

Medical Edge

THE LATEST INFORMATION ON MEDICAL ENGINEERING

BROUGHT TO YOU BY:



Today's Medical Edge is dedicated to the upcoming [MD&M West show](#). It will be held Jan 29 to 31 in Anaheim, Calif. *Medical Design* magazine will hold a roundtable discussion with our editorial advisory board during the show. We'll be talking about the latest trends and the outlook for 2008. Be sure to watch for our April issue which will include summaries from the meeting.



Thanks for reading,

Vicki Burt

Senior Editor

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[Vicki's blog](#)

MD&M West Show Preview

Hi-Tech Group Companies

Booth 2015

www.hi-tech-group.com

Consisting of Hi-Tech Rubber, A.C. Hoffman Engineering, Inland Technologies, Ventrex, Infinity Plastics, and Accusil, the Hi-Tech Group is a single source contract manufacturer of injection molded plastic components, silicone-rubber components, medical grade silicone tubing, surgical instruments, and single and multiple-use medical devices.

B. Braun OEM Division, B. Braun Medical Inc.

Booth 3301

www.bbraunoem.com

The B. Braun OEM Division, B. Braun Medical Inc. delivers complete contract manufacturing capabilities, focusing on Class II and Class III medical devices for several markets including pharmaceutical, biotech, and surgical. The company manufactures thousands of standard and specialty items from components to custom trays to solutions. Services available for outsourcing include research and development, design, prototyping, tooling, molding, validation, manufacturing, packaging, sterilization, quality control, private labeling, and regulatory guidance.

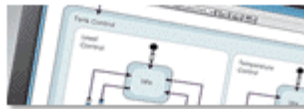
Helix Medical LLC

Booth 1601

www.helixmedical.com

Helix Medical LLC now offers an expanded array of capabilities for silicone and thermoplastic component needs. With the additions of Jenline Industries and APEC Plastic and Silicone Molding, Helix Medical has strengthened its competitive position with turn-key solutions for your healthcare, medical and biopharmaceutical needs. Services include medical device and fluid processing component technology, and platinum-cured silicone and thermoplastic manufacturing capabilities. The company is a finished medical-device manufacturer, is FDA registered and regulated, and ISO 13485 and GMP certified.

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[Learn more](#)



Qosina

Booth 2121

www.qosina.com

Qosina is an ISO 9001:2000 and ISO 14001 registered worldwide supplier and manufacturer of stock and custom-made OEM disposable components. Qosina's comprehensive offering includes vials, test tubes, swabs, sponges, syringes, luers, spikes, stopcocks, filters, check valves, clamps, and connectors. Call our Customer Service Specialists to obtain our latest catalog, request a sample, or place an order at (631) 242-3000, fax (631) 242-3230 or email info@qosina.com. Custom sourcing services is available through our knowledgeable specialists using Qosina's extensive resources.

NuSil Technology

Booth 2361

www.nusil.com/events/mdmw.aspx

NuSil Technology is a leading provider of silicone materials for the medical-device industry. We've recently investigated the incorporation of hydrophilic technology in silicone materials and have some promising initial results. Come by booth #2361 and meet with NuSil's technical specialists to learn more about our custom capabilities in hydrophilic silicone formulations. Be sure to ask for a complimentary profile of our research or download a copy after the show.

I & J Fisnar Inc.

Booth 1639

www.ijfisnar.com

Fluid dispensing equipment, machines and plastic dispensing components, dispensing robots for bench and conveyor lines.

Interface Associates

Booth 2511

www.interfaceusa.com

Interface Associates is the only vertically integrated provider of worldwide outsourced solutions for catheter manufacturing. We offer balloon and catheter design and development, extruded balloon tubing, balloon contract manufacturing, catheter contract manufacturing, plus a comprehensive line of balloon catheter production and testing equipment. Interface Associates is ISO 13485:2003 and ISO 9001:2000 certified. Whether starting a new line, upgrading manufacturing capabilities, or looking to outsource balloon catheter manufacturing, Interface offers the expertise, resources, capacity, and equipment to simplify production processes from start to finish. From finished device manufacturers to component device companies, Interface Associates is the only one who can provide fully integrated catheter solutions.

Crescent Design Inc.

