ProductNews

Aven Macro View VIS Eases Factory-Floor Quality Checks



A compact, easily relocated microscope with display screen simplifies quality checks at any stage of manufacturing or fabrication. The new Macro View Video Inspection System from Aven, Inc. features a wide field of view and 144 mm (5.7-inch) working distance, ideal for quality monitoring of parts, other materials, and finished products. It can be moved

and set up readily in production areas for spot inspections, avoiding a need for multiple units.

Aven, Inc. www.Aveninc.com

Four New 2-MegaPixel Cameras with GigE Vision Interfaces



JAI has added four new GigE Vision cameras to its series of industrial-grade CCD cameras built around quad-tap sensors from Kodak. The new AM-201GE (monochrome) and AB-201GE

(color) are built around the Kodak KAI-02150 quad-tap sensor, providing 1920×1080 resolution at 38.3 frames per second for 8-bit monochrome or raw Bayer color output. The color model (AB-201GE) can also perform in-camera color interpolation to provide YUV 4:2:2 packed color output.

JAI, Inc www.jai.com

Introducing the Brightfield LED Illuminator from Prior Scientific



Prior Scientific is proud to announce the latest addition to their wide range of illumination products for microscopy, the new Brightfield LED. The Brightfield LED illuminator provides all the advantages of LED illumination in a flexible

package that can be fitted to most modern upright and inverted microscope systems. With 10,000+ hours of operating lifetime, the LED simply replaces the standard lamphouse and is easily fitted to the microscope.

Prior Scientific, Inc. www.prior.com

Versatile, Upgradeable Field Emission SEM



The new JEOL JSM-7100F FE SEM offers expanded performance to the budget-conscious lab, featuring 10×–1,000,000× magnification and analytical resolution at the sub 100 nm scale. When equipped with low-vacuum (LV) mode (up to 300 Pa), all LV orifices can be retracted without breaking

vacuum for unrestricted low-magnification imaging and maximum beam current (200 nA) in high vacuum. For the ultimate versatility, the JSM-7100FTLV features through-the-lens electron detectors with energy filter.

JEOL USA www.jeolusa.com

High-Resolution EBSD Detector for Nanomaterials



The e⁻Flash^{HR} high-resolution EBSD detector from Bruker, offering a resolution of 2 megapixels, is the latest addition to the CrystAlign EBSD

analysis system. Featuring a resolution of 1600×1200 pixels combined with excellent optics, the e⁻Flash^{HR} is able to display fine pattern details, making it ideal for the analysis of fine-grained and/ or nonconductive materials, nanomaterials, and for use at low-beam currents and low accelerating voltages.

Bruker Nano www.bruker-nano.com

AURIGA Laser: Combination of FIB/SEM Technology with Laser Ablation for Fast Sample Preparation



Carl Zeiss has launched the AURIGA® Laser, a new advanced system combining the specific advantages of the AURIGA® CrossBeam (FIB-SEM) workstation with the capabilities of a pulsed micro-focus laser for fast ablation of material. AURIGA® Laser is particularly useful for the examination of samples where the target structure is deeply buried under

material layers. Ablation with a pulsed micro-focus laser beam offers clear advantages: it does not damage the sample underneath.

Carl Zeiss, Microscopy www.zeiss.de

Researchers Can Tailor Make Their Own UV Viewing Systems



The Spectroline® CC-80 and CC-81 ultraviolet viewing systems provide unequaled fluorescence analysis and no-wait photo-documentation of research findings. Scientists can select from eight

snap-on camera adapters, so the systems can be used with any 35mm SLR camera or with any of seven different Polaroid cameras. The CC-80 and CC-81 are ideal for use in chromatography, electrophoresis, genetic research, photoresist coating inspection, forensic science, and much more.

Spectronics Corporation www.spectroline.com

Upgrade any Microscope with an LCD View Screen and Digital Camera



Carltex introduced a new line of Microscope LCD Digital Tablet/Cameras that are ideal for any microscope. Available in 2.0 MP (BLC-200) and 5.0 MP (BLC-500) resolutions, these units combine the features of a tablet PC and a digital camera.

Besides providing a real-time specimen visual display, they can also take specimen snapshots and videos, perform measurements and calibrations (BLC-500), and transfer information to a network and/or internet using the built-in wi-fi capability.

