

## Optical/Vision Systems Guide

The 2002 Quality Sourcebook's new Optical/Vision Systems Guide features an array of products representing an assortment of technologies and a wide range of uses. As with all of our guides, the *Optical/Vision Systems Guide* is intended to assist readers in the 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 more information on any of the products or services listed in this section, contact the companies directly. Please be sure to mention that you saw their listings in *Quality Digest's* 2002 Quality Sourcebook.

### Optical/Vision Systems Guide

Optical Dimensional Measurement Systems Matrix .....90

*The matrix provides an alphabetical listing for each of about 40 manufacturers and their optical/dimensional products, including optical comparators, measuring microscopes and video measurement systems. Each product listing includes critical product specifications to help you narrow your choices when selecting an optical or video measurement product or system. For manufacturers that sell product lines that vary only in stage size, screen size and so forth, we combined individual products within a series into one entry and then listed the range of specifications for that entry.*

Optical Dimensional Measurement Systems Directory .....95

*The directory provides contact information and Web addresses for more than 80 optical dimensional manufacturers and a brief description of the company's products. (Please note that not all companies provided us with descriptions.)*

Vision Systems Directory .....99

*The Vision Systems Directory gives the name, address, phone and fax numbers, and Web address of companies that manufacture measuring and detecting microscopes, miniature cameras, high-resolution cameras mounted on CMMs, and laser and X-ray measurement equipment. Among the most common components of these systems are cameras, frame grabbers, PCs and software. The directory also includes descriptions, if provided to us, of specific products that each company provides.*

If you find this guide helpful or have any observations or questions you'd like to share, please contact us by phone or fax, or e-mail us at [sourcebook@qualitydigest.com](mailto: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 much larger field of view than microscopes at a somewhat lower resolution

Profile projector—Optical comparator

SCC—Standards Council of Canada

SRM—standard reference material