Booth 1082

www.crescentdesign.com

Win a free 42-in. LCD TV! Stop by Crescent Design's (CDI) booth for your chance at the free TV. CDI is a San Diego based turnkey design engineering firm in business since 1987. By blending expertise in the areas of mechanical, electrical, and software design, we can develop and fabricate just about any type of automated production equipment. We have extensive experience with catheter production and test equipment and guide wire production and test equipment, as well as offering both custom and standard solutions for leak, burst, and flow testing. CDI also manufactures a line of hydraulic burst/leak testers which will be highlighted at the show.

Advertisement

Enhance your design with smooth, pinpoint positioning control

Request this FREE 20-page Guide to help you evaluate and compare your ideal hardware options for more accurate, smooth, pinpoint positioning control. Learn how torque, detent, stored energy, bi-stable and damping hardware devices can make heavy panels feel light, display screens tilt and swivel into versatile viewing angles, touch-screens accommodate optimum user interaction, and more. Discover ways to overcome common limitations while enhancing your application with reliable positioning control hardware.



www.southco.com

G&L Precision Die Cutting Inc. Booth 2410

www.glprecision.com

G&L Precision Die Cutting is a full service converter specializing in the medical and diagnostic markets. Contract manufacturing services include: tight tolerance die-cutting, slitting, printing, multi-layer laminating, laser cutting, hydrophobic coatings and subassembly or finished devices. Typical materials include pressure sensitive adhesives, films, foams, wovens, non-wovens, and membranes. G&L's proprietary GL-187 adhesive is a worldwide standard for IVD applications including diagnostic test strips for lateral flow and vertical flow applications. G&L provides subassembly support for finished devices, and is experienced with biosensor components, skin contact applications, and medical devices. Dry room and class 10,000 clean room capabilities. ISO 9001:2000 certified.

Lemo USA Booth 1986

www.lemo.com

When you need precision, choose Lemo. With the same superior quality as Lemo connectors, the line of Redel plastic connectors is precision designed to ensure durable, reliable performance in critical medical environments. The standard for the EP catheter industry, Redel connectors are lightweight, sterilizable, and include machined gold-plated contacts for superior electrical performance.

Keystone Electronics Corp.

www.keyelco.com

A world-class manufacturer/designer of custom and standard SMT and THM interconnects and electronic hardware, Keystone produces battery clips, contacts, holders, fuse clips and holders, terminals and test points, spacers and standoffs, panel hardware, pins, plugs, jacks, sockets, PCB and multi-purpose hardware, as detailed in full line Catalog M55. Capabilities include 3D-CAD product modeling, CAD-CAM tool and die fabrication, stamping machining and assembly, plus application engineering services to meet special needs. Keystone maintains an ISO 9001:2000 certified quality system and complies with RoHS directives. A global distribution network supports sales offices in Canada, Europe, Australia, and Asia. Headquarters in the U.S.

Coastal Life Technologies Booth 2190

www.cltsa.com

Coastal Life Technologies Inc. is a manufacturer of medical devices specializing in single-use, disposable products. We are a turnkey outsource provider of logistical services including design and engineering, materials management, assembly, and sterile packaging, sterilization, and warehousing and order fulfillment.

Glenbrook Technologies

Booth 1767www.glenbrooktech.com

Glenbrook Technologies develops and manufactures real-time X-ray inspection systems such as the MedaScope, JewelBox, MicroFluor and RoteX, which incorporate proprietary X-ray microscope technology. Medical-device manufacturers use these high-sensitivity, high-resolution systems to enhance the quality assurance of their products, in accord with 21 CFR 820, and for highly magnified, low-dose, non-invasive viewing of stents and other implants.

Advertisement

**The Lee Company****Booth 1783**www.TheLeeCo.com

The Lee Company manufactures miniature fluid control products for automated liquid handling in medical and scientific instruments and other analytical/clinical chemistry applications. Products include inert and non-inert solenoid valves, latching solenoid valves, high-speed micro-dispense valves, dispense pumps, calibrated flow restrictors, check valves, pressure relief valves, nozzles, custom manifold systems, and inert fluid-handling components.

