November 16-18, 2016 Las Vegas, NV fabtechexpo.com



NEW PRODUCT PREVIEW

A Sample of New Products Set to Debut at FABTECH 2016

Visit fabtechexpo.com for complete details. Register now!



form knowledge



fabricate solutions



weld relationships



finish strong **Thank You** to Our **Platinum Sponsors**



MITSUBISHI LASER

















ENGINEERED BY AMADA

HG 1303 RM Robotic Bending System (Via Live Feed)

At FABTECH 2016, Amada will showcase advanced automated systems and combined process technologies — engineered to maximize your efficiency, quality and profitability. Visit Amada in Las Vegas to witness the North American debut of three innovative machine solutions. The 9kW LCG 3015 AJ fiber laser with automated material handling and the HG 2204 ATC press brake equipped with a patented Automatic Tool Changer will be featured at booth C29037. In addition, the new HG 1303 Rm robotic bending system will demonstrate automated bending of large parts (via live feed from the Schaumburg, IL Solution Center). All three of these leading-edge solutions achieve unprecedented levels of productivity and repeatable accuracy.

You'll also experience the EG 6013 AR — the ideal automated bending solution for small, complex parts and the latest advances in punch/fiber laser combination technology highlighted in the LC 2515 C1 Al. Amada has engineered Process Range Expansion into each of its innovative fabricating systems. For example, the C1 AJ allows you to cut, punch, form

and tap on a single machine. Don't miss this opportunity to verify for yourself how Amada's advanced automation for multiple processes will enable you to:

- Increase productivity and profitability
- Achieve Process Range Expansion while reducing secondary operations
- Seamlessly handle rush jobs and high-mix/low-volume production
- · Substantially reduce lead times and costs

Regardless of your specific manufacturing challenge, Amada has engineered the optimal solution to ensure your green light stays on.



EG 6013 AR Automated Robotic Bending Cell





Amada America, Inc.

LC 2515 C1 AJ Punch/Fiber Laser Combination



SHARPEN OUR LEDGE

FABTECH 2016 will provide the strategies and insight needed to hone your competitive edge for improved quality, productivity and profitability. Come broaden your perspective and experience the future of manufacturing through live product demonstrations, top-notch education programs and networking opportunities. You'll discover the tools for solving today's challenges and sharpen your skills to take on tomorrow.

Get started today! REGISTER NOW at fabtechexpo.com

form knowledg Gain valuable insight from more than 100 game changing sessions and special programs — taught by industry visionaries and in-the-trenches professionals.

weld

With more than 28,000 attendees and networking events on the floor and off, there's plenty of opportunity to meet new contacts and reconnect with old colleagues.

fabricate

Discover new ways to improve quality, productivity and your bottom line as you compare equipment and solutions from more than 1,300 exhibitors.

finish

FABTECH is the number one place to find the latest trends and technologies. The long-term benefits of spending three days at FABTECH are enormous.

TABLE OF CONTENTS

General Show Information	. 3
Hotel & Travel	. 4
Exhibitor List	. 5
New Products	
Arc Welding	
Assembly	
Bending & Forming	
Business Services	
Coil Processing	
Cutting	
Fastening & Joining	
Finishing	. 14
Gases & Gas Equipment	. 16
Inspection & Testing	. 16
Job Shop/	
Contract Manufacturing	
Lasers	. 18
Lubrication	
Maintenance & Repair	
Material Handling	. 22
Other Machinery/	
Equipment/Parts/Products	
Plate & Structural Fabricating	
Press Brakes	
Punching	.24
Resistance Welding	
Safety & Environmental	
Software/Machine Controls	
Stamping	. Zč
Tool & Die	. ZC
Tube & Pipe Fabricating or Welding.	
Tube & Pipe Producing	
Waterjet	
Welding Consumables	
Welding Machines	
Show Special Events	
Education Program	J
Schedule-At-A-Glance	36
- Jone Guille At A Giulle Circini I I I I I I I I I I I I I I I I I I	-50

3 DAYS AT FABTECH EQUALS BIG RETURNS

FABTECH 2016 FEATURES:

- 1,300+ exhibiting companies
- 550,000+ net square feet of floor space
- 500+ new products
- 100+ educational programs
- Special events, unlimited networking opportunities and more!



FABTECH BLUES, BREWS & BBQ

This unique outdoor meeting area located outside Central Hall, is the perfect place to take a break and make new connections.



Open during show days from 11:00 AM until show close.

















START PLANNING TODAY!

LOCATION

Las Vegas Convention Center 3150 Paradise Rd Las Vegas, NV 89109

SHOW ADMISSION

Exhibit-only attendance is FREE through November 11, 2016. Beginning November 12, the cost to attend the exhibits is \$50, AWS, FMA, SME, PMA and CCAL members may always attend the exhibits for FREE with a valid member card.

FABTECH 2016 SHOW HOURS

Wednesday, November 16 | 10:00 AM - 6:00 PM Thursday, November 17 | 9:00 AM - 5:00 PM Friday, November 18 | 9:00 AM - 4:00 PM

HOW TO REGISTER

Register today online at fabtechexpo.com. Or, download a printer-friendly registration form from the website and fax to (508) 743-9696.

EXPLORE LAS VEGAS

Las Vegas remains the No. 1 tradeshow destination and is a 24-hour city that offers something for everyone. Get down to business during the day at FABTECH and at night explore The Entertainment Capital of the World. Find information on the sights and sounds of Las Vegas including dining, nightlife, shopping, local attractions and more at lasvegas.com.



GET THE BEST HOTEL SELECTION AND SAVINGS

Book your stay through on Peak, FABTECH's Official Hotel Provider, for guaranteed lowest rates and big benefits including complimentary shuttle service, hotel parking and no booking or service fees! Reserve your rooms early for the best selection and price - hotels sell out quickly.

Visit fabtechexpo.com/accommodations



DOWNLOAD THE FABTECH MOBILE APP

The FABTECH app provides quick and convenient access to show information on the go! Find exhibits, a floor plan, education program, special events, an agenda planner and more.

Download today at fabtechexpo.com/mobile-app.







Exhibitor List (as of 9/2/16)

Explore equipment and services from leading companies in the metal forming, fabricating, welding and finishing industries. Go to fabtechexpo.com for the most up-to-date exhibitor list.

FINISHING & COATING ACT Test Panels LLC Adhesive Systems Inc AFC Finishing Systems AkzoNobel Powder Coatings Alconox Alliance Manufacturing Inc Allied Photo Chemical Inc Allied Powder Coating American Finishing Resources American Industrial Sales LLC Amiberica Inc Anest Iwata USA Inc APFI International Argon Masking Corp Arkema Inc Asterion LLC Astro Chemical Co Inc Axalta Coating Systems AZZ Galvanizing Services Baril Coatings USA BASF Corp Bayco / Guspro Inc Bex Spray Nozzles Blast Cleaning Technologies Blastechnik Pte. Ltd. Blastman Robotics Ltd **Bulk Chemicals Inc Burleigh Industries** Calvary Industries Inc Cardinal Paint and Powder Carlisle Fluid Technologies Castrol Cataforesis SA de CV Catalytic Combustion Corporation Catalytic Industrial Systems CFCM Canadian Finishing & Coatings Manufacturing Cheil Grinding Wheel USA Inc Chemetall US Inc Chemical Coaters Assoc Int'l Chemtec North America LLC ClearClad Coatings LLC Clemco Danmark A/S Col-Met Engineered Finishing Solutions Columbus Industries Inc Combustion and Systems Inc Coral Chemical Co Custom Fabricating & Supplies Daifuku North America - Jervis B Webb Company Dan Am Company - Sata Spray Equipment Decoral System USA Corp DeFelsko Corp Dinamec Systems DMP Corporation Dosatron International Inc. Doucet Machineries Inc DuRois Chemicals Inc. Durr Systems Inc. Echo Engineering Eisenmann Corp Elcometer Inc Electrocoat Association, The Ellis Paint Company Empire Abrasive Equipment Engineered Finishing Systems Enhancement Technologies / Miroglio Textile EPSI (Engineered Products & Services Inc) Fryin Industries Euroimpianti Srl Eurosider S.a.s. EXEL North America Express Chem LLC Fairsky Industrial Co I td Filtermedia SRL

FINISHING & COATING Goff Inc Graco Inc HafcoVac Hammond Roto-Finish

Hedson Technologies North America Henkel Corp Hentzen Coatings Inc. Heraeus Noblelight LLC Herr Industrial Inc Hubbard-Hall Inc. IFS Coatings Inc

IGP North America LLC IHI lonbond Inc Intek Corporation IntelliFinishing International Thermal

Systems LLC IST International Surface Technologies
Jamestown Coating Technologies Keyland Polymer Ltd

Klinger Paint Co Kolene Corporation Kyzen Corporation LDPI Inc. LPI Inc

Magic Rack/Production Plus Corp Metal Coaters MetoKote Corp Micro-Surface Finishing Products

Midwest Finishing Systems Mighty Hook Inc NikoTrack LLC

Nordson Corp Novacel Parker Ionics Paul Gardner Co Peening Technologies PEM Inc

PhoenixTM LLC Plotterstore Pneu-Mech Systems Mfa Poli-Film America Pollution Control Products Co.

Polymer Molding Inc Powder Coating Powder Coating Institute Powder Parts Inc. PPG Industries Inc Precision Quincy Ovens LLC

PriceWalgren a division of George Koch Sons Products Finishing

Protech Powder Coatings Quaker Chemical Corporation QuickLabel Systems **Banid Cure Technologies** Raptor Blasting Systems

Reading Technologies Inc Reliant Finishing Systems Rhodes Systems International Inc Richards-Wilcox Inc.

Roberts Sinto Corp RRAMAC Connected Systems

Sankyo Rikagaku Co Ltd Sculpt Nouveau Selas Heat Technology Sherwin Williams sia Abrasives

Southern Systems Inc. Spray Systems Inc Spray Tech/Junair Stanza Machinery SuperMax Tools System Technologies

Vitracoat America Inc

TCI Powder Coatings Fischer Technology Inc Therma-Tron-X Inc Fluke Corporation Tianson Co Ltd Fluke Process Instruments Transmet Corp Trimac Industrial Systems Fostoria Process Equipment Uni-Spray Systems Inc Fuji Tool Co

Gema USA Inc General Automatic Transfer United Industries Inc United Surface Solutions General Fabrications Corp V&S Galvanizing LLC George Koch Sons LLC Valmont Coatings Vincent Clad Metals Corporation Gibson Abrasive Equipment LLC **Global Finishing Solutions** Vitaflex Llc

FINISHING & COATING

Vogel Industrial Coatings VULKAN Blast Shot W Ahrasives Wagner Systems Inc Walther Pilot North America LLC Webb-Stiles Co Yeuell Nameplate & Label Yingtan Jiangnan Copper Industry Co Ltd

FORMING & FABRICATING

1960 Seravesi SRL ABIMAQ - Brazilian Machinery and Equipment Association Accurnress America Inc. AccuStream Inc Advanced Machine & Engineering ADVANCED Motion Controls Ajan Elektronik Servis Sanayi Ve Ticaret Ltd St AKS Cutting Systems Inc. Alliance For American Manufacturing Alliance Machine and

Engraving LLC Alliance Steel LLC Allied Machine & Engineering Corp Allied Powers LLC Allor Manufacturing Inc/

