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ABILITY ENGINEERING TECHNOLOGY INC.

16140 South Vincennes Ave.
South Holland, IL 60473
Tel: 708- 331-0025
<https://www.abilityengineering.com>

AET is multi-disciplined engineering, fabrication, and automation company that provides custom-engineered solutions to industrial companies and institutions involved in scientific research & development. Our primary focus is providing equipment used in cryogenic, vacuum, and process applications. Industries we serve include: Energy, Oil & Gas, Industrial Gases, Aerospace, and Healthcare.

Advanced Design Consulting USA, Inc.

126 Ridge Road
Lansing, NY 14882
Tel: 607-533-3531
<https://www.adc9001.com>

ADC, located near Cornell University in Ithaca, New York, is a leading developer and supplier of complex scientific components and instruments for large government laboratories and corporations around the world. Founded as a privately held company in 1995, ADC has grown into one of world's leading technology companies and has enjoyed 24 straight years of business growth and profitability with more than 500 customers located in over 26 countries. ADC's vision is to be a global leader in the development and manufacturing of innovative products for scientific and research markets.

Aerotech Inc.

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Since 1970, Aerotech has designed and manufactured the highest performance motion control and positioning systems for our customers in industry, government, science, and research institutions around the world. Aerotech's precision motion control products provide the critical performance for today's demanding applications in markets such as research and development, laser processing and micromachining, aerospace and defense, medical device and life sciences, semiconductor and flat panel, photonics, automotive, data storage, electronic manufacturing and test, assembly, and others requiring high precision, high-throughput motion solutions. Aerotech manufactures motion control and positioning systems and components including automated direct-drive and piezo nanopositioners; hexapods; planar and rotary air-bearing stages; high-speed gantries; mechanical-bearing linear, rotary, and lift stages; brushless linear and rotary servomotors and drives; stand-alone and software-based motion controllers; goniometers; galvanometers; and gimbals/optical mounts. Our expertise and ability to provide custom motion components and systems is unmatched. Our custom manufacturing capability is further augmented by our long history of providing vacuum-prepped and cleanroom-ready positioning systems and components. Aerotech has full sales and service facilities in the U.S., U.K., Germany, Japan, Taiwan, and China, as well as representatives across the globe.

Agilent Technologies, Vacuum Products Division

121 Hartwell Ave.
Lexington, MA 02421
Tel: 781-861-7200
<https://www.agilent.com/chem/vacuum>

Agilent Technologies, Vacuum Products Division (formerly Varian, Inc.) Agilent Technologies is a world leader providing science researchers with total vacuum solutions for over sixty years. And we provide dry vacuum from the ground up, from rough vacuum to UHV, as well as the vacuum measurement instrumentation and leak detection you need to stay up and running.

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Tel: 414-327-9055
<https://www.aburrilltechsales.com>

Alan Burrill Technical Sales is a manufacturer's representative firm specializing in offering products for the vacuum and thin film industry. Featuring the products of ANCORP, Atlas Technologies, Osaka Vacuum Products, InstruTech Vacuum gauges, and Synergy Systems Corporation (SynSysCo).

Anderson Dahlen – Applied Vacuum Division

6850 Sunwood Dr. NW
Ramsey, MN 55303
Tel: 352-529-7817
<https://www.andersondahlen.com/applied-vacuum-division>

With 30 years of experience manufacturing custom ultra-high vacuum products, the Applied Vacuum Division of Anderson Dahlen has the tools and technology to provide solutions for most requirements. We deliver total vacuum solutions including chambers and assemblies, flanges and components, motion, manipulation and transfer devices, as well as custom integrated equipment. Currently, we can manufacture in sizes ranging from handheld components to chambers 20' in a single length (14' in diameter). Furthermore, we work with a multitude of materials including Stainless Steel, Aluminum, Hastelloy, Inconel, Tungsten, and other exotic materials. The Applied Vacuum Division can provide custom vacuum chambers, weldments, and integrated assemblies of any size or complexity for High Vacuum (HV), Ultra-High Vacuum (UHV) and Extreme-High Vacuum (XHV) requirements. What's more, we manage a range of production volume from custom design-and-build projects for national labs and universities to repeat production for equipment manufacturers.

