

Optical/Vision Systems

The 2003 Quality Sourcebook's Optical/Vision Systems Guide features products that vary greatly, yet they all have one thing in common: Each company listed in this section offers products that utilize the power of sight. In essence, an optical or vision measuring system is capable of not only "looking at" your product, but also gathering, storing and even analyzing data. These include measuring and long-range microscopes, miniature cameras, and mountable cameras for CMMs, lasers and X-ray systems. Common components of these systems include frame grabbers, analytical software and cameras.

The Optical/Vision Systems Guide is intended to assist readers in their search for the products and services they desire. To ensure the guide's accuracy, we only list information that the vendors directly provide to us. For information on any of the products or services listed in this section, contact the companies directly.

Optical/Vision Systems Guide

Optical Dimensional Measurement Systems Directory103

The directory provides contact information and Web addresses for more than 120 optical dimensional manufacturers and a brief description of each company's products. (Please note that not all companies provided us with descriptions.)

Vision Systems Directory.....108

The Vision Systems Directory gives the name, address, phone and fax numbers, and Web address of about 175 companies that manufacture measuring and detecting microscopes, miniature cameras, high-resolution cameras mounted on CMMs, and laser and X-ray measurement equipment. The directory also includes descriptions, if provided to us, of specific products that each company provides.

As with all *Quality Digest* guides, the Optical/Vision Systems Guide is in no way meant to endorse or exclude a particular organization. Rather, it's meant to be used as the starting point in the data-gathering process. Readers are encouraged to contact the companies directly for more information and to ask for—and check—references.

We appreciate any feedback you have on our Optical/Vision Systems Guide. If you have any suggestions for how we can improve this guide for next year, e-mail them to sourcebook@qualitydigest.com.

Glossary

A2LA—American Association for Laboratory Accreditation

ACIL—American Council of Independent Laboratories

ANSI—American National Standards Institute

ASME—American Society of Mechanical Engineers

Brightfield—an illumination technique that provides flat, even lighting of the field of view

CAD—computer-aided design

CAE—computer-aided engineering

CAM—computer-aided manufacturing

Confocal microscope—a visual inspection device that uses white light or lasers to construct a highly detailed map of a 3-D sample, optically sectioning a given sample point-by-point and layer-by-layer

Darkfield—an illumination technique that lights the specimen surface from an oblique angle to highlight surface problems

DIN—Deutsches Institut für Normung (German national standards body)

IEEE—Institute of Electrical and Electronics Engineers

NIST—National Institute of Standards and Technology

Optical comparator—a visual inspection device that uses large ground-glass screens for imaging, offering a larger field of view than microscopes at a somewhat lower resolution

Profile projector—optical comparator

SCC—Standards Council of Canada

SRM—standard reference material

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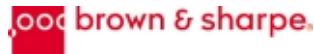
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Visual Inspection Products Inc.

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Visual Precision Inc.

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