Plesh Industries Allstrap Steel & Poly Stranning Systems Alro Steel Corporation

Alternative Parts Inc. AM Machinery Sales Inc Amada America Inc. Ambrell Induction **Heating Solutions**

American Cutting Edge American Photonics American Punch Co. American Technical Publishers

AMS Controls Inc ANDRITZ Herr-Voss Stamco Inc Anhui Huatian Mechanic Co Ltd ANSYS

AP Lazer Apex Machine Group Apex Precision Technology Corp Armstrong Kover Kwick Inc

ARNTZ Inc Arro-Mark Co LLC Arrowhead Manufacturers &

Fabricators Assoc ASC Machine Tools Inc ASKO Inc. ASTES4

Atlanta Drive Systems Inc Automec Inc AXOOM GmbH

Azarbod Inc Barton International Baykal Makine san ve tic A.S. Beck Automation

Beckhoff Automation Behringer Saws Inc. BEKO Technologies BELFAB

Betenbender Manufacturing Inc Bic Tool Co Ltd **Big Ass Solutions** Black Hills Cornoration

Blastec Inc Blue Chip Engineered Products Inc Blue Water Engineering Pty Ltd BOFA Americas Inc Boldrini Srl - Roundo Division

Bosch Rexroth Corp Boschert Precision Machinery Inc Bowlin Manufacturing Inc Roy On Demand Bradbury Co Inc Bradbury Group Australia Bradbury Group PuMa

Bradbury Metal Tile

Roofing Solutions

FORMING & FABRICATING

Braner USA Inc Brass Knuckle Protection Burghardt + Schmidt GmbH Burnco Mfg Inc - Prodevco Robotic Solutions Burns Machinery Inc. Burny Burr King Manufacturing Co Bushman Equipment Butech Bliss BUWW Coverings Inc

Bystronic Inc C Marshall Fabrication Machinery Inc Cambco Inc Camlock Systems Carell Corporation
CASTEM HOUSTON LLC.

Centricut CH Steel Solutions Inc Changzhou City Wansui

Chemtool Incorporated Chicago Slitter China Union Material (Shanghai) Co Ltd

Choice Waterjet Parts Cidan Machinery Inc. Cincinnati Inc CLARCOR Industrial Air | UAS Cleveland Punch & Die Co. Cleveland Steel Tool Co

CMF CMS North America Inc CNA Insurance CNC West COAIRE Inc Coherent Inc Coldwater Machine Co

COLE-TUVE Inc Combilift USA COMEQ Inc CONCOA Inc Controlled Automation Inc Cornerstone Capital Partners

Cosen Saws Costa Sanders Cowles Tool Co Creaform

CT Kesme Teknolojileri ve mak san Tic Ltd STI CTD Machines Current Inc Custom Rollforming Corp

Daito USA Inc Dake Corporation

Dalian Zhengshen Stainless Steel Precision Components Co Ltd Dalmec Inc. Darex LLC

DAVI Inc DCM Tech Inc Delta Steel Technologies Desert Diamond Industries Design Data

Design Storage & Handling Inc Design-2-Part Diamond Wire Spring Dimeco Coil Technologies Inc Dimide Clamps

Dimplex Thermal Solutions Disston Tools DoALL Sawing Products Donaldson Torit -

Donaldson Company Inc Doringer Cold Saws Douglas Steel Supply Co Dreistern Inc Durma USA

E Jordan Brookes Co Eagle Bending Machines Inc Eastern Metal Supply Ebbco Inc Eberle America Inc Econco/CPI

Edwards Manufacturing Co FHRT North America Electrex Inc Elumatec North America Inc Emmeai USA Inc Epilog Laser Corp

FORMING & FABRICATING

Ercolina - CML USA Inc ESCO Tool Co Exact JobBOSS F & B Manufacturing Llc Fab Shop Magazine Direct Fab Supply Inc Fabricating & Metalworking Magazine Fabricators & Manufacturers Association FabSuite LLC FabTrol An AVEVA Group Company Faccin USA Inc FANDELI Coated Abrasives FARO Technologies Inc Fascut Industries Fastenix Felton Inc FF Journal/Modern Metals Ficep Corporation Fixtureworks Fladder-Hansen & Hundebol Inc Flexarm Inc Flow International Corp FluidForming Americas FomUSA

Formlahs FreePoint Technologies Inc FSInspection FST Fabrication Solutions & Technologies Fuji Electric Corp Of America

Fuiitsu Glovia Inc Gas Control Systems Inc Gasparini SpA Genius Solutions Gentec Electro-Optics Global Shop Solutions GMA Garnet USA Corp GMC Machine Tools Corp

Golden Aluminum Inc Gorbel Inc Graitec Inc Green Valley Manufacturing Inc Gripnail Fastening Systems GrishamWorks LLC

GSM America Inc. Guanghe Industry (Hong Kong) Co. Ltd H20 JET Inc Haberle / Ken Bergman &

Associates LLC Haco-Atlantic Inc Haeger Inc HAEUSLER AG Duggingen

Hafendorfer Machine Inc Hako CNC Machine/Accurl (Anhui) Manufactory Co Ltd. Hangzhou Ailong Metal Products Co Ltd

Hangzhou Xiangsheng Abrasive Machine Manufacturing Co. Ltd Han's Laser / Gromax Enterprises Corp

Hans Weber Sales and Service Corp Hayes International HE&M Saw Inc. Hexagon Manufacturing Intelligence

Hiwin Corporation Hornet Cutting Systems Hougen Manufacturing Inc Husky Rack & Wire Hyd-Mech Group I to Hydren Systems LLC Hypertherm Inc igus Inc

II-VI Infrared IMSM Inc Industrial Assets Machinery Industrial Machine Trader Industrial Machinery Digest Industrial Magnetics Inc Industrial Market Place

Industrial Molded Rubber Industrial Photonics a Photonics Media publication Infor InfoSight Corp

FORMING & FABRICATING

InnovMetric Software Inc Integrous Steel Software Solutions International Knife & Saw Inc International Technologies Inc INTERTEK lowa Area Development Group IQMS

IRON ISB Iwatani Corp JET

Jet Edge JETCAM-NestONE Solutions Jinan Bodor CNC Machine Co Ltd JMR Industrial JMT USA Jobscope ERP

Jorgensen Conveyors Inc KAAST Machine Tools Inc Kaspar Manufacturing Kasto Inc KRS Dished Heads

KD Capital Equipment LLC Keller USA Inc Kelly Services Kentek Corp Laser Safety Div Kern Laser Systems

Ketec Precision Tooling Inc KeyedIn Manufacturing Software Solutions Kinetic Cutting Systems Inc

Kinn Inc. KMT Waterjet Systems Inc Kolev Engineering Inc Kurimoto Ltd Laguna Tools Lantek Sheet Metal Solutions LAP Laser

Laser Experts / NUKON Laser Marking Technologies LLC Laser Research Optics Laservision Lazer Safe Ptv Ltd

LENOX® Lincoln Electric Co LISSMAC Corp LS Industries Inc LT Ultra Precision Optics

LVD Strippit Machinery Dealers National Assoc Malico Inc Manrepco Inc

Manufacturing News Manufacturing Solutions Marion Die & Fixture Inc Marvel Manufacturing Co Master Magnetics Mate Precision Tooling

Mazak Optonics Corp MB Metal Technologies LLC MC Machinery Systems Inc Measurement Systems Intl a Rice Lake Weighing Systems Brand MECCO

MegaFab-Piranha-Whitney-Messer Cutting Systems Metal Center News Metal Supermarkets Service Company Inc MetalFinish LLC MetalForming Inc Metalix CAD/CAM Ltd

MetalMizer MetaMation Inc Metform International Ltd MetIsaw Systems Inc Metreel Inc MG Midwest Tool Inc

MIE Solutions Inc Millner Haufen Tool Company Minnesota Department of Employment and Economic Development Mittler Bros Machine & Tool Modern Manufacturing Technologies Intl Mohawk Machinery Inc

Morton Machine Works

FORMING & FABRICATING

MPI Magnetic Products Inc MTC Bamieh Srl Muller - Load Containment Solutions MultiCam Inc Murata Machinery USA Inc. MVD INAN Machine Tools Industry MVD Machine Ind Nadella Inc Nantong Reliantt Co Ltd Nebraska Public Power District New Electric New Hampshire Industries Ningbo Langyi Metal Products Co Ltd Nitto Kohki USA Inc

NOMMA Fabricator Norlok Technology Inc North American Safety Products Inc. NUKON USA Oasis Scientific Inc O'Brien Installations Ltd

Ocean Machinery Inc Oerlikon Balzers Oerlikon Metco (US) Inc Ohio Laser LLC OMAX Corp

OMCO OmegaCube Technologies Oncor Ophir Optics LLC

Ophir Spiricon LLC ORBIS Corporation Osai Usa Otto Trading Inc Oxford Instruments Pacific Press Technologies Packsize International LLC

Pangborn Corporation Pannier Corp Paper-Less LLC Parker Hannifin

Gas Separation and Filtration Pat Mooney Inc Paulo PCI Gases Peddinghaus Corp

PEP Technology Perfection Global LLC Permadur Industries Inc. Peter Prinzing GmbH Polyurethane Products Corp Precision Saws Inc. Press Brake Safety Prima Power North America Inc.

Project Tool & Die Inc PythonX - A Lincoln Electric Company Qnect LLC Quality Vision International Quantum Machinery Group

Quarld Ltd Lianyungang Radan RAS Systems LLC Raziol Zibulla & Sohn GmbH RDI Laser Blanking Systems Red Bud Industries Reservoirs Despres Tanks Retro Systems LLC Rhino Cutting Systems

Richardson Electronics Ltd Rigidized Metals Corp Rocklin Manufacturing Co Rodman Drill Roller Die + Forming Co Roper Whitney Rosler Metal Finishing USA LLC ROUNDO

Rousseau Metal Inc RWM Casters Co Rverson SafanDarley BV Saimen Sakura of America

Salsco Inc Salvagnini America Inc Samco Machinery Ltd Sawhlade com SB Whistler & Sons Inc Schelling America Inc

FORMING & FABRICATING Schneider Electric Scotchman Industries Inc. Semyx LLC Service Lamp Corp SES Salico Finishing and Processing LLC Shandong Jinfu Tools Co Ltd Shanghai Tongai Precise Aluminum Alloy Mfg Co Ltd Shaoxing Inbon Machinery Co LTD Shop Data Systems Inc Shoptech Software SICK Inc SigmaTEK Systems LLC Site Location Partnership (SLP) Size Metal Inc. SKM Industries Inc. Slatpro Tools Smartware Group SME Soitaab USA Inc SPANCO Inc Special Springs LLC SPI Lasers Splawn Belting Inc Spotti Sergio Coil Processing SRI Spraying Systems Co Spyraflo Inc SSC Controls Co. Stainless Structurals LLC STAM SnA State of Wyoming Steel King Industries Inc Sterling Machinery Stratasys Inc Striker Systems STRUMIS LLC Superfici America Inc Supra Machine Tool Syspro TAB Industries LLC Tapeswitch Corporation Team Oregon Advanced Manufacturing TECHNI Waterjet Technical Translation Services Tecnomagnete Inc TeraDiode Inc TESAR S.p.A. The Bradbury Group The Extractor
The FABRICATOR The M K Morse Company The Right Corner of Texas TigerStop LLC Timesavers LLC Tooling II - SMF Toolmen Corp Torchmate Total Cut CNC Travelers Indemnity Company Tribogenics Inc Tri-Chem Corp Trilogy Machinery Inc Trimble Trim-Lok TRUMPF Inc. Tseng Yih Industrial Co LTD HGS UniPunch Products Inc United Lens Co Universal Drilling & Cutting Equipment US Industrial Machinery Co Verisurf Software Inc VERNON Tool Viking Blast & Wash Systems Virtek Vision International VISUAL ERP Software VKS - Visual Knowledge Share Voortman Corporation VvTek W F Wells Inc Wachs Services - Wachs Fabrication Group Walker Magnetics Wateriet USA LLC Welser Profile GmbH Wemo International B V Wendt Machinery Movers Wheelabrator Group Wila USA Williams Metals and Welding Allovs Inc Wilson Tool International Workshops For Warriors Worthington Industries