Incision Tech**Booth 3158**www.incisiontech.com

IncisionTech is a tier 1 contract manufacturer and strategic device OEM partner. Our goal is to enable better patient outcomes through innovative incision technologies. As the Center Of Excellence for incisional components we provide expert solutions for surgical cutting and piercing. IncisionTech manufactures the sharpest cutting and piercing components for MIS applications in all surgical markets including surgical blades, trocars, custom and specialty needles, cannula, scissors, surgical saw blades, tissue cutters, and biopsy needles and punches. Our proprietary processing techniques include the latest CNC sharpening and pointing equipment in combination with leading edge electrochemical finishing and other value-added technologies.

Instron**Booth 2544**www.instron.com

Instron systems can be used to evaluate a wide range of biomedical materials and devices. Ranging from human and bio-engineered tissues to nitinol wire used in the manufacture of the newest drug-eluting stents, Instron provides customers with comprehensive solutions for all their research, quality and service-life testing requirements. Additionally, Instron offers a variety of service capabilities, including assistance with laboratory management, calibration expertise and customer training.

Harmonic Drive LLC**Booth 4146**www.harmonicdrive.net

Harmonic Drive LLC produces innovative "Zero-Backlash" gearing called Harmonic Drive which has been used in various markets which require high positioning accuracy, compact and light weight, high torque, and high efficiency. We are proud to announce our actuator solutions which utilize zero-backlash Harmonic Drive Gearing with a high-performance brushless motor with high resolution encoder, achieving "arc-sec" level positioning accuracy with high torque capability. Our actuator line-ups will provide you a solution to your technical problems or design problems. If you're facing performance problems, Harmonic Drive will be the solution for you. Visit our booth and experience our innovative solutions. You will have a solution in your hand.

Kahle USA

Booth 4321

www.kahleautomation.com

Kahle designs and builds high-speed assembly and process equipment for the medical device and pharmaceutical industries. Kahle's product line includes custom-made automation equipment for IV products, safety devices, catheters, blood collection products, syringes, needles, tubing, and related medical devices, pre-fill syringes and other pharmaceutical devices. Kahle Assembly Machines incorporate the latest in rotary, linear, and continuous-motion designs. Kahle's services include customized equipment design, system integration, equipment validation, documentation, installation and on-site customer service – resulting in a true turnkey solution. Kahle has met the demands of the medical industry since 1920, and looks forward to meeting the industry's unique demands in the future.

Advertisement

New PTFE Terminals

Press-Fit PTFE (Teflon) insulated terminals for high temp./high quality terminal/connector use available from Keystone. Engineered for dense packaging on .062 & .093 PCB's. Feature superior electrical, mechanical, thermal & chemical characteristics. Shock & Vibration resistant, they operate -85 F(-65 C) to +400 F (204 C). Various Terminal & Pin styles, top & bottom mount, threaded, Chassis & PCB Panel feed-thru mount. High grade White PTFE Insulated Bushings, Tin Plated Brass Electrodes. Ask for Catalog M55. Click or call kec@keyelco.com (800) 221-5510 or (718) 956-9800.



www.keyelco.com

Peter Paul Electronics Co. Inc

www.peterpaul.com

Peter Paul Electronics, established in 1947, provides through worldwide distribution a broad range of standard and miniature solenoid valves, explosion proof, high-flow and high pressure models - most UL and CSA listed, complementary manifolds and stacking bodies in stainless, brass or aluminum, solenoid valve operators for OEM use, and a vast array of body, housing, and coil options for standard and special applications.

Dymax Corp.

Booth 2438

www.dymax.com

Dymax will present live demonstrations of new See-Cure Color Change and Ultra-Red fluorescing adhesive technologies at MD&M West 2008. Dymax is an ISO:9001:2000 certified manufacturer of solvent-free, RoHS compliant UV light curing adhesives and CE marked UV curing equipment for all facets of medical-device assembly. Dymax MD medical-device adhesives are ISO 10993 biocompatible, Class VI certified, and cure in seconds upon exposure to UV light. The adhesives and compatible curing systems are used to assemble medical devices such as syringes, reservoirs, respiratory masks, catheters, infusion sets, hearing aids, optics, surgical instruments, and diagnostic equipment.

