working distance of the optics lies between 73 and 128.9 mm. This allows for the extremely compact design of the machine vision system. To achieve homogenous illumination of the objects to be inspected, MORITEX and SCHOTT also offer high-performance LED and halogen light sources, including fiber optic light guides upon request.

Automated visual inspection is of growing importance in advanced high-tech industries. Their main area of application is in semiconductor manufacturing, for quality assurance during the production of solar modules and Liquid Crystal Displays (LCD), or manufacturing of printed circuit boards for computers, for instance. Advanced machine vision systems are also being put to use in telecommunications and information technology, as well as biosciences and laboratory automation.

About SCHOTT and MORITEX

The international technology group SCHOTT, based in Mainz, Germany, acquired a majority interest of 70.8% in MORITEX Corporation, Tokyo, in November, 2008 as a result of the tender offer bid. Both companies have been cooperating since June 2007 in order to further extend their position as the world's leading manufacturers for specific types of imaging and lighting solutions.

SCHOTT sees its core purpose as the lasting improvement of living and working conditions. To this end, the company has been developing special materials, components and systems for 125 years. The main areas of focus are the household appliances industry, pharmaceuticals, solar energy, electronics, optics and the automotive industry. The SCHOTT Group is present in close proximity to its customers with production and sales companies in all its major markets. The Group's approximately 17,300 employees generated worldwide sales of approximately 2.2 billion Euros in the fiscal year 2007/2008. The company's technological and economic expertise is closely linked with its social and ecological responsibility. The SCHOTT AG is an affiliate of the Carl-Zeiss-Stiftung (Foundation).

The SCHOTT Lighting and Imaging division offers a broad range of lighting and image transmission solutions especially for customers in the core industries automotive, aviation, medical, machine vision, security technology and architecture. Innovative lighting solutions and combinations of light and image transmission are being developed on the basis of LED technology and fiber optics.

MORITEX develops, manufactures and distributes lighting and imaging solutions and supplies optical components and systems for machine vision and digital imaging. As an established leader in machine vision systems with an impeccable track record of innovation, MORITEX is the only provider that can service all different levels from system design to integrated system solutions.

Number of characters: 2,842 (including empty spaces)

Download link to a ZIP file that contains the photograph in print quality: http://tinyurl.com/MORITEX-SCHOTT-ML-L12K5A

Photo no. 236731: Lenses for line scan cameras with 5µm/12K: With its “ML-L12K5A” series, MORITEX SCHOTT offers high resolution, low distortion lenses for fast industrial image processing. Source: MORITEX

More press photographs are available for downloading under: www.schott-pictures.net

Contact:

SCHOTT AG
Christine Fuhr
PR Manager
Corporate Public Relations
Phone: +49 (0)6131/66-4550
Fax: +49 (0)6131/66-4041
E-Mail: christine.fuhr@schott.com
Internet: www.schott.com

Agency contact:

oha communication
Oliver Hahr
PR Consultant
Phone: +49 (0)711/5088 6582-1

Fax: +49 (0)711/5088 6582-9
E-Mail: oliver.hahr@oha-communication.com
Internet: www.oha-communication.com