FORMING & FABRICATING

YESTOOL / Aloris USA Yoshikawa Iron Works Co Ltd ZEISS Industrial Metrology LLC

METALFORM 3D Systems, Cimatron Software AAF International ABC Metals Inc Accurate Die Design Software Inc./Logopress3 Agathon Machine Tools Inc AIDA-America Corp Alma Machinery Co Almco Inc Almetals Company Anchor Manufacturing Group Inc Anshan Hafen New Material AP&T North America Inc. ART Technologies Inc Atago USA Inc Autodesk Inc. AutoForm Engineering USA Inc Automated Tapping Systems Bad Dog Tools Balluff Inc Beckwood Press Co Benteler Maschinenbau GmbH Restar LLC BesTech Tool Corp Bohler Uddeholm Corp Brown Boons Machine Co. Bruderer Machinery Inc Buderus Edelstahl Gmbh Cadence Inc Century Spring Corp Champion Tools China TJK Machinery Co Ltd COE Press Equipment Corporation Colt Automation LTD Dallas Industries Inc DAYTON Lamina Corporation Deere Minmetal Group Co. Ltd Dees Hydraulic Industrial Co Ltd Delta Computer Systems Inc. DG Associates Digital Lumens Dirinler AS Dongguan Changhong Metal Technology Co LTD Dongguan Gooming Mechanical Co Ltd Dongguan Pinyi Automation Technology Co Ltd Dongguan SYH Tooling Co Ltd DTC Products Corporation Durable Superior Casters Dvnaform/ETA Dynamatic Fanle Metals EAS Mold & Die Change Systems Inc ECi M1 EECCO Inc Empowering Technologies Engineered Components Enprotech Industrial Technologies Epicor Software Corporation Erectastep Erickson Metals Corp ESI North America Etna Products Inc Eurolink Inc Excelsior Hardware & Plastic Co I td F & G Tool and Die Co Fagor Arrasate Feed Lease Corp Fibro Inc Forming Technologies Inc FORMTEK-ME Fox Valley Spring Co LLC Fuchs Lubricants Co. Fuxin Jiufeng Hydraulico Co. Ltd Gefran Gipontech Company Limited GoMeasure3D Greenerd Press & Machine Company Inc Gruber Tool & Die Inc G-W Group Hangsterfer's Laboratories Inc Hefei Metalforming Intelligent

Manufacturing Co Ltd

Hilma Div Carr Lane Roemheld

Heim Group, The

HINNLI CO LTD

Heraeus Electronics

Hitachi Metals America

Hennia Inc

xTuple-World's #1 Open

Source ERP

Yangli Group Co Ltd

METALFORM Hong Kong Metals Manufacturers Association **HONGJU Automotive Components** Tool & Die Co Ltd Houghton International Inc. Hsin Fu Chia Industrial Co Ltd HTM Sensors Hutchison Tool Sales Co Hydraulico as Industrial Innovations Inc Intercomp Interlaken Technology International Mold Steel IV-S Metal Stamping Inc Jarvis Cutting Tools Ji' An RuiPengFei Precision Technology Co. Ltd Jiaxing Everis Hardware Manufacturing Factory JIT Automation Inc J-Tech Kaeser Compressors Inc Kayser Ltd KDDL - Eigen Kinfine Tool & Die Co. Ltd. Kleen Performance Products Komatsu America Industries LLC Kosmek USA Koyatch Castings Inc. Kovinoplastika Loz D.D. Kunshan Dersun Precision Mould Co I td Kunshan Eagle Precision Tooling Co Ltd Lakeside Casting Solutions LLC Latrobe Specialty Metals Distribution Lauffer GmbH & Co KG Lee Contracting Inc Lenzkes Clamping Tools Inc Liaoning Fu-An Heavy Industry Co. Ltd Linear Transfer Automation Inc Link Flectric & Safety Control Logopress3/Accurate Die Design Software Inc LSP Industries Inc Lucky Harvest Co Ltd MachineMetrics Macrodyne Technologies Inc Mayfran International Inc Meccanica Rossi USA Corp Metalloid Corp MetalRustGuard MJC Engineering & Technology Inc Moeller Precision Tool Multipress Inc Neff Press Inc.

Nidec Minster Corp Ningbo Goanwin Machinery Manufacturing Co Ltd OGS Industries OMCG North America Orijmec Corporation of America Orttech Inc Overton Industries Ozkoc Hidrolik Makina San Ve Tic AS P/A Industries Inc Pacesetter System

Pax Products Inc. PEE WEE GmbH Penn United Technologies Inc PennEngineering Peterson Spring Philnott Rubber Lankhorst Mouldings Plex Systems

Pottiez America LP

Precision Metalforming Association Precision Punch Corp Precision Stamping Products Precision Steel Warehouse Inc. Prescor LLC Press Room Equipment Co Pressroom Electronics Inc Pronic Inc Proto Labs Inc

Punch Press Ready Technology Inc Ross Controls Ross Technology Corp **RUF Briquetting Systems** Ruian Jianxin Machinery Manufacturing Co Ltd Sangiacomo Presses Americas LLC SB Specialty Metals LLC **METALFORM** Schuler Incorporated schwartz Gmhh SelfLube Serapid Inc SEYI-America Inc. Shandong Yanggu Jingyanggang Precision Co Ltd Shenyang Metal Tech Co. Ltd Shenzhen HuaYuanDa Technology Co Ltd Shenzhen Meinie Tool & Die Co I td Shop Floor Automations Inc ShopEdge Software Inc ShopFloorConnect SIMPAC Inc Solar Atmospheres Soph Inc Stamtec Inc Starrett Company Stripmatic Products Inc Strothmann Machines & Handling GmbH Superior Die Set Corp Sutherland Presses Telos Global LLC Toledo Integrated Systems Toptime Precision Electronics Co Ltd Torque Technologies Inc. Torspec International Inc Tower Oil & Technology Co Trans-Matic TURCK Inc Ulbrich Stainless Steels & Special Metals Inc Ultratech Tool & Design Inc Unisorb Installation Technologies United Aluminum Corp United Machine Corp United Performance Metals Van-Am Tool & Engineering LLC Vaughn Manufacturing Co Versatility Professional Tool Storage VIA Information Tools Inc Vibro/Dynamics LLC Victory Tool Vidir Machine Inc Voith Turbo Inc Weld Systems Integrators Inc Wilco Inc Wilson Tool International Wintriss Controls Group LLC Wuxi Micro Research Precision Press Parts Co. Ltd WuXi QuanSheng AnRen Machinery Co Ltd Wysong Xinyongxu Metal & Die (shenzhen) Co Ltd Yih Shen Machinery Co. Ltd (YSM) Yong Da Precision Mould (Dong

TUBE & PIPE 3D Fab Light

Guan) Co Ltd

Zapp Precision Strip

Zerust Corrosion Solutions

Yuyao Jinggiao Hardware Factory

5 Star Engineering and Maintenance Accurate Technology Inc Accurex Measurement Inc Addition Manufacturing Technologies Advanced Tubular Technologies Inc AIM Inc Ajax Tocco Magnethermic Corp Allied Powers LLC Alpine Bender Machinery Ampco Metal Inc ASMAG USA Inc Bend Tech Bihler of America Inc BLM GROUP USA Corp Rollhoff USA Bonal Technologies Inc Brandt Engineered Products Ltd Cambridge Vacuum Engineering Cefla North America CHIYODA / MARUKA Clark Fixture Technologies CMP Automation COB Industries Inc. Combilift USA Comco USA Inc. Craters & Freighters Crippa USA LLC

Tools for Bending

Tube & Pipe Technology

Tube Form Solutions

Tube Works Inc

Tubing Central

Tusco Tube

Unison LTD

Tube Bending Concepts Inc.

Tubeshark and Accu-Tapper

Tubex Technology Machinery

Universal Controls Group

Universal Tube & Rollform

Equipment Corp

US JaClean Inc

Vulcan Tool Corp

Universal Tool & Engineering

TUBE & PIPE

CTA Amercas Current Tech Cy Laser America LLC Design Storage & Handling Inc DEWALT - Power Tools & Abrasives Diamond Saw Works Inc Doerrenberg Edelstahl Gmbh Dynabrade Inc Eddytech Systems Inc WELDING eldec LLC EnergynTech Inc 3М Euroboor USA Euromaquina S.L. Exact Pipe Tools Inc FabPro1 FD Machinery FIT RITE Systems LLC AGT Robotics Aimtek Inc. Flange Armour Inc. FOCUS GmbH Airgas Inc. Fontijne Grotnes North America Alabama Laser Formdrill USA Inc. Fromm Packaging Systems Alfra USA LLC Gem Tool Corporation Allcryo Guild International HGG Profiling Equipment BV Horn Machine Tools Inc HOSO Metal Co Ltd Huth - Ben Pearson International LLC IMC Marks LLC Innovative Tube Equipment Corp INNOVO Corp J & S Machine Inc Kent Corp Kistler Machines AMFT Inc. Amico Power LANS Company Inc Lillbacka USA Lomar Machine & Tool Co Mactech On-Site: Field Machining Solutions Manchester Tool & Die Inc Arc Products Manufacturing Solutions Industries Inc MARIJHIDE KOKI CO ITD Metalloid Corp Artotic Metronor Inc. Mill Masters New Form Tools Ltd Mount Nucor Buildings Group Numalliance Inc OMNI-X USA AUTOIT Co Ltd Overton Industries Pan Taiwan Enterprise Passline Performance Patterson Fan Co PDM Steel Service Centers Inc Axelent Inc Pensa Lahs / D L Wire ΔΧΧΔΙΒ ΙΙSΔ Pillar Induction Pines Engineering Polytec Inc Production Tube Cutting Inc PROTEM USA LLC Proto-1 Manufacturing Qatar Steel Industries Factory REA Elektronik Inc Beveler USA RF System Lab Roland Industrial Electronics LP Bluco Corp Roll Machining Technologies & Solutions Saar Hartmetall USA LLC Sage Automation Inc Samuel Packaging Broco Rankin Systems Group Sanderson Machines Ltd Schwarze-Robitec GmbH Schweissen & Schneiden SST Forming Roll Inc Bullard Canaweld Inc Starbend Srl T&H Lemont CANTESCO® T-DRILL Industries Inc. Tenryu America Inc CEL Thermatool Corp

TUBE & PIPE

WAFIOS Machinery Corp Walhonde Tools Inc Watts Specialties Inc Wauseon Machine & Manufacturing Inc. Weil Engineering North America Winton Machine Company Xuyi Titan & Material Co Ltd YLM USA Inc