Precision Extrusion Inc

Booth 2600

www.precisionextrusion.com

Precision Extrusion Inc. is an ISO 9001:2000 certified custom manufacturer of close-tolerance tubing and produces custom extrusions. PEI can handle many complex tubing needs, including small diameter, coextruded, single and multi-lumen, and braided reinforced tubing. Materials include PVC, PUR, PA, PC, PE, PEEK, FEP, LCP, PLA, Nylon, and other most engineering resins. Materials can be compounded with barium,

bismuth, or tungsten for radiopacity. ID is as small as 0.0025-in. and walls as thin as 0.002-in. are possible. PEI is also a premier supplier of acetal mandrel in sizes from 0.025 to 0.185-in. with or without silicone exterior release layer.

**KNF Neuberger
Booth 1860**

www.knf.com/usa

KNF is exhibiting oil-free air and gas, and self-priming liquid diaphragm pumps ranging from .050 to 300 LPM. Introducing our new solenoid-driven diaphragm pump, it features an accurate, adjustable 5 to 25 μ L/stroke, with applications such as medical devices, liquid dosing and ink-jet printing systems. NSF-approved models available. With KNF's extensive diaphragm pump line, we can design you a pump using a variety of materials of construction, motor types, and mounting methods. KNF welcomes your custom OEM requirements.

**Servometer/PMG LLC
Booths 2171 and 2173**

www.servometer.com

Servometer/PMG LLC, is a manufacturer of custom miniature metal bellows and bellows assemblies, bellows type flexible shaft couplings, gold plated bellows contacts, and electroforms. Servometer bellows are flexible, leak tight, and can be used as springs and flexible seals in long life applications. Bellows type flexible shaft couplings can accommodate axial, angular, and offset deflections with zero backlash and low windup. Gold plated contact bellows can be used in delicate electronic applications where good contact and continuity are important. Servometer precision electroforms are light weight and structurally rigid. Our design staff is on hand to help with the design of custom applications.

**Popper & Sons Inc.
Booth 2550**

www.popperandsons.com

Popper is ISO 9001:2000/13485 OEM manufacturer of device components. Popper's Tubing Services Division features extensive inventory of 304 and 316 stainless steel tubing, burr-free cut-offs and burr-free point (cannula) grinding. Rapid Prototype Priority Services offer quick 2-4 weeks delivery. Popper's Metal Fabrications of small diameter tubing include centerless grinding, swaging, bending, laser welding and marking, needle assemblies, EDM, CNC, flaring, tip reducing, electro-polishing, micro-polishing, Teflon coating, grit blasting, laser marking, assembly, and packaging.

Advertisement

Free Webinar
January 15, 2008
2:00pm ET/11:00am PT

**The Technology
of Etching and Bonding
of Metal Components**

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VACCO

**Advanced Polymers Inc.
Booth 1960**

www.advpoly.com

Advanced Polymers Inc. produces ultrathin-walled heat-shrink tubing, high and low-pressure medical balloons, custom balloon catheters, and extruded tubing. Heat-shrink tubing is available in hundreds of stock sizes with walls as thin as 0.0002-in. and diameters as small as 0.006-in. The company's balloons can be produced in virtually any size and pressure rating.

Metal Cutting Corporation

Booth 2212

www.metalcutting.com

Recent advances in abrasive cutting by Metal Cutting Corporation made possible the burr-free cutting of longer length tubes without exposing the tubes to corrosive chemicals. Known for short length cutting, Metal Cutting was able to combine proprietary techniques and yield longer length cuts with no ID contamination or residue. Tube ends have the clean and smooth surfaces characteristic of their supported cut technique while holding parallelism and squareness similar to their short length business. Length tolerances of +/- 0.002-in. are possible on parts as long as 20.0-in and tolerances of +/- 0.010-in. meet the demands of most customers while allowing fast deliveries.

Admedes Schuessler GmbH

Booth 1084

www.admedes.com

Admedes Schuessler GmbH is the largest OEM manufacturer of precision machined Nitinol implants and medical-device components serving healthcare markets in the United States and worldwide. We specialize in the manufacturing of stents, filters, coupling devices, orthopedic implants, and other miniaturized instrument parts utilizing Nitinol and other medical-grade alloys. Admedes offers a wide range of proprietary micro machining capabilities and advanced laser techniques to expand options for device miniaturization. Admedes is dedicated to provide the highest quality products possible, and to be leaders in the production of high quality, cost effective, customer-specific products which allow healthcare professionals to provide the level of care that their patients expect and deserve.