Andor Technology

300 Baker Avenue
Suite 150
Concord, MA 01742
Tel: 860-290-9211
<https://www.andor.oxinst.com>

Andor Technology, a leader in high performance cameras and spectroscopy solutions will be exhibiting at the APS/CNM user meeting. Come by and chat to our experts about your research, and find our more information on our latest technology.

Applied Diamond, Inc.

3825 Lancaster Pike
Wilmington, DE 19805
Tel: 302-999-1132
<https://www.usapplieddiamond.com>

Applied Diamond fabricates parts from Single Crystal and Polycrystalline Diamond for a variety of industrial applications. Diamond-based products provided to Synchrotrons include filters, detectors, brazed windows, fluorescent screens, x-ray membranes and lens products.

Applied Diamond grows diamond tailored to the specific application. After the growth, we have a variety of processes we can apply. Diamond polishing equipment makes the surface finish of materials highly smooth. Additional post-processing capabilities include metalization for bonding and as contacts, mounting to a flange for vacuum and pressure applications and brazing. We can use dry etching to make thin parts even thinner. The lasers can cut parts to a different shapes and sizes.

attocube systems Inc.

2020 Stuart Street
Berkeley, CA 94703
Tel: 510-649-9245
<https://www.attocube.com>

attocube offers piezo positioning stages as well as complete piezo motion solutions with highest precision and extremely rugged yet cost efficient design. The IDS3010 is the latest addition to attocube's patented fiber-based interferometer technology which enables displacement and vibrometry measurements in various applications and in extreme environmental conditions.

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<https://www.axilon.de>

AXILON is your strong partner in the international synchrotron, accelerator & photon community. Based on the extensive and long-term experience of our dedicated experts, we serve our customers with excellent and efficient solutions for complete beamlines, beamline components, monochromators, mirror systems, experimental stations, X-ray microscopes, insertion devices and other special engineering and manufacturing solutions.

BellowsTech

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Ormond Beach, FL 32174
Tel: 386-615-7530
<https://www.bellowstech.com>

BellowsTech, a MW Industries company, is a premiere US manufacturer of high quality, dependable edge welded bellows and assemblies. Engineers in Aerospace, Medical, Semiconductors, UHV, and Oil and Gas industries rely on BellowsTech products for the highest cycle life, responsive design, wide material selection and leak tight performance. BellowsTech builds partnerships or a full production run. They can manufacture in all sizes, shapes and material combinations to fit their customers' unique applications. With proprietary welding, in-house tooling and machining, and custom solutions, BellowsTech can supply a completed assembly with the best price to performance ratio in the industry. They excel at new designs with custom capabilities and short lead times and also offer repair and replacement services. BellowsTech is ISO 9001:2015 certified and AS9100-C Compliant and is dedicated to overall customer satisfaction.

Bruker

112 Robin Hill Rd
Santa Barbara, CA 93117
<https://www.bruker.com/nano>

Bruker's industry-leading technologies include atomic force microscopes (AFMs), stylus and optical profilers, mechanical testers, and nanoindenters. We have led the expansion of AFM capabilities since the beginning, and our AFMs are the most cited in the world. Featuring proprietary PeakForce Tapping®, our high-resolution AFMs enable new research with unique nanomechanical, electrical, and chemical measurements. As the worldwide leader in surface measurement and inspection, our 3D optical microscopes and profilers provide analyses for samples ranging from microscopic MEMS to entire engine blocks. These profilers supply the specific information needed to answer R&D, QA/QC, and surface measurement questions with speed, accuracy, and ease. Bruker's mechanical testers and tribometers provide the most comprehensive and versatile means of investigating friction, wear, load, hardness, and lubrication. Their proprietary multi-sensing technology, highest-accuracy force sensors and amplifiers, and high-frequency acoustic emission sensors and amplifiers enable the widest variety of testing applications. Bruker also offers the most comprehensive suite of quantitative nanomechanical and nanotribological test instruments in the market. Highly customizable and upgradable, our Hysitron nanomechanical test instruments are specifically designed to enable new frontiers in nanoscale materials characterization, materials development, and process monitoring.