ABB Inc-Robotics ABICOR BINZEL Accuracy Machine Ace Industrial Products Airflow Systems Inc Alabama Robotics Technology Pk A-Line Pipe Tools Inc Allegro Industries ALM Positioners Inc American Innovative Manufacturing LLC American Society For Nondestructive Testing American Torch Tip Co Inc American Welding Society American Wire Research Andersen Industries Inc Anthony Welded Products Inc Antra Technologies Co Ltd Aquasol Corp Arc Machines Inc ARC Specialties Inc. ArcLabs Welding School ARCON Welding Equipment LLC ASSA ABLOY Entrance Systems Associated Technologies Weld ATI Industrial Automation Auburn Manufacturing Inc Automatic Welding Wire Company, Inc. Avani Environmental Intl Inc AVS Industries LLC B&B Pipe & Industrial Tool Becken Technology Development Limited Beijing Essen Welding & Cutting Fair Beijing Metals & Minerals Corp BESSEY Tools North America Beveltools Blackbird Robotics North Ameri Bob Dale Gloves Bore Repair Systems Inc Boss Products LLC Bradford Derustit Corp **BTIC America Corporation** BTM Company LLC Buffalo Shrink Wran BUG-0 Systems Capital Weld Cleaners CEIA USA CENIT North America Inc Cepro International Cerbaco Ltd CGW-Camel Grinding Wheels USA Changzhou Asia Science & Technology Co Ltd Changzhou Golden Globe Welding & Cutting Equipment Co Ltd Changzhou Huarui Welding & Cutting Equip Co Ltd Changzhou Shine Science & Technology Co Ltd Changzhou Wow International Trade Co Ltd

Changzhou Zhengyang Welding

Material Co Ltd

Technology

Hotfoil EHS Inc

WELDING Chart Inc Chicago Pneumatic Tool Co Cibo NV CK Worldwide Clamptek USA Inc Cloos Robotic Welding Inc Cold Jet Complete Filtration Computers Unlimited Continental Abrasives Controlled Automation Inc COR-MET INC Coxreels Inc CS United Inc Cuda Grit Cyl-Tec Inc D/F Machine Specialties Inc. Dakota Ultrasonics Danatronics Inc Dataweld Inc DBM Automatizacion SA De CV Dengensha America Corp Diagraph MSP an ITW Company Diamond Ground Products Inc DIG Automation Engineering Dino-Lite Scopes (BigC) Dinse Inc Direct Wire & Cable Divel Inc. Diversitech Dr Shrink Inc DualDraw LLC Dynamic Laboratories Dynatorch Inc E. H. Wachs Easom Automation Systems Inc Eisele Connectors Inc Elderfield & Hall / Pro-Fusion Electron Beam Technologies Inc. Encompass Machines Inc Ensitech
ESAB Welding & Cutting Products ESTA Extraction USA LP Fagor Automation Corp. Fairsky Industrial Co Ltd FANUC America Corp Farina (Jinan) Weldtec & Machinery Co Ltd Fastenal Company Fein Power Tools Inc Filter 1 Flame Technologies Inc Flange Wizard Tools FlashCut CNC Flexovit USA Inc Forney Industries Inc Fronius USA LLC FumeVac Fusion Inc. G&J Hall Tools Inc G.B.C. Industrial Tools S.p.A. Ganzhou Hongfei Tungsten & Molybdenum Materials Co LTD GF Schmidt Inc. Gemtex Abrasives Genesis Systems Group Genstar Technologies Inc. Goff's Enterprises Inc Golden Eagle Minmetals(Beijing) Wldg Materials Co Goldland Industrial Co LTD Goss Inc Greenweltech Gudel Inc Gullco International Hangzhou Sida Machinery & Flectronics Co. Hangzhou Topwell Technology Co Itd Hankook Weldtek Co Ltd Harbert's Products Inc/Allied Flux Reclaiming Ltd Harris Products Group HBS Studwelding Inc Hebei Xinyu Welding Co. Ltd. Heck Industries Helvi S.p.A Henan Huamao Metal Materials Co Ltd Hermes Abrasives Ltd Heron Machine & Electric Industrial Ltd Heshan Wode Tungsten & Molybdenum Co Ltd Hisco HIT Welding Industry Co Ltd Hobart Brothers Hobart Institute of Welding



"Off the line" capability backed by science. A lifetime of value backed by service.

At COE Press Equipment, our goal is your productivity. We demonstrate our coil processing equipment performance through analysis and hard numbers — not by sales talk — so you always receive the best machine for your operation. And, our proactive service team ensures that you continue to perform optimally, maximizing uptime and profitability.

The best equipment. The best service.



586-979-4400 COEPRESS.COM Check out COE's service van in booth C12060 at FABTECH to learn more.



WELDING

Hubei Zheyu (Goldsense) Machinery & Equipment Hypertherm Inc IBEDA/Superflash Compressed Gas Equipment Inc Ideal Welding Systems LP igm Robotic Systems Inc Imperial Systems Inc Industrial Air Solutions Inc Infra S.A. de C.V. Innerspec Technologies Innovative Product Ideas LLC Interactive Safety Products Inc Intercon Enterprises Inc International Welding Technologies Inc InterTest Inc. IPG Photonics IRCO Automation Inc. Ironworkers Management Progressive Action Cooperative Trust (IMPACT) IVEC Systems JASIC Technologies America Inc Jennings Weld Gauge Co LLC Jiangsu Guotai International Group Guomao Co Ltd Jiangsu Haoguanjia Rubber Industry Co. Ltd Jiangvin Xinlian Welding Equipment Co Ltd Jinzhou Special Welding Electrode Co Ltd Jisheng Electric Machinery Co Ltd JLC Electromet Pvt LLC John Tillman Co Joysun Ahrasiyes Co I to JP Nissen Co JR Automation Technologies Kalas Wire Inc. Kawasaki Robotics (USA) Inc Kayo Products Co Ltd. Kemper America Inc Kent Stud Welding Co Ltd Klimawent USA LLC KLINGSPOR Abrasives Inc Kobelco Welding of America Inc

WELDING

Koike Aronson Inc Koike Aronson Inc/Ransome Kugler of America LTD KUKA Robotics Cornoration Laboratory Testing Inc LA-CO Industries Inc Laiwu Taishan Sunshine Welding Materials Co Ltd Laizhou Hongyuan Bench Vise Manufacture Co Ltd Laser Mechanisms Inc Laserline Inc. Lasermet Inc LaserStar Technologies Corp Lianyungang Orientcraft Abrasives Co Ltd Liberty Glove and Safety Inc. Liburdi Automation Inc Lincoln Flectric Co. Linemaster Switch Corp LONGEVITY Global Inc LORD Corporation Luvata Ohio Inc Lynn Welding Magnatech LLC Magnum Reels Makita Industrial Tools Maryland Brush Co Mathey Dearman Matsumoto US Technologies Inc McDantim Inc MCR Safety Meltric Corp Mercer Industries Meta Vision Systems Inc Metal Man Work Gear Co. Metal Science Technologies Pty Ltd Michigan Pneumatic Tool Inc Midallov Miller Electric Mfg Co MK Products Inc Morris Engineering Works Ltd MSC Software Corporation

WELDING MTA-IISA I I C

Multi-Contact USA Murrplastik Systems Inc Nation Wide Products National Standard Navus Automation NBM Metals Nederman LLC Nelson Stud Welding Inc New Fire Co Ltd Newland (Tianjin) Welding Wire and Metal Products Co Ltd. Ningbo Kimpin Industrial Pte Ltd Ningbo Powerway Alloy Material Co I td Ningbo Qisheng Welding Tools Ningbo Starex Welding & Cutting Tech Technologies nLIGHT Corp Norton | Saint-Gobain Nuova C.M.M. Srl OCTOPUZ Inc Optrel Inc OR Lasertechnology Inc Orbitalum Div / EH Wachs OT-AWT (Wenling) Machinery Co I td OTC DAIHEN Inc Oxylance Inc Pador Marketing Group Panasonic Factory Solutions Company of America Pandiiris Inc PDS Bartech Inc Pearl Ahrasive Co PFERD INC Phoenix International Inc Plasma Automation Inc. plasmo USA LLC

Plymovent Inc

Polymet Corp

Praxair Inc

Precitec Inc

Pro Spot International

WELDING

Production Design Services Inc (PDSI) PROFAX / LENCO Professional Plastics Inc. PTR-Precision Technologies Inc PushCorp Inc Pyro Shield Inc Qingdao Everbest Trading Co Ltd Radyne Corp Rasco FR Red Rock / Romar / MEC LLC Reel Quality Products Inc. Revco industries Inc (Black Stallion / BSX) Rex-Cut Abrasives Rite Hite Machine Guarding Robots At Work RoboVent Rolled Alloys RoMan Manufacturing Inc rose plastic USA LLLP Saf-T-Cart Inc Sandvik Materials Technology SanRex Corp Schaefer / Pinnacle Climate Technologies Schnelldorfer Maschinenbau GmbH SciAps Inc Sellstrom Manufacturing Co. Servo-Robot Inc SFA Companies Shandong Aotai Electric Co Ltd Shandong Huaye Tungsten & Molyhdenum Co I td Shandong Juli Welding Co LTD Shanghai Gas Welding Equipment Co Ltd Shanghai Huawei Welding & Cutting Machine Sales Co. Ltd. Shanghai TAYOR Heavy Industry (Group) Co Ltd Shanghai Welding & Cutting

WELDING

Shenzhen Action Welding Technology Co Ltd Shenzhen Donyun Welding Fauinment Co Ltd. Shenzhen Yaorong Technology Co Ltd Sherwin Inc Sideros Engineering Srl SMA Speciality Manufactured Abrasives SMC Corp Of America Southern Copper & Supply Southern Stud Weld Inc Special Metals Welding Products Co Spectro Analytical Instruments Staubli Corn Steelmax Tools Steiner Industries Strong Hand Tools Strong Hold Products Suhner Industrial Products Inc Sumig USA Corporation Sumner Manufacturing Co Inc SUNS International LLC Superior Abrasives LLC Surface Engineering Alloy Co. Surface Flow Technologies Inc Tanis Inc Taylor-Winfield Technologies Inc Team Industries Inc TEC Welding Products Techflex Inc TECMEN Electronics Co Ltd. Tennessee Rand Inc Thermacut Inc Thermal Dynamics Thermion Inc Tianjin Golden Bridge Welding Materials Group Tianjin Xinsen Welding Materials Co Ltd Tip Tig USA LLC TJ Snow Co

Tongling Xinxin Welding Materials

Top Cat Air Tools

WELDING

Trafimet Group S.p.a Tregaskiss Trendex Infor Tri Tool Inc. TRU-FIT Products TRU-Weld Trystar Inc Tyrolit Industrial Abrasives ÚltraTech International Inc U-Mark Inc UNIARC Uniarc Limited United Abrasives Inc /SAIT Universal Robots USA Inc. Uniweld Products Inc. Up In Smoke Welding Apparel Inc Uweld Technologies Co Ltd Vantage Capital Equipment LLC VDM Metals USA LLC Veroine LLC Victor Victory CNC Plasma Systems Vizient Manufacturing Solutions Inc - A Lincoln Electric Company voestalpine Bohler Welding VSM Abrasives Corp. Walter Surface Technologies Washington Alloy Co Wayne Trail Technologies Weiler Corporation Weld Engineering Co Weld Pride USA For Weldbrush Weld-Aid Products Weldas Co LLC Weldcoa WeldComputer Welding Alloys USA Weldlogic Inc Weldobot Ltd Weldsale LLC Welker Engineered Products Wendt USA LLC West Chester Protective Gear West Cryogenics Inc tern Enterprises Wire Wizard

WELDING

WireCrafters Wise Welding Technology & Equipment Co Ltd WITT Gas Controls Wolf Robotics LLC - A Lincoln Electric Company Worthington Industries Wuhan Temo Welding Consumables Co Ltd Wuhan Welhel Photoelectric Co Ltd Wuxi Yinchena Science & Technology Co Ltd Wuzhou Ally Protect Co Ltd Xiris Automation Inc Yaskawa America Inc Yixing Liangxu Welding Ceramic Parts Co Ltd York Portable Machine Tools Yuvao Tianvi Special Carbon Fiber Ltd Co Zhejiang Changzheng Project Carbon Electrodes Co Ltd Zhejiang Jingwei Welding & Cutting Technology Co Ltd Zhejiang Jinhua Cumet Abrasive Co Ltd Zhejiang Juba Welding Equipments Manufacturing Co Zhengzhou Anxin Abrasives Zormot International Inc.