Microspec Corporation

Booth 1600

www.microspecorporation.com

Precision extrusions, customized excellence. Founded in 1989 and located in rural southern New Hampshire, Microspec Corporation remains a privately owned and managed company producing some of the most challenging medical extrusions required by the medical-device industry. A certified ISA 9001:2000 company, Microspec brings quality to your product design. Microspec is an industry leader in the extrusion of close tolerance extrusions from engineering thermoplastics and elastomers including polyurethane, polysulfone, nylon, polyetherimide and pebax. Our capabilities include but not limited to: single and multi-lumen tubing, bump tubing, co-extrusions, multi-layered walls, over-extrusions, striped and multi-material profiles, solid core guide wire coating, and new concepts.

Metro Mold and Design

Booth 3185

www.metromold.com

At Metro Mold and Design you will find a partner who offers a broad range of capabilities. MMD has been a custom molder for the medical, bio-medical, and pharmaceutical industries for 35 years. MMD has developed a rapid tooling division called ExpressParts. We can take a 3D model from concept to production-ready injection mold in days, not weeks. This rapid tooling and molding is offered in our thermoplastic injection, extrusion blow molding and thermoset divisions. MMD is ISO certified and has Class 100,000 clean rooms for molding and assembly. OEM's depend on MMD as their resource for a total sourcing solution.

Atek Medical

Booth 1372

www.atekmedical.com

Atek Medical is a total solutions partner serving the medical, disposable, electro-mechanical, and implantable device markets. Capabilities include solutions across the value chain, from product design and launch to distribution and post-production fulfillment. Atek Medical has a dedicated, skilled and cross-trained team, including engineers and quality and regulatory professionals. The company has developed and launched more than 350 unique products and specializes in product management and full-service manufacturing. Atek Medical, founded in 1979, is located in Grand Rapids, MI employs over 300 people and recently opened its second facility in Costa Rica.

Value Plastics

Booth 2715

www.valueplastics.com

Value Plastics designs and manufactures proprietary fluid management products for healthcare OEMs. Products include quick-disconnect, blood pressure, luer, tube-to-tube, threaded and bondable fittings in over 10 materials and over 400 configurations. Over 3,100 components are available from stock and designed for use with tubing IDs between 1/16-in. (1.6mm) and 1-in. (25.4mm) Custom configurations are available to suit your needs. Contact us first for superior service and rapid delivery.

Elcan Optical Technologies

Booth 1605

www.ELCANmedical.com

Elcan Optical Technologies is a fully integrated provider of custom, precision optical and electronic solutions for medical, defense & security, industrial and commercial customers. Small start-up companies need Elcan's experience, stability, and talented people, to help bring new products quickly and profitably to market. Large medical corporations appreciate Elcan's innovation, integrated optical and electronics capabilities, as well as our reliable Program Management, to support out-sourcing of critical subsystems and assemblies. Elcan is the ideal medical design and manufacturing partner. We take your innovative medical concepts, add our design for manufacturability and deterministic processes to give you ready-for-market, cost-effective solutions.

Lee Spring Company

Booth 3389

www.pharmamed-spring.com

Lee Spring celebrates its 90th Anniversary as a global manufacturer of mechanical wire springs and formed wire parts, used in wide-ranging medical, pharmaceutical, electronic, industrial, and consumer applications. Lee Spring is ISO 9001:2000 Certified with facilities in the United States, Mexico, United Kingdom, and China. In addition to extensive world-class custom product design and manufacturing capabilities, Lee's print and online catalog features over 16,000 RoHS compliant Stock Springs, including 3000 Type 316 Compression Spring designs and new 17-7 Stainless Redux Wave Springs. Medical applications include pharmaceutical delivery systems, valves, inhalers, infusion pumps measuring devices, diagnostic devices, and many others.

Medical Extrusion Technologies Inc.