Carl Zeiss Xray Microscopy

4385 Hopyard Rd
Pleasanton, CA 94588
Tel: 925-474-7415
<https://www.zeiss.com/microscopy/us/products/x-ray-microscopy.html>

ZEISS is one of the world leading manufacturers of microscopes. In addition to excellent light and electron/ion microscopes, ZEISS also offers a broad range of optical sectioning systems as well as high-resolution X-ray microscopes. ZEISS Microscopy is a leading provider of microscope solutions in the life sciences, materials research, routine and industry markets. Our microscope system are much more than just hardware. A dedicated and well-trained sales force, an extensive support infrastructure, and a responsive service team enable customers to use their ZEISS instruments to their full potential. Our claim is our promise: We make it visible.

CINEL STRUMENTI SCIENTIFIC SRL

VIA DELL'ARTIGIANAT 14-14A
Vigonza, IT-PD 35010
Tel: +39 49 725022
<https://www.cinel.com>

CINEL Strumenti Scientifici (<http://www.cinel.com>) is an established supplier of components and integrated systems for synchrotron, XFEL light sources and particle accelerators.

We provide innovative and tailored solutions into integrated UHV systems, complete beamlines, beamline components (mirror systems, monochromators, etc.). Our combination of in-house expertise in precision design and engineering, metrology, assembly and integration, vacuum and, last but not least, our precision manufacturing capabilities allowing us to produce every single part of our instruments, make CINEL the right partner to realize challenging and state-of-the-art instruments for your beamlines.

Cosmotec, Inc.

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<https://www.dectris.com>

DECTRIS is focused on developing and producing high-quality, high-performance hybrid photon counting (HPC) X-ray detectors. We are the global leader in HPC X-ray detectors for science and industry.

Hybrid Photon Counting detectors have transformed measurement methods and data collection strategies at Synchrotrons over the last 10 years. The absence of readout noise and the extremely high photon flux capability increases achievable signal-to-noise ratio, which is often the key parameter of the experiment. In addition, we offer two energy thresholds per exposure and image rates of up to several thousand per second, which makes time-resolved studies and scans over large sample volumes possible.

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DECTRIS is the HPC detector company of choice for customers desiring premier performance, plus the confidence of working with a stable, trusted technology partner.

Excillum Inc.

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The MetalJet technology replaces the traditional solid anode of X-ray tube with a jet of liquid metal.

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FMB is the world leader in the supply of cutting edge tailor-made instrumentation, from the smallest standard components to the largest customised systems. We can deliver a solution for every scientific need.

With over 25 years' experience, we have a wide variety of beamline components that have been designed, manufactured, tested, delivered and optimised. Our products are well known in the synchrotron and FEL industry for satisfying customer requirements, whatever they may be. As a leading supplier of state-of-the art, high value equipment for the scientific community, we have the experience and ingenuity to work with you on your beamline projects. Whether it be a standard or custom component, you can be sure that our collaborative approach will yield the results you want and need.

Please take a look at our website, www.fmb-oxford.com, to view our advanced and expanding range of products. If you can't find what you're looking for come and see us at our booth or contact Sales@FMB-Oxford.com.

FREDERICKS COMPANY/TELEVAC

2400 Philmont Avenue
Huntingdon Valley, PA 19006
Tel: 215-947-2500
www.frederickscompany.com

The Fredericks Company manufactures high-quality vacuum sensors, gauges and control instrument under the TELEVAC brand. We offer full range vacuum measurement solutions for national labs and high energy physics, including industry-leading cold cathode gauges with high bakeout temperatures and quick ignition at UHV. We guarantee customer satisfaction and our "not too big, not too small" operation is what enables us to offer a true partnership experience. Covering the entire practical vacuum range, our products deliver rapid response vacuum readings and superior sensitivity.

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<https://www.hiwin.com>

HIWIN Corp. manufactures an extensive line of both linear motion components and complete solutions. With a goal of supplying superior quality at the most competitive prices, the company offers a variety of precision ground and rolled ballscrews, linear guideways, electric actuators, ballscrew-driven stages, linear and rotary motors, and articulated robots with many fully integrated value-added features.

HUBER Diffraktionstechnik

8344 W Ave C4
Lancaster, CA 93536
Tel: 661-728-9538
<https://www.xhuber.com>

HUBER Diffraktionstechnik GmbH designs and manufactures high-precision positioning systems primarily used for X-ray diffraction in laboratories and at synchrotron beam sources. Other application fields are diffraction experiments with neutrons, laser technology, astronomy and precise measurement technology.