Insulate Painted Sheet Metal with Permanently Welded Fasteners

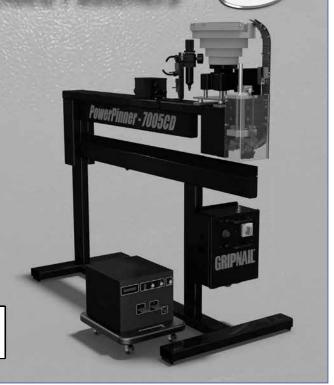
Position & Charge Contact & Weld Bonding Complete

Now you can fasten fiberglass or foam insulation to painted metal panels automatically with cupped head weld pins.

- Replaces messy adhesives or expensive internal bracing
- Speed up your insulating process and provide a more reliable insulation fastening system.
- Visit www.gripnail.com for product videos and specifications



Product Demonstrations at FABTECH Booth C19088



East Providence, R.I. I 800-474-7624

Explore New Products at FABTECH

The following pages in this New Product Preview offer a glimpse of what's in store at FABTECH. Find descriptions and images of new machinery, new materials and new processes listed by technology and company name. To view a complete list of all new products offered, click on the Exhibitor Search tab at fabtechexpo.com.

Arc Welding

ABICOR BINZEL

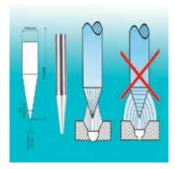
Booth N4704

ABIMIG SpinArc

The ABIMIG SpinArc's patented technology uses centrifugal force to produce droplets of molten metal for a more consistent weld. High speed rotation means faster, more productive welding. Perfect for square butt joint, fillet, clad overlay, and vertical down application.

Becken Technology Development Limited

Booth N1620 **Pre-Sharpened Thick Tungsten** Electrode 1/4" Diameter



The pre-sharpended electrode features 1/4" thick diameter and offers a welding arc with easier starting, higher penetration and a good surface.

ESAB Welding & Cutting Products

Booth N4529 Rebel EM & EMS 215ic



Rebel EM 215ic (ESAB MIG) and Rebel EMS 215ic (ESAB MIG/Stick) join Rebel EMP 215ic (ESAB Multi-Process) welder. All units offer the sMIG (smart MIG) function that automatically fine tunes the arc.

Weld Engineering Co

Booth N5107 FTV-3000 Automatic Flux **Transfer Valve**



The FTV-3000 Flux Valve automatically transfers recovered submerged arc flux from the recovery hopper to the lower pressure feed tank of its PFR-3000 (or HPFR-3000) pressure feed and recovery system for submerged arc welding. Easy to install on old, or order with new PFR-3000's and HP-FR-3000's.

Wire Wizard

Booth N5216 PowerBall® MIG Welding Guns



Wire Wizard® is proud to introduce its line of high performance semi-automatic & robotic PowerBall® MIG Welding Guns. Its proven consumables design provides maximum conductivity with superior cooling and increased consumable life. Made in USA.

Assembly

CMP Automation

Booth N7025 **Metal Component Assembly Automation**



CMP designs and builds rotary dial transfer systems to meet demands of high volume production for metal component assembly in various industries. These types of machines provide proven process and assembly benefits that will meet production throughput.

Yoshikawa Iron Works Co Ltd

Booth C20127 **Electrical Servo Riveting** Machine



The Electrical Servo Riveting Machine can help increase productivity and enhance quality. It enables users to set pressure, stroke, speed, motion and rpms with a touch screen, shorten changeover time with 300 programmable working procedures, rivet with high repeating accuracy, adjust processing conditions during riveting, shorten tact time, trace quality trace with process logs, and connect with the production control system.

Bending/Forming

Burghardt + Schmidt GmbH

Booth C51073 **High-Efficiency Leveller For Parts**



Schnutz has developed a parts leveler, because the requirements are becoming more demanding on the flatness of sheet metal products. The proven concept of the high-capacity leveler has been consistently applied to this specific field of application. The modular machine series covers the application of 0.4 to about 40mm. All metallic materials, which have a plastic deformability can be levelled. By combining different widths with different directional roll diameters can be found for each directional task the right machine.

Carell Corporation

Booth C37085 T100 DIGI Dual Axis

Horizontal Press



The T100 DIGI dual axis horizontal press is equipped with a digital programmer and powered back gauge. This hydraulic press will bend, fold, crimp, punch and form a variety of materials in flat, square, round, tubular and special shapes.

Bending/Forming

CMP Automation



The Servo Nylon Tube Bender is a fully flexible nylon tube bending machine capable of bending both prototype and production volume nylon tubes. This patent pending technology can revolutionize how to produce nylon tubes.

Eagle Bending Machines Inc

BA CNC LINUX Ubuntu Software Revolution



Eagle's BA Series CNC Roll Benders now run the LINUX Ubuntu Operating System with enhanced reliability over M.S. DOS. The CNC controls have increased processing speed giving the highest bending precision possible.

Model CP30-MS



The improved Eagle CP30-MS compact, portable Roll Bending Machine for

field or shop use. It has a bright LED digital readout, 18 component universal tooling set, variable rake lateral guides and the patented robust Z block top roll journal design.

DP-7, Control Panel for Roll Benders



Eagle introduces its DP-7 featuring programmable control with 7" HMI touch screen, direct radius display via digital radius gauge (optional), self learning feature and 400 slot memory is available on all Eagle hydraulic roll benders.

HAEUSLER AG Duggingen Booth C46085 Plate Roll Line - ROLLmeister



HAEUSLER has improved and streamlined its 4-roll plate roll line ROLLmeister TETRA. Also the line was extended with additional smaller size machines.

Innovative Tube Equipment Corp



In response to the market demands for a versatile, primarily electric and high quality CNC bending machine, ITEC is pleased to introduce its re-envisioned Starbend 3-axis CNC bending machines and will be exhibiting both a 1.75" and 3" machine at FABTECH 2016.

Kurimoto Ltd



Kurimoto's original bending method achieves higher accuracy and productivity, making it possible to attain precise circular fabrication without press machines.

MetalForming Inc



Schroeder PowerBend Industrial, introduced in 2014, took the bending market by storm. The new PowerBend Industrial is just as revolutionary. Bidirectional bending capacity up to 1/4". A perfect blend of performance and price point.

SafanDarley BV

Booth C39103 E-Control EC40 Smart



The EC40 Smart is the latest control software innovation from SafanDarley. The EC40 Smart has the functionalities to draw 3D models and read 3D drawings on a mobile device off-line. They can be synchronize with the machine control at any time.

SigmaTEK Systems LLC

Booth C19078 SigmaBEND

SigmaNEST brings many efficiencies used in sheet metal cutting to press brake technology with SigmaBEND - maximizing the speed, quality, and flexibility of bending processes with full

Trilogy Machinery Inc

3-D simulation.



Trilogy Machinery Inc introduces its SWEBEND plate bending rolls including CNC. With the SweBend four-roll double-pinch PB4 machines, plates can be bent on both sides without having to turn the plate. This results in only minimum residual flat ends of 1.5- to 2-times the plate thickness.

Business Services

Member Network



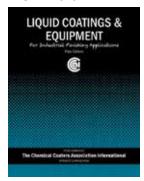
The AWS member network provides members access to networking and educational opportunities, as well as an easy-to-use discussion forum where individuals can connect, engage and share information and best practices with other AWS members. Not only is the network the go-to place to connect with other members, ask advice and share expertise about all things industry related, individuals can even share large files without cluttering their inbox.

Business Services

Chemical Coaters Association International

Booth C45043

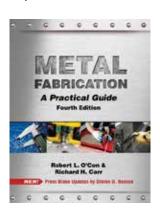
Training Manual - Liquid Coatings & Equipment



CCAI's newly published Liquid Coatings & Equipment for Industrial Finishing Applications is a training manual that provides innovative and updated information on all essential factors to run an efficient and productive liquid coatings paint line.

Fabricators & Manufacturers Association

Booth C19000 **Metal Fabrication: A Practical** Guide, 4th Edition



The fourth edition of FMA's bestselling book includes updated and expanded press brake information from industry expert and trainer Steve Benson, plus a new PowerPoint teaching aid.

SME

Booth C22000

Smart Manufacturing Magazine

Smart Manufacturing is the leading business-to-business magazine that focuses on advanced manufacturing technologies and tools that are driven or enhanced by integrated information technology (IT).





Coil Processing

Allor Manufacturing Inc/ **Plesh Industries**

Plesh Precision Tapered Backup Bearings



Tapered backup bearings give direct interchange 2.5"- 12". All of the bearings are sealed or shielded for life, and are heat-treated using bearing-quality steel.

ASKO Inc

Booth C23018 **HXT Slitter and Side Trimmer Knives for AHSS**

The laser head moves in the Y-axis via a direct-drive servomechanism for maximum speed and accuracy and is isolated from punching vibration to help maintain beam integrity and cut quality. The highly efficient fiber laser uses approximately a

third of the electricity when compared to a CO2 system.

COE Press Equipment Corporation

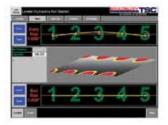
Booth C16020 **Enhanced 350 Series**



The enhanced 350 series straightener design features enable processing of a wider range of materials. Improvements include a 30+ percent increase in strength and rigidity as well as work roll penetration, helping achieve the material flatness required to properly feed AHSS.

The Bradbury Group

Booth C44023 Automatic e-Drive® Leveling



Bradbury continues to advance the industry by automating their e-Drive® technology. The system reads the shape of the strip, initiating the leveler to self-adjust by using I-unit monitoring to automatically correct for shape changes throughout the coil.



Caplugs BT100-SH Series is a protective masking tape for use during plastic media blast (PMB), blast (dry strip paint removal) or other shot peen processes. The tape prevents small particles of blast media and other foreign debris from infiltrating and damaging sensitive surfaces, components and control systems.

BT100-SH tape is used in a wide variety of applications including aerospace, industrial and automotive masking. A white crepe release-coated paper liner allows the tape to tear easily by hand.

www.caplugs.com/masking | 1.888.CAPLUGS | sales@caplugs.com





Reserve a seat at the FABTECH Bistro and you will always have a convenient place to eat, meet and network.

The Bistro offers assorted menu options including fresh and healthy lunch options, international cuisine and regional favorites all at a reasonable price.

Pre-purchase your individual lunch tickets to avoid the lines. Find the daily menu, pricing and order tickets at fabtechbistro.com.