Booth 2098

www.medicalextrusion.com

Manufacturer of close tolerance, single and multi-lumen geometries, profiles, FEP heat shrink tubing, wire coatings, and over-extrusions. Additional capabilities include bump tubing, vacuum sizing, co-extrusion, and multi-layer configurations. In-house tooling capabilities. Cut length repeatability to plus/minus 0.010-in. Custom sizes from 0.003 to 1.0-in. OD. Processing for most thermoplastics. Specializing in quick turn around of prototype/production quantities. We now have three locations to serve our customers - California, Minnesota, and Texas. For quotes or information e-mail MET@medicalextrusion.com, fax (951) 698-4347, or telephone (800) 618-4346.

Pulse Systems

Booth 3176

www.pulsesystemscorp.com

Since 1998 Pulse Systems has built a reputation for consistently exceeding customer's expectations. We continue to refine and experiment, and now we've raised the standard again with added capacity and improved capabilities including Nitinol shape-setting and electropolishing of Nitinol, stainless steel and cobalt chromium. Other services include laser welding, passivation, corrosion testing, microabrasive blasting and other turn key solutions that keep us on top of the most dynamic industry - yours. Our quality, speed, and customer relationships have made the difference to hundreds of customers looking for laser-based contract manufacturing. We look forward to showing you the difference the people at Pulse Systems can make.

Aubrey Group

Booth 1656

www.aubreygroup.com

Aubrey Group Inc., located in Irvine, Calif., employs over 40 engineers in its 43,000 sq. ft. facility. We provide services for the design and manufacturing of electromechanical and disposable medical devices. Specialties include disposable cassettes, custom tubing sets, RF generators, wireless communication, fluidics, implantables, blood processing, and cardiovascular assist devices. Services include electronic, software, and mechanical engineering, industrial design, FDA submission, prototypes, and flexible contract manufacturing. Aubrey Group has class 100,000 certified clean room facilities. The company is an FDA-registered developer and manufacturer of medical devices and is ISO 13485:2003 certified.

MicroLumen Inc.

Booth 3031

www.microlumen.com

MicroLumen Inc., high-performance medical tubing. Ideal for critical applications and low-invasive medical devices. Typical applications include cardiovascular and urological catheters, stent deployment and drug delivery systems. Polyimide has excellent mechanical, thermal and chemical properties. Braid and coil reinforced designs available for added flexibility, torque, and column strength. Thermoplastic jackets (Pebax, nylon & urethanes), multi-durometer designs, A-traumatic flexible tips, custom contract sub-assembly, PTFE/FEP liners, and laser machining available. ISO 9001: 2000 and USP Class VI biocompatible.

Featured Links

Boker's 2008 Washer Catalog

Boker's, Inc.'s FREE 2008 Washer Catalog has over 22,000 non-standard sizes available with no tooling charges. A wide range of ODs, IDs and thicknesses, plus 2,000 material variations provide millions of possibilities.

www.bokers.com

News from Medical Design

UPCOMING WEBCASTS

Introduction to Direct Gear Design

Sponsored by AKGears

DATE: January 16th, 2008

TIME: 2:00pm ET

Invention of the gear hobbing process about 150 years ago revolutionized not only gear fabrication, but also gear design. The cutting edge of the hob presents the generating gear rack. The standard universal gear design approach provides gear interchangeability and reduces tooling inventory, however, it also constrains performance for particular gear applications.

This webcast presents the *Direct Gear Design* method — an alternative approach to traditional analysis and design of involute gears, which separates gear geometry definition from the generating rack and tool selection to maximize gear transmission performance for a particular product and application.

[Click here to register!](#)

Power Transmission Technologies: The Advantages and Applications of Belt Drive Solutions

Sponsored by Gates Corporation

DATE: February 19th, 2008

TIME: 2:00pm ET

Today's designers choose from a variety of technologies for transmitting power in mechanical systems. With increasing demands to optimize systems for efficiency, noise, package size and low maintenance, choosing the right power transmission technology for the job is a challenge. Brent Oman with Gates Corporation will share his knowledge about selecting power transmission solutions. The presentation will review the pros and cons of different technologies and demonstrate the various capabilities of belt drive systems in particular.

[Click here to register!](#)

Whitepapers anytime you want them

Medical Design has a whitepaper section on the Web site. Find out how one company made the transition to lean, read a report about the relationship between FDA and industry, and how to choose the right international electrical equipment.

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