



Exhibitors

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Agilent Technologies, Vacuum Products Division	Kurt J. Lesker Company
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Anderson Dahlen, Inc.	OWS WOUDI IIC.
	Photron/ Motion Engineering Company
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Ability Engineering Technology

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Ability Engineering Technology, Inc., AET, is a multidisciplined engineering, design and manufacturing company specializing in providing engineered, cryogenic and process equipment and precision-machined parts for application within the energy, industrial, and scientific market segments. With more than 50 years of expertise in delivering engineered solutions to its global customer base, AET is known for its product quality, as well as its engineering versatility & creativity.

Aerotech 101 Zeta Drive Pittsburgh, PA 15238 Tel: (412) 963-7470 https://www.aerotech.com



Aerotech designs and manufactures best-in-class motion control and precision positioning systems for industry, government, science and research institutions. Our products and solutions solve customers' most difficult precision motion challenges. Standard product offerings include motion control platforms, drives, amplifiers, motors, positioning stages, actuators, hexapods, robots and light manipulation devices. Our custom equipment and engineering services range from purpose-built motion systems to turn-key machines developed specifically for unique applications. We specialize in superior accuracy and resolution, giving you high confidence in your results. With our micro- and nano-scale motion and position control solutions, you'll run diffraction, tomography, laminography and crystallography experiments – and collect data – more precisely, faster and easier than ever. Our high-resolution, high-accuracy sample positioning lowers the sphere of confusion for imaging experiments, and our multi-axis, highperformance motion controller delivers smooth velocity control, synchronized data collection and detector triggering. Choose from various vacuum prep configurations to meet the demands of your test requirements. From software to controls, our motion technology gives you the flexibility to adjust as your research needs evolve – all with minimal system integration. We also pre-configure and test your motion system, helping to get your research up and running faster.

Agilent Technologies, Vacuum Products Division 121 Hartwell Ave. Lexington, MA 02421 Tel: (781) 860-5489 www.agilent.com/en/product/vacuum-technologies Agilent Agilent Trusted Answers	Agilent Technologies, Vacuum Products Division Agilent Technologies (formerly Varian, Inc.) offers complete vacuum solutions for Ultra and Extreme High vacuum applications for advance research centers. Product lines include: Ion pumps, turbo-molecular pumps, dry roughing pumps, gauging, hardware, leak detectors, and custom pumping systems. Agilent offers unique expertise in applications, support, system design and training to integrate superior vacuum products into optimized vacuum solutions. Learn more at: <u>http://www.agilent.com/en/product/vacuum-technologies</u>
ANCORP 707 SW 19th Ave. Williston, FL 32696 Tel: (800) 352-6431 https://ancorp.com/	Manufacturer of high and ultra-high vacuum components since 1965 ANCORP offers an extensive line of vacuum flanges fittings feedthroughs traps viewports valves chambers and custom fabrications to researchers OEMs and industrial users around the world. ANCORP products are designed to meet or exceed the standards required by our customers such as those involved with thin film deposition surface analysis semiconductors laser devices cryogenics and the aerospace industry. Our Product Lines Include: High Vacuum Valves ASA Flanges & Fittings Vacuum Feedthroughs CF & Wire Seal Flanges & Fittings ISO Flanges & Fittings Quick Disconnects Hybrid Adapters Weldable Components Glass Components & Chamber Accessories Roughing Vacuum Components Traps & Filters
Anderson Dahlen, Inc. 6850 Sunwood Dr. NW Reading, MN 55303 Tel: (763) 852-4700 https://andersondahlen.com/ Anderson Dahlencom/	Anderson Dahlen is a supplier of a wide range of custom- built vacuum chambers from ultra-high vacuum (UHV) chambers and weldments for vacuum systems to moderate vacuum for industrial processes to extremely high vacuum (XHV) for critical scientific study. Production sizes can range from one-of-a-kind research chambers for National Labs and Universities to production volume chambers for world-class equipment manufacturers. Our chambers have been used for a wide variety of applications including: Epitaxial and Thin-film Deposition Semiconductor Processing Surface Analysis Mass Spectrometry Space Simulation Nuclear & Particle Physics