More Technologies. Expert Support. Better Solutions.

High production to hand finishing, our brands are the global leaders in innovative finishing solutions.

One Source.

- Atomization
- Automated Systems
- Infrared & Catalytic Curing
- Electrostatic
- Fluid Handling

- Powder Coating Products & Systems
- Lab & Testing Center
- R&D Resources
- Training

devilbiss.com

DEVILBISS



ransburg.com



msnews.ch/en/



bgk.com



binks.com

See for yourself FABTECH 2016 Las Vegas • Booth # C48037



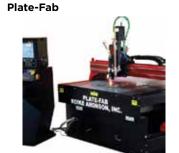
Cutting

CS United Inc



CS Unitec introduces the AutoMAB 350 portable magnetic drill, which can drill holes up to 1-1/2" diameter and features an automatic feed mechanism with automatic reverse and shut off.

Koike Aronson Inc/Ransome Booth N4720



The Plate-Fab cutting machine includes a unitized, double-walled downdraft table to isolate sparks & fumes while providing insulation to reduce heat transfer from the torch to machine; configured with one plasma or oxy-fuel torch.

PNC-12 Extreme



The PNC-12 Extreme is an easy-to-use, compact cutting system for use with both plasma and oxy-fuel gas cutting. Its CNC operation is simple and installation time of the system is quick. Pre-installed shape templates are included as well as art files upon request.

Messer Cutting Systems



The MetalMaster 2.0 is a compact 5' x 10' unitized cutting machine and table featuring a PowerMax 125 plasma torch for straight plasma cutting that provides a superior cut performance at a low cost.

MVD Machine Ind



Special design MVD swing beam shears provide up to 25 cutting stroke per minute. Double speed machine concept: FastMode, when cutting thin sheets, can offer up to 50% faster cutting, manufacture in length 3 to 7 meters and capacities 6mm to 25mm.

Fastening & Joining

Master Magnetics



Grade 42, neodymium, rare earth magnetic assemblies with SAE threaded bases or hooks provide a range of mounting and holding options for industrial and manufacturing industries.

Rubber Coated Neodymium Magnetic Assemblies



These Master Magnetics rubber coated magnetic assemblies feature male or female threads in order to accommodate a range of low-profile holding applications.

Finishing

Carlisle Fluid Technologies



The DeVilbiss AG-360 series of automatic spray applicators feature DeVilbiss "QuickCleanTM" technology and are available in various machine mounting formats to provide a universal finishing solution for all industrial low pressure applications.

Catalytic Combustion Corporation

Booth C45023 Paint Booths



The paint booths by Catalytic Combustion Corporation Finishing Products Division are known for customized design, ease of installation, superior quality components, and exceptional service after the sale.

DCM Tech Inc



The IG 380SD features a 36" diameter electromagnetic chuck with configuration features of through table vacuum, air or hydraulic clamping. The variable speed 30 HP grinding spindle provides exceptional grinding performance for both conventional and superabrasives and is configured with a sliding door enclosure, air/mist filtration and swarf system with continuous filtering of the coolant.

EXEL North America



Exel North America offers its InoBell®, a high transfer efficiency applicator that delivers higher first pass transfer efficiency, better uniformity and high finish quality. The InoBell® can be installed on a robotic or reciprocating system for various types or markets.

EXEL North America

Booth C49021 NANOGUN MV™ Manual **Electrostatic Low Pressure Sp**



The SAMES NANOGUN MV[™] has been designed for spraying 1K, and 2K, solvent and water-based materials with low pressures in a variety of markets such as Aerospace, Agricultural & Construction, Metallic Furniture, Wood and Automotive Industries.

Fluke Process Instruments Booth C50026

EasyTrack3



Easy to use, accurate and reliable the EasyTrack3 system is designed specifically for the day-to-day needs of every paint/powder coater and supplier alike. Available in a variety of system configurations to suit whatever the coating application demands.

Gema USA Inc

Booth C45013 OptiFlex®2 F Spray



OptiFlex®2 F Spray integrates advanced pump technology, providing excellent coating consistency and quality. OptiFlex®2 F Spray is designed for applications requiring high film builds with precise and constant powder outputs when using long powder hoses.

Nordson Corp

Booth C45037

OptiMix 1 Plural Component Metering System



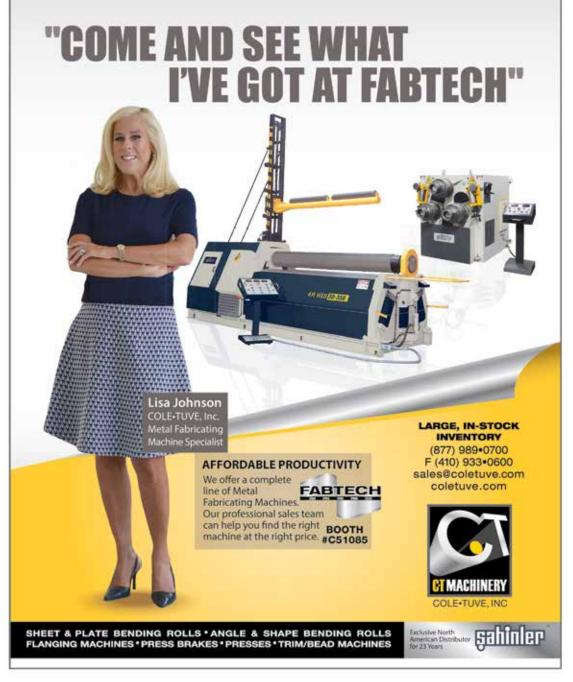
The OptiMix plural component system is an electronically controlled proportioning/ mixing unit for the processing of solvent and waterbased coatings. It allows rapid change of up to 10 base or catalyst materials in various viscosities and flow rates.

Spectrum VT Powder Feed Center



The Spectrum VT Power Feed Center provides a return on investment with innovative features 1that

offer the fastest possible color change, including pump and purge technology to eliminate contamination, a selfcontained round hopper and easy to use controller.



NEW PRODUCTS

Finishing

Rohner



Rohner in-line process powder booths are designed with optimal airflow for powder containment, application efficiency and a perfect solution for spray-to-waste/reclaim cartridge collector efficiency to your coating process.



VOC-Free, synthetic, biodegradable, rust preventive. Excellent protection in humid environments for extended storage. Dries quickly leaving a thin, water displacing, dry to the touch film. Spray, wipe, or dip methods. Easily removed.

Weiler Corporation



Weiler Wolverine flap discs are designed to deliver fast material removal and consistent performance at a great value. The improved design provides up to 25% more life over the previous Vortec Pro line.

Wendt USA LLC



Wendt USA LLC introduces its ceramic flap wheel with 5/8-11 threaded arbor, offering the ability to grind and finish using a normal angle grinder. This design allows users to achieve the linear finish needed on stainles steel tanks, food service equipment and architectural parts.

Gases & Gas Equipment

McDantim Inc

Booth N4514 Trumix® TM2B450



The TM2B450 provides two different blends of a two-component mixture. The TM2B450 can deliver 450 scfh of both blends at the same time and maintain +/- 10% accuracy.

Trumix® TMA950-3



McDantim's TMA950-3 gas blending system can provide up to 950 scfh of a three-component gas blend. Accurate mixtures of any three of the following gases; Ar, N2, C02, O2, He, or H2 can be produced on-site in the exact ratios a process requires.

Trumix® TM4000-2



McDantim Inc's most complete and versatile package the Trumix® TM4000-2 (standard or laser model) gas blending system can provide up to 4000 scfh of a two-component gas blend.

Weldcoa

Booth N4108 Flexible Teflon Lined Hoses



Flexible Teflon lined hoses specifically for gas industry applications. Proudly made in the USA.

Inspection & Testing



The Pronto-250 is a portable laser power meter with an integrated touch-screen monitor presenting an intuitive user-interface that can measure up to 250 W, thanks to an all-metal casing and strong absorber.

Pronto-Si - Portable Silicon Detector



The Pronto-Si is a handheld laser power meter with an integrated touch-screen monitor and a Silicon sensor. This handy tool presents a slide-in attenuator to extend the measurement range up to 800 mW and flips close for better protection during transport.

HP Series - High Power Detectors



The HP are High Power Detectors with water cooling that can read up to 12,000 W of continuous power with a noise level of only a few Watts. They feature a regular DB-15 connector to connect to a monitor and a USB output for direct measurements on a PC.



The HDI Advance R4x 3D scanner is ideal for metrology applications and demanding projects that require high accuracy and detailed resolution scan data with repeatable results.

GoMeasure3D

Booth C15094 MikroCAD 3D Scanner



MikroCAD is a surface metrology system that generates 3D surface scans with microscopic level of detail. It inspects small volume measurement with sub-micron resolution and accuracy.

KARBON Optical Coordinate Measuring Machine (CMM)



KARBON is an optical CMM for engineers and inspectors in various manufacturing industries. It offers user-friendly, repeatable and accurate measurements using a contact probe.

Olympus

Booth N3715 Vanta Handheld XRF: **Redefining Rugged**



Vanta handheld XRF analyzers redefine rugged durability. IP65-rated and drop-tested to meet MIL-STD 810 specifications, these rugged, powerful instruments provide rapid, accurate, laboratory-quality element analysis and alloy identification in the field.

IPLEX NX



Olympus' IPLEX NX combines the highquality images available in a videoscope with an intuitive user interface, ergonomic design, and durability for efficient inspections in any environment.

Job Shop/Contract Manufacturing

OMCO

Booth C19047

Custom Welded Tubes



OMCO offers contract manufacturing of custom welded tubes. Highly automated equipment is a cost-efficient alternative to highly post-processed standard tubes. Material thickness up to 0.250". 150 kW high frequency welder with integrated eddy current weld monitor.



Lasers

Amada America Inc



Demonstrating the expanded range of Amada's proven fiber laser technology, the LCG 3015 AJ will exhibit 9kW of fiber laser cutting power. This high-capacity fiber laser allows fabricators to process thin-to-thick materials at unprecedented levels of efficiency.

Bystronic Inc

ByStar Fiber Laser Cutting Machine



The high performance ByStar Fiber is designed from the ground up to meet the demands from high-speed fiber laser cutting as well as cutting capabilities into the thick plate range.

BySmart Fiber Laser Cutting Machine



Bridging performance with lower investment costs. The BySmart Fiber 3015 laser cutting machine is designed for users who are looking for quality machine performance at a lower investment cost.

Cincinnati Inc



Cincinnati introduces its CL-960, 6,000W fiber laser system featuring: 5'x10' dual pallets, LaserMech Fibercut laser cutting head, linear drive motors, HMI control, nesting software, automation interface and dynamic power control.

Durma USA



With their modular construction concept Durma fiber lasers are now offered in large formats up to 60' lengths and 8' widths and power sources from 1kw to 8kw. Machines are available with and without linear drive systems as well as automation.

Hako CNC Machine/Accurl (Anhui) Manufactory Co Ltd Booth C44079 CNC Laser Cutting Machine



The CNC Laser Cutting Machine by Hako adopts an imported IPG Fiber laser source (500W,1KW,2KW) and features a dual driving ball screw moving system, fixed light-route with gantry style design and a close-loop control with linear scale to make the cutting quality perfectly match with the design.

LaserStar Technologies Corp



The FiberCube Laser Engraving System is compact, turnkey & offers a non-contact, abrasion-resistant, permanent laser mark, engraving or cut onto most materials. Made in USA.

iWeld Benchtop Laser Welding System



Easy to use, simple to maintain and incredibly powerful, the 990 Series iWeld Benchtop Laser Welding System fits neatly into any work environment. iWeld is the highest peak powered laser welding machine in its class.