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Instrument Design Technology Ltd.

Unit 2 Turnstone Business Park
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Tel: 1516014111
<https://www.idtnet.co.uk>

Instrument Design Technology are an established leading supplier of complete beamlines, systems & components to the global synchrotron community.

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38400 Saint-Martin-d'Hères – France
Tel: +33 4 76 44 12 96
<https://www.irelec-alcen.com>

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JTEC CORPORATION

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567-0086
Tel: +81-72-643-2292
<https://www.j-tec.co.jp/english/>

We have been fabricating OSAKA MIRROR using EEM, nano-fabrication, and RADSI and MSI, nano-measurements, developed by Osaka University. We have delivered more than 500 super precision mirrors to XFEL and Synchrotron radiation facilities.

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PO Box 2804
Evergreen, CO 80437
Tel: 303- 944-1082
<https://www.kohzuprecision.com/>

KOHZU Precision Co. manufactures industry-leading scientific & experimental equipment for synchrotrons and laboratories including monochromators, diffractometers, measurement equipment along with high-precision, linear stages (X), rotary axes (R), vertical lift stages (zed axis, Z), stacked XY, swivel or goniometer stages (tip/tilt) for atmospheric or vacuum environments. Stages are available with manual micrometers or stepper motors (motorized). KOHZU also manufactures 6-axis alignment stations perfect for metrology & synchrotron beamline systems.

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As a pioneer of vacuum technology, Leybold offers a wide range of vacuum components, standardized and fully customized vacuum solutions, complemented by vacuum technology accessories and instrumentation.

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McCrone Group

850 Pasquinelli Drive
Westmont, IL 60559
Tel: 630-887-7100
<https://www.mccrone.com>

The McCrone Group is internationally recognized as a world leader microscopy and microanalysis and includes McCrone Associates, McCrone Microscopes & Accessories and Hooke College of Applied Sciences.

McCrone Associates, Inc. is focused on solving the most difficult materials and particle identification problems along with the day-to-day analysis needs of clinical laboratories, scientific researchers, business organizations, and government agencies worldwide. McCrone Associates' scientists consult direct with clients, and use the most advanced microscopy techniques and instrumentation to solve their problems.

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Meyer Tool & Manufacturing, Inc.

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Mirion Technologies (Canberra)

800 Research Parkway
Meriden, CT 06450
Tel: 800-255-6370
<https://www.mirion.com>

Our organization is comprised of over 1800 talented professionals, passionate about delivering world class products, services, and solutions in the world of radiation detection, protection and measurement.

In partnership with our customers in nuclear power plants, military and civil defense agencies, hospitals, universities, national labs, and other specialized industries, Mirion Technologies strives to deliver cutting edge products and services that constantly evolve based on the changing needs of our customers.

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MKS Instruments, Inc.

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Tel: 949-253-1468
<https://www.mksinst.com>

MKS Instruments is a global provider of instruments, subsystems and process control solutions that measure, monitor, deliver, analyze, power and control critical parameters of advanced manufacturing processes to improve process performance and productivity for our customers. Additional information can be found at www.mksinst.com.

MPF Products Inc.

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Tel: 864-876-9853
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Newport Corporation

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Irvine, CA 92606
Tel: 949-863-3144
<https://www.newport.com>

Newport is a brand within the MKS Instruments Light & Motion division. The Newport product portfolio consists of a full range of solutions including motion control, optical tables and vibration isolation systems, photonic instruments, optics and opto-mechanical components. Our innovative Newport solutions leverage core expertise in vibration isolation and sub-micron positioning systems and opto-mechanical and photonics subsystems, to enhance our customers' capabilities and productivity in the semiconductor, industrial technologies, life and health sciences, research and defense markets. For more information, visit www.newport.com.

Nor-Cal Products

1967 South Oregon Street
Yreka, Ca 96097
Tel: 530-925-9235
<http://www.n-c.com>

Nor-Cal Products, now a division of Pfeiffer Vacuum, serves industry and research as a trusted global source for high and ultra-high vacuum chambers and weldments supported by over 6000 standard components and hardware. Founded in 1962, Nor-Cal Products has developed a reputation at national laboratories and universities for being a premier vacuum chamber fabricator. The quality, appearance, and performance of our chambers are unequaled.