CAEN Technologies Inc. 1 Edgewater St. Suite 101 Staten Island, NY 10305 718-981-0401 www.caentechnologies.com CAEN Technologies.com	CAEN Technologies Inc. is the U.S. branch for CAEN S.p.A. and CAEN ELS line of instrumentation, supporting physicists with front-end electronics and digitizers for nuclear physics, as well as photon beam position controllers and magnet power supplies.
DECTRIS Ltd. Taefernweg 1 Baden-Daettwil 5405 Switzerland Tel: +056502137 www.dectris.com DECTRIS detecting the future	DECTRIS develops and manufactures the most accurate X-ray and electron cameras to spark scientific breakthroughs around the world. While photographic cameras capture visible light, DECTRIS cameras count individual X-ray photons and electrons. We are located in Switzerland, Japan, and the United States.
FMB Oxford Unit 1-4 Ferry Mills Osney Mead, Oxford OX2 0ES United Kingdom Tel: +44(0) 1865 320300 www.fmb-oxford.com	FMB Oxford is a recognized and established leader in the supply of beamlines and beamline components to the scientific community, specializing in the design, assembly, test, installation, and commissioning of the high value systems. With over 25 years' experience in the global synchrotron industry, FMB has built an extensive product range and continues to work with its customers and other experts in the community to expand and develop this range to provide new solutions capable of supporting the increasing demands of the science. Continual investment in new production, test, and design facilities, together with the recruitment and development of key staff, ensures that FMB Oxford remains at the forefront of beamline system supply.
Huber Diffraktionstechnik GmbH & Co. KG Sommerstrasse 4 Rimsting 83253 Germany www.xhuber.com Diffraction and Positioning Equipment	HUBER DIFFRACTION (Huber Diffraktionstechnik GmbH & Co. KG) is a manufacturer of precise positioning and diffraction equipment for laboratory synchrotron and neutron applications. The all-in-house manufacturing covers rotary stages (goniometers) segment stages and linear stages of different size and load capacity. The Huber standard stages can be widely customized and combined to multi axis positioning systems or complete diffractometers.

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JTEC Corporation 2-5-38 Saito-Yamabuki Ibaraki, 567-0086 Japan Tel: 0726552786 https://www.j-tec.co.jp	At JTEC Corporation, we have been fabricating OSAKA MIRROR's since 2005, using EEM, nano-fabrication, and RADSI and MSI, nano-measurement, technologies of Osaka University. The number of our X-ray Mirrors delivered worldwide reached over one thousand. Learn more about our fabrication and production technology, our potentiality, and OSAKA MIRROR.
<section-header><text><text><text></text></text></text></section-header>	Exclusive North America Distributor for: KOHZU Precision Co. Ltd. was established in 1945 and manufactures reliable high-end production quality cost effective linear stages (X XY) rotary axes (R) vertical lift stages (zed axis Z) stacked swivel or goniometer stages (tip/tilt) for atmospheric cleanroom and vacuum environments. Stages are available with manual micrometers or stepper motors (motorized). KOHZU also manufactures 3-axis & 6-axis alignment stations metrology & synchrotron equipment. https://www.kohzuprecision.com/i/ North America Sales Representative for: LAB Motion Systems is a 15+ year-old company that is a world-class manufacturer of air bearing products: nano- precision rotary stages linear stages and complex multi- axis systems. LAB's RT150U with sub-20nm motion errors is a world-class industry leading stage. One of LAB's industry advantage is high-performance in compact form factors. https://www.labmotionsystems.com/