Carltex Inc www.carltex.com/BestScope.htm

EDAX Launches New Team™ Pegasus Integrated EDS and EBSD System



EDAX Inc. has introduced the TEAMTM Pegasus system, which combines energy dispersive spectroscopy (EDS) and electron backscatter diffraction (EBSD)

hardware with EDAX's highly successful TEAMTM software platform to create the next generation in synergistic materials characterization. The product offers both high-level analysis capabilities and an easy-to-use, intuitive interface to users of all levels. The TEAMTM platform introduces Smart Features such as Smart Camera, Smart Background, Smart Indexing, and Smart Data Management.

AMETEK EDAX www.edax.com

Ultra-Sharp Imaging Package for AMRAY 3000 Series SEMs



SEMTech Solutions designed an imaging package that is compatible with all AMRAY 3000 series SEMs. This package offers sharper imaging with higher contrast. Older SEMs have video signal voltage ranges that are above and beyond those required for today's flat panel displays (FPD).

These higher voltages result in the FPD clipping the video signal, which produces an image that is less sharp than one would desire. The Ultra-Sharp Imaging System corrects this issue.

SEMTech Solutions, Inc. www.semtechsolutions.com/files/Ultra_Sharp_Imaging_Upgrade.pdf

Introducing the Lumen 200S Fluorescence Illumination System from Prior Scientific



Prior Scientific announced the newest addition to the Lumen series of fluorescence illumination systems—the Lumen 200S with high-speed shutter. A wide variety of control options are available for the Lumen 200S including RS232, USB, TTL, and via the Prior Scientific ProScan III

controller shutter port. The Lumen 200S also features a 2,000-hour life, 200-watt metal arc lamp with a stabilized DC power supply for consistent illumination.

Prior Scientific, Inc. www.prior.com

Tilt & Rotation Sample Holder for the Phenom™ Desktop SEM



The computer-controlled Motorized Tilt & Rotation Sample Holder enables smart 360° rotation and tilting from -10° to $+45^{\circ}$ via a dedicated Pro Suite application system. The computentric rotation allows viewing details from all sides, even when the feature is

off-center, while the specific feature remains at the center of focus. The *Z*-height is auto-corrected through the pseudo-eucentric tilt, while simultaneously the *Y*-position of the Phenom-stage is corrected.

Phenom-World BV www.phenom-world.com

High-Precision Forensic Glass Analysis from CRAIC Technologies



CRAIC Technologies, Inc. joins with Laboratory Imaging, s.r.o. to introduce rIQTM: the intelligent solution for the analysis of glass trace evidence. rIQTM, which stands for Refractive Index Quantification, is the result of a collaboration between CRAIC Technologies and Laboratory Imaging. rIQTM combines sophisticated imageanalysis software, advanced optical design, and electronics to enable criminalists in modern

forensic laboratories to measure the refractive index of multiple glass fragments simultaneously, quickly, and with the highest accuracy.

CRAIC Technologies, Inc. www.microspectra.com

Revolutionary Cameras Offer Powerful CMOS Sensors and Dual GigE



Available with 2- and 4-megapixel resolutions, Baumer HXG cameras reliably transfer more than 100 frames/s. HXG cameras combine the latest CMOS sensor technology with a dual GigE interface and PoE (power over ethernet). Dual GigE

technology allows the cameras to double GigE bandwidth, achieving a bandwidth of 240 MB/s with all the advantages of gigabit ethernet. If one GigE line becomes disconnected, the camera will continue to operate on the remaining GigE line.

Baumer Ltd. www.baumergroup.com

Electron Microscopy Sciences Offers 3D Measurement in Scanning Electron Microscopy



Electron Microscopy Sciences announced the addition of MeX, a stand-alone software package that turns any SEM with digital imaging into a true surface metrology device. Using stereoscopic images, the software automatically

retrieves 3D information and presents a highly accurate, robust, and dense 3D dataset that is then used to perform traceable metrology examination. The results are obtained irrespective of the SEM magnification, providing metrology at macro and micro levels.

Electron Microscopy Sciences www.emsdiasum.com

Pfeiffer Vacuum Introduces Modular ASI 30 Helium Leak Detector



Pfeiffer Vacuum has introduced the Adixen ASI 30 fully integrable modular helium leak detector for industrial applications. The new ASI 30 helium leak detector features 3G

technology for enhanced reliability and repeatability with minimum maintenance requirements. Its modular design and small footprint optimize the ASI 30 for minimum space. Simple two-cable connection allows easy setup, and selectable I/O meets or mimics any installation requirement. Interface options include RS232, ethernet, Profibus, or USB.

Pfeiffer Vacuum, Inc. www.pfeiffer-vacuum.com