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Nor-Cal Products is ISO 9001-2015, and ASME U-Stamp certified. Count on Nor-Cal Products for innovative design, precision manufacturing and exceptional customer service.

OMS Motion, Inc.

15201 NW Greenbrier Pkwy.
Ste. B1
Beaverton, OR 97006
Tel: 503-629-8081
<https://www.OMSmotion.com>

For more than 35 years OMS Motion, aka Oregon Micro Systems has been successfully producing motion control products and services. Single axis integrated controls with drives as well as multi-axis controllers that can control up to 10-axes on a single controller.

Founded in the early 80's OMS developed patented technology that provided an advantage in the motion control industry. In the mid 90's OMS was acquired by Pro-Dex Inc, a publicly traded company, and continued business as a subsidiary and later a division of Pro-Dex. There were many changes within the Pro-Dex organization though OMS remained constant, expanding their role beyond Motion Control to the support of the Medical Devices of other Pro-Dex companies. After separating from Pro-Dex in 2017, OMS has regained its focus on motion control with its original leadership of the last 35 years.

OMS Motion produces superior motion control products that are simple to use. The controls accept simple ASCII character commands for simple and intuitive programming. Controllers support Ethernet, RS232, RS485, ModBus, VME and PCI bus communications. New products will cover other communication protocols, new functional features, integrated drives and amps and other features.

OMS has earned a strong reputation for reliable and quality motion control products that is trusted throughout many industries. OMS Motion is a trusted name worldwide for quality motion control.

Pfeiffer Vacuum

24 Trafalgar Square
Nashua, NH 03063
Tel: 603-578-6500
<https://www.pfeiffer-vacuum.com>

Pfeiffer Vacuum provides complete vacuum solutions supplying a full range of hybrid and magnetically levitated turbo pumps, turbo pumping stations, helium/hydrogen leak detectors, backing pumps, measurement and analysis devices and now Nor-Cal Products, the new member of the Pfeiffer Vacuum Group, provides premium quality vacuum components, valves and chambers.

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-

Quantum Detectors

R104, RAL, Harwell Oxford
 OX11 0QX
 United Kingdom
 Tel: +44 1235 445 795
<http://quantumdetectors.com>

Quantum Detectors has provided novel technology to the APS for several years, with the first installation of an Xpress 3 detector readout system here in 2014. Since then several more systems have been installed around the ring enabling higher throughput, wider dynamic range, and faster experiments.

As well as advanced detector readout systems we've also installed several MerlinX detectors at the APS. A 55µm energy resolving detector with up to eight thresholds in Colour Mode and employing a Medipix3 ASIC to achieve rates of 1200 Hz in 12-bit mode, MerlinX is a high-performance x-ray imaging detector that requires no supplementary cooling system. Additionally, we have Hexitec: A fully spectroscopic hard x-ray imaging detector which measures the energy and position of every incident photon in the 4-200 keV range. If you'd like to hear how we could provide better usability, enable faster throughput and in some cases offer a completely new mechanism for detection at your beamline, drop by our booth to learn more.

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), now offer geometries for XFEL applications, that allow the direct beam to pass through the detector. Other new detector geometries allow SAXS to pass through in vacuum, for simultaneous SAXS/WAXS data collection.

Rayonix is developing a new ultra high speed pixel array X-ray detector with special features to support pump-probe experiments and 2-color experiments.

RaySpec

1 The Valley Centre
 Gordon Road
 High Wycombe, BKM
 HP13 6EQ,
 United Kingdom
<https://www.rayspec.co.uk>

Specialist design and manufacture of fluorescence detectors for synchrotron applications. RaySpec offers custom detectors designed to optimise geometries, efficiencies and performance on individual end-stations. Based on Silicon Drift Detector technology, RaySpec's detectors range from single sensor to multi-sensor assemblies with up to 19 individual channels. Specialities include focussed sensor arrays for optimum source-detector geometry, low energy windows (including windowless) and through-hole detectors for high solid-angle backward angle detection around the incident beam. RaySpec's SDD detectors may be used in air or in vacuum, with specialised UHV solutions available and they are designed for high rate operation with ASIC readout and 'next generation' DPP compatibility. To discuss your ideas and applications, please visit our booth and find out more about RaySpec's expertise and capabilities.