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Photron

9520 Padgett Street, Suite 100 San Diego, CA 92126 Tel: 858-684-3555 www.photron.com



OMS Motion has been producing motion controls for 40 years. Originally founded in the early 80's as Oregon Micro Systems, OMS developed patented technology that provides advantages in the motion control industry. The core products include multi-axis controllers up to 10axes, fully coordinated and synchronized, as well as single-axis integrated drive/controllers. OMS Motion has the experience, proven reliability and performance that has gained the confidence of engineers and scientists worldwide. OMS Motion found success in markets around the world, including semiconductor equipment, lab automation and life science instruments, factory automation, large- and small-scale research facilities/projects, astronomy research and others. Currently there are OMS products in use around the world, on every continent and several countries, supporting mission critical applications. OMS products are proven and help enable the creation of great products and processes. OMS Motion's products were designed to be easy to commission while providing superior performance. The use of advanced components allows OMS to avoid excess overhead and produce very effective performance. The company's strong commitment to their customers success has manifested the support of some individual product applications for more than 28 years, which is no easy task. OMS Motion firmly believes in doing the right thing, which is a testament to how they have had 40-years of success.

Photron was founded in 1974 to provide manufacturing, sales, and service for state-of-the-art professional film and video equipment used to capture thousands of highresolution images for playback and analysis. Photron has continually expanded their product line to aid in the advancement of photo optics and electronic technologies furthering research and development in the areas of digital imaging and slow-motion analysis. Markets include microfluidics, military testing, aerospace engineering, automotive, broadcast, particle image velocimetry (PIV), digital image correlation (DIC), ballistics testing, and more.

Motion Engineering Company (MEC) is located in Westfield, IN and is the authorized Distributor for Photron high speed camera systems in the Midwest. As such, we offer Sales, Rental and on-site Service for a wide range of products, applications and budgets. Motion Engineering Company was founded in 1986 and provides turnkey, high speed imaging solutions for manufacturing, R&D, automotive, military and academic applications in Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio and Wisconsin. Physical Location: Motion Engineering Company, 17338 Westfield Park Road, Suite 4 Westfield, IN 46074 www.highspeedimaging.com

PI Physik Instrumente LP 16 Albert Street Auburn, MA 01501 Tel: 508-832-3456 www.pi-usa.us	Global Leader in Fast Photonics / Fiber Optical Alignment Stages High Precision Motion Controllers Fast Laser Beam Steering Devices. High-Speed Alignment Algorithms and Fast Motion Systems provide to 100X higher Throughput. Products: Nanopositioning Stages Precision Automation Systems Gantries Hexapods Air Bearings Piezo Motors Steering Mirrors Flexure Stages Rotary Stages Controllers.
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Quantum Detectors Ltd R103 RAL, Fermie Avenue Harwell, Oxford OX11 0QX United Kingdom Tel: +44 (0) 1235 632047 www.quantumdetectors.com COMPARIANCE OF COMPARIS COMPARISON OF COMPARISON OF COM	Quantum Detectors was founded in 2007, a technology spin-out from the Science & Technology Facilities Council (STFC) and Diamond Light Source (DLS), the UK's synchrotron radiation facility. Our core mission was a clear one. Make our cutting-edge technology accessible to the global science community. And that's what we've done. The company today is a market-leading provider of advanced direct electron detectors and readout solutions employed in TEM and synchrotron radiation facilities throughout the world. Serving scientific and commercial research sectors, we have gained a reputation for customer service and support with our lifetime product care, continuous product improvement and bespoke solution capability. Quantum Detectors is now recognized as being at the forefront of 4D STEM analysis, having the largest installed base of DEDs supporting all major TEM brands, including Hitachi, JEOL and Thermo Fisher Scientific. And with several hundred installations operational in the field, our readout systems are leading the way in accessing high- quality beamline data.

Rayonix, L.L.C. 1880 Oak Ave., Suite 120 Evanston, IL 60201 Tel: (847) 869-1548 https://www.rayonix.com/	Rayonix L.L.C. integrating Rayonix HS (High-Speed) X- ray detectors, now offer geometries for XFEL applications which allow the direct beam to pass through. Other geometries are useful for simultaneous SAXS/WAXS data collection. Rayonix has two new ultra high speed pixel array X-ray detectors with special features to support pump-probe experiments, 2-color experiments and gain-switching for XFEL applications under development. Input from scientists is welcome.
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