Industrial Laser Welding Systems



LaserStar's 1900 Series Industrial Laser Welding Systems are ideal for a wide range of metal joining, complex assembly, automation and repair applications for the industrial marketplace.

Lumentum



Lumentum introduces its CORELIGHT series 6.3 kW fiber laser engines, based on highly advanced, compact 2.1 kW ytterbium fiber laser modules.

2.1 kW Fiber Laser Engine, 1080 nm CORELIGHT YLE 2



The CORELIGHT series 2.1 kW fiber laser engines is based on highly advanced, compact 2.1 kW ytterbium fiber laser modules.

4.2 kW Fiber Laser Engine, 1080 nm CORELIGHT YLE 4



Lumentum offers its CORELIGHT series 4.2 kW fiber laser engines, based on highly advanced, compact 2.1 kW ytterbium fiber laser modules.

Mazak Optonics Corp



The VCL-T100 is an affordable tube production laser that utilizes direct diode laser technology, delivering higher efficiency and reliability than other solid state laser systems.

MVD Machine Ind

Booth C44101 iLASER - Fiber Laser



Flying optics from 1KW up to 6 KW with machine sizes of 1500mm x 3000mm up to 2000mm x 6000mm and variable size manufacturing. iLaser is designed with high precision criterias, rigid and powerfully body that allows high cutting speed and accelerations.

Richardson Electronics Ltd

Booth C23078 Round Bellows



Richardson Electronics expands its offering of round bellows for state-of-the-art CO2 lasers. The patented design allows for peak performance on high speed lasers. These bellows are suitable for use in laser machines from TRUMPF®.

REdi 4.0 Remote Diagnostics



Richardson Electronics introduces a remote diagnostics system, which monitors certain functionality of laser equipment by analyzing data collected from the machine. REdi 4.0 allows users to predict machine failures and avoid costly downtime.

Dust Filter



Richardson Electronics has expanded their line of replacement dust collection filters. The filters meet and or exceed OEM specifications and are suitable for use in laser machines from Bystronic® and TRUMPF®.



Lasers

TRUMPF Inc



The TruMatic 1000 fiber is the first entry-level punch laser combination machine from TRUMPF with a solid-state laser. It is revolutionary in its modular design and offers users the ability to add to the machine as business grows.

Versatility Professional Tool Storage

Booth C17034 Laser Cabinet VT-4100



Versatility Professional Tool Storage now provides a high quality laser cabinet that offers safe and secure storage for lenses, nozzles, accessories & cleaning supplies. Dimensions: 34" W x 27.5" D x 40-1/2" H. Drawers: (3) - 3", (2) - 5", (1) - 7".

Lubrication

Kent Corp

Booth N6117 DieTronic ANTIRUST 04



Ensure efficient and complete corrosion protection with the LCP ANTIRUST Spray System. Precise spray application and the ability to recycle all waste allows users to decrease consumption by over 70%.

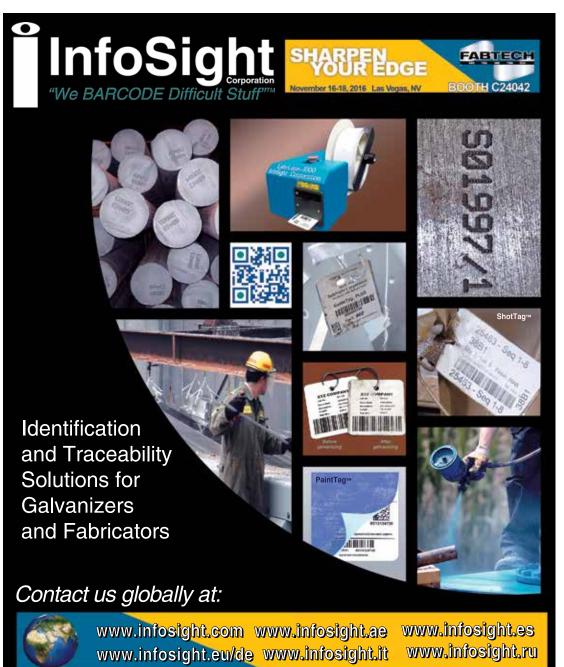


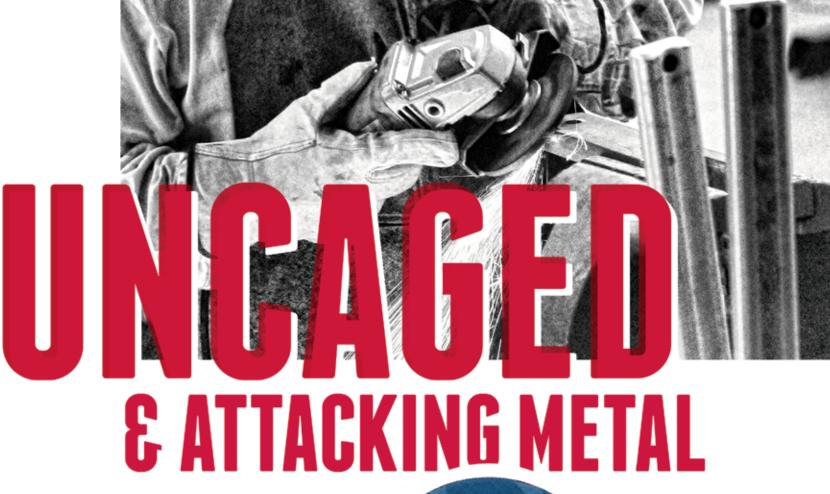
Tower Oil & Tecnology offers Kleneslat-RP, a synthetic, oil free, non-flammable, non-toxic liquid that prevents hot slag and splatter from sticking to support slats and work pieces when laser, plasma or flame cutting.

Towerpro 7762-R



The Towerpro 7762-R is a heavy duty, multi-purpose emulsifiable metalforming lubricant for high strength alloys, stainless steel, and aluminum. State of the art extreme pressure additives for improved performance. Good in-process rust protection.







NEW: BONDED ABRASIVE WHEELS

Weiler's Cutting and Grinding wheels get the most demanding jobs done right, and done fast. Our high quality lineup helps Welding & Fabrication professionals select the best solution for the toughest jobs. Whether you're looking for serious stock removal, beveling, grinding, notching, facing, cutting or edge softening, Weiler will get it done. Visit us at FABTECH and Request a FREE Sample Attack Pack.

Booth #N3704



Maintenance & Repair

Imperial Systems Inc

Booth N1825 ServiceMAXX



Imperial Systems Inc introduces its dust collection equipment service and preventative maintenance. Dust collectors are designed to provide many years of air filtration and air pollution control. Cleaner air means a healthier workplace environment decreasing employee and production down time.

Material Handling/ Marking

InfoSight Corp

Booth C24042 CodeTags™



CodeTags[™] are preprinted metal tags with 1-D and 2-D barcodes and a unique ID number for tracking pieces or assets. Available in KettleTag[®]PLUS material for galvanizing applications or ToughTag[™] for asset tracking. Perfect low cost tracking system.

LA-CO Industries Inc

Booth N4511

Quik Stik® Fluorescent



Markal® Quik Stik® solid paint markers in a twist-up holder are now available

in fluorescent yellow, green, orange and pink. Joining the family of eight other colors, the fast-drying, gel-based paint marks on smooth or rough surfaces up to 400°F.



Dual-finger pin clamp provides positive part location and clamping, up to 14mm part thickness. Ideal for flanged holes, end effector applications, and material handling. Retract option allows pin to retract below the backup for easy part release.

Other Machinery/ Equipment/Parts/ Products

Boschert Precision Machinery Inc



Shearing copper and aluminum bus bar with excellent edge quality is easy and affordable. The CS shear from Boschert is available with or without radius cutters for rounding corners. Includes DROs and back gauge.

Gripnail Fastening Systems

Booth C19088 TackMount



Quickly and permanently fasten cable tie mounts to metal without drilling or any other surface preparation. Just place the TackMount of the tip of a Gripnail air tool, position and impact directly into base metal such as steel, aluminum and cast iron.

Gudel Inc



The TMF-5 is the only standard linear motion product available on the market that can move an articulated robot with a payload over six metric tons. The TMF-5 is designed for heavy weight robots. Available in lengths from 4 meters to over 100 meters.

Hydraulico as



The Hydraulico Upsetting Forging Press (USP) offers great flexibility and extreme precision. The two side cylinders are servo-controlled and have a precision better than +/- 0.1 mm, even though they move with a speed of up to 350 mm per second.

Nederman LLC

Booth N2734 Filtac Oil Mist Filter



Nederman introduces Nederman Filtac, a range of products for efficient oil mist filtration based on the patent-pending FibreDrain[™] technology, specially designed for continuous operation.

Saar Hartmetall USA LLC



Saar-Hartmetall USA introduces its SMA30E electric hand-held beveling tool that features a more powerful motor and new milling head design. The SMA30E is a compliment tool to the complete line of electric and pneumatic portable beveling tools.

MMB 500 Stationary Beveling Machine



The MMB 500 is suitable for processing small, medium and large aluminum, steel, and stainless steel plate and bar stock workpieces and is designed for hands-free operation and is capable of providing a variety of bevel angles between 30Å and 60Å.

TRUMPF Inc



The TruPrint 1000 for additive manufacturing enables users to build metal components, layer by layer, using the process of laser metal fusion (LMF).

Versatility Professional Tool Storage



Versatility's iTool® Visual Press Brake Cabinet features polycarbonate see-th-ru door, LED lighted interior and configurable drawers with flip down drawer fronts and lockouts.

Plate & Structural Fabricating

Carell Corporation

NEW! MRM H Series



Carell introducesthe MRM-H. All sizes have powered central rolls rotation, hydraulic side & pinch roll adjustment, 2 LED readouts, hydraulic drop-end, hardened rolls and cone rolling device, all standard.

JOIN THE 4TH

100% of the proceeds go to scholarship and other education support programs of AWS, FMA, PMA, SME, and CCAI.



Registration Opens: 6:30 AM | Event Start: 7:00 AM

Cost: \$35.00, After Nov. 4 \$50.00





Nederman Filtac Oil Mist Filters

Efficiency Powered to Infinity

Nederman Filtac oil mist filtration solutions are designed with our unique FibreDrain™ technology ensuring superior separation performance with:

- Continuous operation
- Long filter media life
- Lower overall cost
- Peace of mind

Visit us at booth N2734



www.nederman.com

Plate & Structural Fabricating

Hydraulico as

Booth C16056 Heat Exchange Plate System



Hydraulico offers its press line for stamped and embossed plate production, a complete production system up to 1 m² (11 ft²) plates, up to 900 pcs/hour and quick die change.

ROUNDO



ROUNDO introduces its section bender. The R-3 is a top precision machine in the field of steel deformation.

Press Brakes

Amada America Inc



Amada engineered the HG 2204 ATC as an ideal solution for variable lot sizes and complex tool layouts. A patented Automatic Tool Changer (ATC) loads the most complex tool layout within a few minutes and allows operators of varied experience levels to efficiently utilize this bending system. The HG's 13-ft. bed length facilitates multi-stage bending operations and

supports bend lengths up to 161.4". Other standard features on the HG 2204 ATC include an AMNC 3i touchscreen control, an integrated bend sensor that ensures consistent bend angles, and an energy-efficient servo/hydraulic drive system.