Rigaku Innovative Technologies, Inc.

1900 Taylor Road
Auburn Hills, MI 48326
Tel: 248-232-6400
<https://www.RigakuOptics.com>

RIT utilizes its staff of 10 PhD Scientists and 10 Engineers with over 250 years combined experience to provide the customer with the best solution to their coating and optics needs. RIT has provided optics and coatings to many of the world's synchrotron and free electron laser facilities with excellent results. While RIT specializes in reflective multilayer coatings for use in the VUV – Hard X-ray wavelengths, RIT can also provide single film and crystal optics for synchrotron and free electron laser beamlines and end stations. RIT's large deposition chambers allow for precise coatings to be applied to substrates up to 1.5 meters in length. Mirrors coated by RIT may also have multiple "stripes" allowing for different material systems or d-spacing designs on the same optic. This reduces the need for multiple optics, time consuming optic changes, and allowing for a wide range of energies and bandpass choices in the same optic. Rigaku Innovative Technologies also has developed a proprietary methodology for the complete refurbishment, recovery, and restoration of synchrotron and custom multilayer systems. These refurbished optics utilize the existing, often expensive, substrates allowing for lower costs and shorter lead times in replacing worn or damaged optics. Rigaku Innovative Technologies looks forward to continue to provide cutting edge X-ray and EUV optics technology to the world's premier synchrotron and free electron laser facilities.

SPECS-TII, Inc.

20 Cabot Blvd.
Suite 300
Mansfield, MA 02048
Tel: 508-618-1292
<https://www.specs.com>

SPECS leads the way in state-of-the-art technology, cutting-edge components, and compact and individually designed systems for surface analysis. The customized systems are highly integrated with facilities for sample and thin film preparation and in-situ analysis from UHV to high pressures. Our newest solution for environmental XPS is the award-winning EnviroESCA, which features quick sample throughput at Near Ambient Pressure. Our innovative product for ARPES research is the KREIOS 150, which combines a hemispherical analyzer with a new PEEM lens approach. This allows it to access the full photo electron emission hemisphere ($\pm 90^\circ$). We also offer a variety of sources for deposition, excitation, and charge neutralizers as well as analyzers, X-Ray sources, and research microscopes like LEEM and LT-STM.

Spellman High Voltage Electronics Corporation

475 Wireless Blvd.
Hauppauge, NY 11788
Tel: 631-630-3071
<https://www.spellmanhv.com>

Spellman High Voltage Electronics Corp is the world's leading independent supplier of precision DC high voltage power supplies, X-Ray generators and Monoblock® X-Ray sources for medical, industrial and scientific applications. While we offer the broadest and most advanced range of standard and platform products in the industry, we specialize in partnering with OEM's to develop, produce and support the optimum solution for each system and market segment. We advance medical care, industrial processes, quality control, scientific research, security and telecommunications by providing innovative high voltage power conversion solutions that enable equipment manufacturers to achieve their systems' performance, reliability, and cost goals. We currently have five design centers, six production centers, eight repair locations and over 2,200 employees in North America, Europe and Asia.

Starrett Tru-Stone Tech

1101 Prosper Drive
Waite Park, MN 56387
Tel: 250-251-7171
<https://www.tru-stone.com>

Starrett Tru-Stone Technologies specializes in precision granite machine bases & assemblies. We partner with you to add expertise in design collaboration, high-quality on-time manufacturing and complex assembly for your precision base. In addition to granite bases, Tru-Stone techs install precision rails, air mounts, brackets, pneumatic systems and cabling. Custom stands are also provided. Materials beyond granite include ceramic, carbon fiber materials.

Sydor Technologies

78 Schuyler Baldwin Drive
Fairport, NY 14450
Tel: 585-750-8578
<https://SydorTechnologies.com>

Sydor Technologies is a global provider of advanced x-ray detectors and diagnostic instrumentation for the energy, research, and defense industries. We manufacture complex measurement solutions for the world's most advanced applications. Our products are customized to each user's requirements. Our hard and soft x-ray detectors are engineered to provide the best sensitivity, across the widest dynamic range, and are optimized for use at modern and up-and-coming light sources. Our x-ray Diamond Beam Position Monitors (DBPM) are available in a variety of packages for use in ambient to UHV environments. X-ray streak cameras and framing cameras are available to accompany our line of gated imagers and visible streak cameras. Established in 2004, Sydor Technologies is headquartered in Rochester, NY and now supplies systems and support in over 33 countries. For more information, please visit www.SydorTechnologies.com

Talend Inc.

