

## Thermal Video System



Indigo Systems has unveiled the new TVS-700 radiometric thermal-imaging video system for preventive maintenance and condition monitoring. Its state-of-the-art, high-resolution,  $320 \times 240$ -pixel microbolometer focal-plane array and integrated 3.8-in color liquid-crystal-diode display provide superior infrared images, ease of use, viewing from difficult angles, and the ability to decipher fine detail. The microbolometer requires no cryogenic cooling or mechanical scanning parts, provides a time-to-image of less than 30 s, and reduces maintenance costs. The compact, lightweight camera measures temperature differences as small as  $0.8^\circ\text{C}$  over a range of 8 to  $14\ \mu\text{m}$ . Video imaging is supported by a navigation system that uses logical on-screen icons.

### Indigo Systems

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Goleta, Ca 93117

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## Focused Ion Beam

LEO Electron Microscopy recently introduced the Leo 1540 Cross Beam XB SEM/FIB, a flexible, high-resolution focused-ion-beam (FIB) workstation for nanoscale subsurface analysis and control. A proprietary feature of the 1540 XB allows real-time scanning electron microscopic imaging of the FIB milling process at ultrahigh resolution (up to 1 nm) and simultaneous use of different types of in- and out-lens image detectors. Its super-eucentric, six-axis, fully motorized specimen stage allows for eucentric movements of semiconductor wafers

and other materials at all operating working distances. Its multichannel gas-injection system, which allows the use of up to five different gases, enables cross-contamination-free etching and deposition of materials at high rates with nanoscale precision.

LEO Electron Microscopy, Inc.

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## X-Ray Microanalysis

EDAX has introduced Genesis XMS, its next generation of X-ray microanalysis systems that consists of three models. Each system includes software, electronics, and an energy-dispersive X-ray detector. The 2000 model can acquire data from one X-ray detector, the 4000 from two X-ray detectors, and the 7000 from up to



four X-ray detectors. All the detectors can be integrated into multidetector systems to acquire data simultaneously. The new models are compatible with EDAX's Pegasus EDS-EBSD systems, providing users with a complete package for microanalytical materials characterization. The Genesis XMS system accepts inputs in excess of 500,000 counts/s. Applications include uses in materials science, pharmaceuticals, geology, aerospace, and semiconductors.

EDAX, Inc.

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## Motor Brakes

Force Control's fully electric Magna Shear motor brakes provide a comprehensive solution to start-stop indexing, cycling, and palletizing operations that damage conventional brakes, motors, and drives. They have a low-inertia design and oil-shear cushioning, which enable faster response, smoother stops, less wear and stress on drives, and greater energy efficiency than dry-friction brakes. Thus, users experience less production loss, lower maintenance, and fewer frustrations. The seven Magna Shear models provide a wide range of motors as well as torque ratings from 4 to 1,250 ft•lb. They are fully sealed to ensure dependability and long service as a holding or cycling brake in outdoor and indoor applications, and fit several types of motors, including NEMA, U-frame, T-frame, and low-inertia IEC motors. Anodized housings are available for use in caustic environments.

Force Control Industries, Inc.

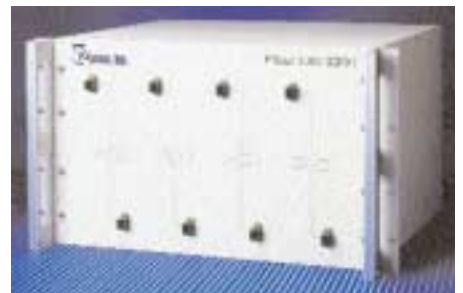
P.O. Box 18366

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## Fiber-Optic Test Instrument

M2 Optics' new test instrument simulates field applications for those designing, developing, manufacturing, or using fiber-optic





products. The M2 Fiber Lab 3200 houses four individual spools of fiber in specified lengths of up to 25 km per spool for use in testing fiber-optic devices and products. The individual spools can be connected in series with short patch cords to provide the attenuation or length of real fiber required to simulate an actual application. The Fiber Lab 3200 can be bench- or rack-mounted, and it is available with various connector interfaces and types of fiber, attenuation-specified at 1,310 or 1,550 nm, and with standard SMF-28 fiber or other single or multimode fibers.

**M2 Optics, Inc.**  
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## Radiation Meter

Berkeley Nucleonics' new palmRAD 904 nuclear radiation meter measures X-rays and alpha, beta, and gamma radiation and provides multiple monitoring and surveying options. The handheld device allows users to display results in mR/h, counts/min, or total count and to switch among



the three. The palmRAD 904 has a four-digit digital display and three other indicators—a light-emitting diode, an audio alarm, and an audio chirp that, when enabled, emits a single sound for each count detected. It has a typical accuracy of  $\pm 10\%$ , weighs 225 g with battery, and measures  $150 \times 80 \times 30$  mm; and its dual miniature jack sends counts to computers, data loggers, and several other compatible devices. Applications include use by emergency medical technicians and other first responders, hazardous-materials work, compliance verification, domestic preparedness, and dirty-bomb detection.

**Berkeley Nucleonics Corp.**  
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## Charge-Coupled Devices

Roper Scientific has introduced the Princeton Instruments VersArray XP series of thermoelectrically cooled charge-coupled device cameras for low-light digital imaging applications. The new camera system can detect signals previously captured only by photon-counting devices. Each of the 16-bit systems uses innovative vacuum technology to provide high performance while preserving the integrity of the camera's vacuum for the lifetime of the detector. The VersArray XP provides the industry's first six-speed digitization platform, which allows software-selected rates of 50, 100, 200, and 500 kHz and 1 and 2 MHz. Applications include high-throughput semiconductor-failure analysis, pharmaceutical screening, and analytical chromatographic gel documentation.

**Roper Scientific, Inc.**  
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## Hydrostatic Test Systems

WSF Industries markets hydrostatic test systems that provide ocean depth pressures



for oceanographic research projects, materials evaluation, instrument-performance checks, undersea hardware pressure testing, and other applications. Innovative features include WSF's Rapidoor quick access and Rapid/Load mechanism for fast exterior loading and unloading. The company

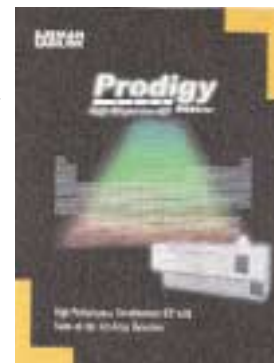
manufactures all key components of its systems, including the pressure vessels, and will custom-build units to customer specification. Test units can be assembled in almost any size, in horizontal or vertical configurations and with a variety of controls, including programmable versions for pressure and temperature variations.


**WSF Industries, Inc.**  
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## New Literature

### Emission Spectrometer

Leeman Labs has released a brochure that details features of the Prodigy High Dispersion ICP system, its new inductively coupled plasma optical-emission spectrometer. The 12-page, 4-color publication describes the system's new large-area detector and advanced high-dispersion Echelle spectrometer, as well as its optics, software, and analytical performance. The combination of the Echelle spectrometer and the large-area detector enables users to access any wavelength or group of wavelengths for analysis. Prodigy software provides intuitive navigation between applications, network readiness, access security, and regulatory compliance tools.



**Leeman Labs, Inc.**  
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