800 Bridge Parkway Suite 200
Redwood, CA 94065
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Talend, a leader in cloud integration solutions, puts more of the right data to work for your business, faster. Talend Cloud delivers a single platform for simple and complex data integration tasks across public, private, and hybrid cloud, as well as on-premises environments, and enables greater collaboration between IT and business teams. Combined with self-service solutions and hundreds of pre-built connectors from SaaS applications to cloud data warehouses, Talend allows you to cost-effectively meet the demands of ever-increasing data volumes, users, and use cases.

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Talend is Nasdaq listed (TLND) and based in Redwood City, California.

TDK-Lambda Americas
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Website: www.us.tdk-lambda.com

TDK-Lambda Americas High Power Division is a manufacturer of Programmable, High Density Power Supplies located in Neptune, N.J.. The Genesys™ series of Programmable Power Supplies has the highest density in power levels from 750W through 15KW with output ranges up to 1500V and 1,000A.

TDK-Lambda Genesys™ Series of Programmable Power Supplies has the highest density, making the Genesys™ Series the most complete set of platforms with identical user interfaces. Platforms include 750W, 1500W, 2.4KW, 3.3/5kW and 10/15kW Output. Outputs available range up to 600V and 1,000A. In addition to saving space, Genesys™ power supplies contain extensive standard features that provide a new level of performance and flexibility. An optional LXI Certified LAN interface provides flexible system integration and functionality.

Teledyne Princeton Instruments

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Teledyne Signal Processing
Devices Sweden AB

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Teledyne SP Devices designs and manufactures world-leading modular data acquisition and signal generation instruments. Our products utilize patented calibration logic, the latest data converters, and state-of-the-art FPGA technology resulting in an unrivaled combination of high sampling rate and resolution. Products are available with a range of application-specific features and embedded, real-time signal processing.

Toho Technology Inc.

4809 N. Ravenswood
Suite 113
Chicago, IL 60640
Tel: 773-5837183
<http://www.tohotechnology.com/>

Toho Technology Inc. provides Material Characterization solutions and Surface Metrology. Through a partnership with industry leader Nanometrics, Toho Technology now offers comprehensive metrology solutions used to monitor the physical, optical, electrical and material characteristics of compound semiconductor, strained silicon and silicon-on-insulator (SOI) devices, including composition, crystal structure, layer thickness, dopant concentration, contamination and electron mobility. Toho's new and improved FLX family of products measure intrinsic or thermal stress, expansion coefficients, and more. Advanced film thickness measurements of single/multi-layer films are performed with the Nanometrics' new NanoSpec II Systems and TohoSpec 3100.

Toyama Co., Ltd.

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Toyama designs and manufactures accelerator and synchrotron beamline component and systems. Toyama is fundamentally an engineering company, manufacturing ultra-precision systems for experimentation at the cutting edge of science. If you have a new concept that needs to be developed, then Toyama is the place to come. We have the technology and experience to turn your ideas into reality. In addition to our skills at developing new products, our long history of supplying scientific instrumentation means that we have produced a wide range of standard products. These standard items can meet the needs of many system requirements; alternatively they can be easily and quickly customised to meet your specific needs.

USI Corporation

600 Hillgrove Ave.
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Western Springs, IL 60558
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USI Corporation is a data storage, protection, and archive solutions provider offering innovative storage technology. Each of our hardware and software products has been carefully chosen to maximize data availability, system performance and business value. USI Corporation has been providing storage solutions to Fermilab and Argonne for two decades. See www.usicorp.com for additional information.

VACOM Vakuum Komponenten & Messtechnik GmbH

In den Brückenäckern 3
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VACOM ranks among the European market leaders for vacuum technology. Founded in 1992, the family-owned enterprise employs more than 220 staff members. Its leading brand Precision & Purity stands for the highest demands in UHV, XHV and UCV. Core areas of expertise are vacuum hardware, electrical feedthroughs, vacuum measurement, vacuum optics and ion getter pumps. VACOM specialises in custom components and service including innovative technologies for ultimate cleanliness, low outgassing and particle freedom of products. The spacious production and technology centre includes 800 sqm cleanroom facilities. VACOM is partner in high-tech industries and research institutes e. g. in the field of analytics, semiconductors, optics and accelerator technologies worldwide.

Vacuum One

3717 N. Ravenswood – Suite 240
Chicago, IL 60613
Tel: 773-244-3102
<https://www.vacuumone.com>

Vacuum One is a manufacturers' representative firm in the Midwest.
We represent the following companies....

- Edwards Vacuum
 - MDC Vacuum Products
 - Insulator Seal Incorporated
 - CTI-Cryogenics
 - MKS Instruments/Granville-Phillips
 - Polycold
 - Gamma Vacuum
 - KLA-Tencor
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WIENER Plein & Baus Corp.

202 N. Limestone Street
Suite 320
Springfield, OH 45503
Tel: 937-324-2420
<https://www.wiener-us.com>

WIENER Plein & Baus Corp. is providing a full line of electronics for detector read-out, data acquisition, experiment control and diagnostics.

Combining superior designed mechanic chassis with high quality, microprocessor controlled, low noise power supplies and a high level of integrated diagnostic and monitoring W-IE-NE-R became a world leader for powered chassis in all standards as VME/VME64x, VXI, PXI, In a joint venture between W-IE-NE-R and ISEG we provide the new high density, multi-channel low and high voltage power supply system MPOD / MMS which can house up to 480 independent high voltage, 80 low voltage channels or any mixture of low and high voltage. ISEG multi-channel modules offer highest stability and lowest ripple/noise and thus deliver cutting-edge solutions for high voltage applications. Adding a line of stand-alone HV power supplies ISEG is covering a range from 100V up to 100kV in different power classes.

In addition to our family of high performance controllers for VME and CAMAC with USB2 interface a new series of MESYTEC high resolution digitizers in VME as well as matching NIM front-end modules and a new VME display / bus-analyzer completes our line of instrumentation.

- WIENER: low voltage power supplies and systems, powered chassis [www.wiener-d.com]
- ISEG: High voltage power supplies, modules and multi-channel systems [www.iseg-hv.com]
- MESYTEC: analog and digital detector read-out electronics [www.mesytec.com]

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Developed at CERN's laboratories, LAMBDA is based on the Medipix3 readout chip.

It is designed for synchrotron experiments requiring high spatial resolution, high sensitivity and extremely high speed.

LAMBDA is ideally suited for these applications:

- XPCS
- Time-resolved measurements
- Ptychography
- SAXS
- Diamond anvil cells and imaging.

Single-photon-counting circuitry means that LAMBDA provides effectively noise-free operation. This is critical for achieving high image quality during fast measurements and for discriminating against fluorescence.

LAMBDA's small pixel size (55 μm) means that it offers the best high-resolution imaging available, with flexible in-pixel circuitry.

XGLab Srl

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<https://www.xglab.it/>

XGLab holds a leadership and innovative position in the field of radiation detectors and electronic instrumentation for X- and Gamma-ray spectroscopic analysis and imaging. XGLab is now part of Bruker Nano Analytics (BNA), a division of the Bruker Corporation, a global leader in scientific instruments and solutions for life sciences and materials research, as well as industrial process and quality control.

XIA LLC

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Hayward, CA 94544
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XIA LLC invents, develops, and markets advanced digital data acquisition and processing systems for high rate x-ray spectroscopy at synchrotron facilities and other radiation detector applications in university research, national laboratories, and industry. Our core technology of high rate digital signal processing is applied to a diverse range of products from large multichannel systems, to benchtop units and compact low power processor cards for handheld instrumentation. Our product features include high rate elemental fast mapping, and data output rates in excess of 3 Mcps (FalconX). In addition to x-ray detector electronics, XIA offers a parallel product line of high speed digital signal processors for gamma detectors used for spectroscopy, timing and coincidence measurements. XIA is based in Hayward, California, on the east side of San Francisco Bay. Our multi-lingual staff currently supports product sales in over 30 countries on six continents.