Bystronic's Xpert 40 press brake is a compact, ultra-high-speed, ergonomic press brake, moveable on demand to where you need it, when you need it. The Xpert 40 is ideal when space is limited and capacities vary.

Cincinnati Inc



Cincinnati introduces the GOFORM, its first portable, electric press brake.

Hako CNC Machine/Accurl (Anhui) Manufactory Co Ltd

Booth C44079 CNC Press Brake



CNC press brake with DA66t control system, 8+1 axis, DSP laser protection.

JMT USA



JMT introduces its fast, accurate and efficient (up to 75% energy savings) Eco Bend electric press brakes. They run quiet, draw very little power while idle and have a compact footprint. 4' x 28-ton to 10' x 112-ton available with optional ergonomic packages.

MVD Machine Ind

Booth C44101 iBEND C Series Hydraulic Press Brake



The iBEND C Series features 310mm stroke and 500mm throat maximum machine performance and high bending accuracy provided by synchronized hydraulic cylinders, CNC-controlled, Germany hydraulic block, proportional valves and high quality Givi or Heidenhain optic scales.

Salvagnini America Inc

Booth C25047 P1 Panel Bender



The all-electric Salvagnini P1 panel bender for 2016 is a smart, adaptive machine newly redesigned with Automatic Blankholder Adjustment (ABA) for flexible kit and single piece part production. The P1 will be on display at FABTECH 2016.

TRUMPF Inc



The redesigned TruBend 5130 precision press brake will be on display at FABTECH. Its Servo Drive 4-cylinder drive technology is highly dynamic and delivers significantly more productivity than a conventional drive.

Punching

Amada America Inc



The LC 2515 C1 AJ provides sheet metal fabricators maximum production flexibility by integrating Amada's innovative Multi-Purpose Turret (MPT) and 2kW fiber laser technology. Processes such as tapping, forming, and laser cutting can all be performed on this innovative system to maximize part accuracy and machine productivity.

Murata Machinery USA Inc



The world's first electric servo-driven turret punch press has evolved to bring the ultimate in control, precision and reliability, providing an economical solution to parts production requiring punching, forming, tapping and deburring.

Resistance Welding

Dengensha America Corp

Booth N5922 Flexwave



The Flexwave welder is a combination of an advanced Capacitor Discharge Welder (CDW) and a 1500Hz Bipolar Medium Frequency Converter (MFC).

Upper Electrode Feeder



With Dengensha's upper electrode weld nut feeding, users can reduce weld cycle times and achieve faster feed rates. A patented linkage design with fewer moving parts provides performance that is more reliable.

Capacitor Discharge Welder



Dengensha America's compact NDZ Capacitor Discharge Welder offers unique selectable current control mode and intuitive control setup.

WeldComputer



The industry's highest performing controls are now more intuitive with a new touch-screen option that offers all the control monitoring functions WeldComputer is

known for, via user-friendly, drop-down menus on a touch screen.

FABTECH® EDUCATION PROGRAM



With more than 100 targeted technical, operational, economic, and managerial sessions, you'll discover the solutions you need to advance your career and business.

REGISTER TODAY for sessions at fabtechexpo.com/edu

*See the schedule-at-a-glance on pages 36-38.





Our Upper Electrode Feeder Reduces Cycle Times. See a Live Demo!

Minimize Heat Transfer & Distortion

See a Live Demo!

With Breakthrough Flexwave Technology.



Check Out Our Newest & Most Compact Capacitor Discharge Welder Yet

- Simultaneous workpiece movement and nut feeding.
- Accurate and secure nut positioning.
- For 6, 8 and 10 millimeter square nuts.
- Faster speed rate.



Selectable current modes let you fine-tune weld quality.
Weld current as high as 50kA,

- Weld current as high as 50kA, but only requires a small 6kVA supply.
- High current in short bursts allows minimum heat transfer and workpiece distortion.
- Smaller footprint. Cost-efficient compact design.
- Ideal for welding small projection parts on high-strength steel.



- Provides energy savings and shortens cycle times.
 - High current in short bursts optimizes weld nugget quality, minimizing heat transfer and workpiece distortion.
 - Combination of capacitor discharge welder and bipolar medium frequency converter.
 - Maximizes waveform flexibility.

Call: 440-439-8081 • Ask for Steve Andrassy • Web: dengensha.com



Engineering Resistance Welding Value

We plan to showcase even more new products at Fabtech. Be sure to put the Dengensha booth on your priority list!

NEW PRODUCTS

Safety & Environmental

ESTA Extraction USA LP



ESTA's mobile devices are excellent for direct extraction at individual or multiple processing machines for metal dusts and shavings. Optionally, extraction hoods, extraction arms and smaller pipe systems can be attached.

OILMAC Oil Mist Separators



The oil mist separators from ESTA are especially designed for the metal industry. They effectively extract oil and emulsion mist that arises when cooling lubricant is used during lathing, milling, drilling or grinding metal.

SRF 15



Mobile welding fume filters from ESTA can be used for a wide range of applications.

Imperial Systems Inc

Booth N1825 Explosion Isolation Valve



Imperial Systems Inc introduces a fire safety device used in conjunction with a dust collector to prevent fire or explosive material from re-entering a manufacturing facility.

Heavy Duty and Low Profile Airlocks



Imperial Systems Inc offers its heavy duty and low profile Airlock, engineered to outlast all other airlocks. The unit offers the tightest flexible seal, allowing larger particles to easily pass through the valve while maintaining the air seal.

Lasermet Inc



Laser Castle G2 is the second generation modular, rapid-build laser safety cabin, certified to ANSI Z136.1 and IEC 60825-1 fitted with interlock control, LED signs, active guarding, CCTV or active windows, auto-doors and fume extraction.



Lasermet Inc

Booth N1126
Laser Jailer - Active Laser
Guarding



The patented Active Laser Guarding System is a failsafe, modular safety control system that switches off a multi-kW laser within 50ms if the beam strikes a cabin wall. Now available with new polarflex detector panels.

Laser Interlock Controller



Lasermet introduces its Laser Interlock Controller ICS-6-0EM, ideal for integration with laser robot welding systems within a laser safety cabin. Connected to interlock switches it enables the laser to be fired only under safe conditions.

Software & Machine Controls

Bosch Rexroth Corp



Rexroth's IndraMotion MTX CNC systems can control up to 250 axes of electric and/or hydraulic motion across 60 independent NC channels, depending on hardware, and feature super fast execution speeds, safety on board technology and 5-axis interpolation.

Burghardt + Schmidt GmbH Booth C51073 EP300_250mm



The burr height measuring system EP300 offers an optimal quality control of slitting processes of thin metal strips. Slitting samples with maximum length of 250mm are measured quickly and without complex preparation. The system determines burr, cutting edge curvature and edge drop of the slitting samples. The quality standards are controlled with an accuracy of 1 µm.

EP300_1350mm



EP300_1350mm Burr height measuring system for optimal quality control of slitting processes.



Bigfoot.

by Smartware Group

FABTECH Booth #C21100 866-858-7800 ext. 82 sales@bigfootcmms.com www.bigfootcmms.com

Maintenance Software for Manufacturing

Catch a demo of the modern Bigfoot CMMS and its new mobile app to access your work orders, assets, PMs, Parts, and EHS/Safety across all platforms.

You're just a swipe away.





Software & Machine Controls

FlashCut CNC

Booth N4136 FlashCut Titanium Series CNC **Control Console**



All-in-one slim ergonomic industrial CNC control console with sealed steel construction. Additional features include an 8A advanced microstepping or 25A peak digital PID servo for up to 6 axes of motion and pedestal mounting with bottom access to all connections.

Logopress3/Accurate Die **Design Software Inc.**

Booth C15031

Transfer Die Simulation

Logopress3 now allows for realistic simulation and interference detection with various press types including servo and link motion presses.

OMAX Corp

Booth C27047 **Digital Dashboard**



OMAX introduces its digital customer care portal to provide customers with an all-encompassing and convenient digital support experience. The digital dashboard will help operators and owners get the most out of their waterjet cutting systems around the clock.

SigmaTEK Systems LLC

Booth C19078 **SigmaMRP**

SigmaMRP is a manufacturing resource planning (MRP) system that manages transactions and communication with customers, suppliers and more.

Smartware Group

Booth C21100 **Bigfoot CMMS Mobile App**



Smartware Group, Inc. introduces its first native mobile application for Bigfoot CMMS, the cloud-based asset and equipment management software used by maintenance teams worldwide. The mobile EAM app offers a robust suite of capabilities for maintenance professionals on the go and is included with a Bigfoot CMMS Enterprise+ subscription, for both existing and future users.

TESAR S.p.A.

Booth C14115 **I4Suite**



14Suite is the simple, intuitive and automatic solutions family proposed by TESAR® for production & supply chain management. I4Suite can be implemented both in new plants and in retrofitting scenario. I4Suite is scalable, modular and integrable with the most important ERP available on the market.

4APS is the software for industrial production planning and finite capacity scheduling suitable for all industry sectors and applicable to companies of all sizes. I4APS optimizes the men/machines load, efficiency and productivity of the whole company, considering priority orders, deadlines, resources, and so on. Data redundancy can be avoided thanks to possibility of DB set sharing with the whole I4Suite.

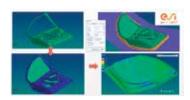
I4Production

14Production is the software for data collection, production monitoring and management. I4Production allows the control and management of the manufacturing process, considering both manual tasks statements and automatic monitoring of production parameters (of any machinery/plant types). Direct link to the production machines, allows 14Production to collect production data in real time. Shop Floor Interface allows operators to interact with production and machines.

Stamping

ESI North America

Booth C15105 Die Starter



Die Starter enables die face designers to reduce drastically the number of iterations needed to establish a feasible tool design. This solution automatically creates the first complete die face including binder, addendum surfaces and bead center-line.

Tool & Die

Bohler Uddeholm Corp

Booth C18047 Vanadis 8 SuperClean



The Vanadis 8 SuperClean offers a grade that sets a new standard for PM Tool Steel. The combination of extremely high wear and chipping resistance paired with improved machining properties raise production rates and reduce costs.

Green Valley Manufacturing Inc

Booth C46095 140,000 lb. Capacity Free

Range Transporter



The Titan 153371 is a free range industrial transporter with a capacity of 140,000 lbs. It features 48 VDC power, a wireless remote control, poly wheels, collision avoidance sensors, E-stop bumpers, and visual and audible alarms.

Tooling

Strong Hand Tools

Booth N2324 **Big Mouth Pliers**



Strong Grip® big mouth pliers have 4-adjustment slots so you can instantly adjust the jaws for holding capacities from 1/4" to 3". Use the crank handle to quickly open and close the plier jaws and increase torque, even with the pliers locked in position.

BuildPro® Tool Cart



The BuildPro® Tool Cart is the ideal way to organize, inventory, and keep the clamps and components in the BuildPro® Modular Fixturing Kits within easy reach for faster fixture setup and tear down.

Strong Hand Tools

Booth N2324 Inside / Outside Angle Magnets



The Inside /Outside Angle Magnets let users old stock from the outside, leaving clearance for inside welds, or hold stock from the inside for outside welds. Hold and position sheet metal, round pipes, square, angled or flat stock.

ESCO Tool Co



The ESCO
Mongoose
MILLHOG®
battery powered beveling
tool is a truly
portable tube
beveling tool

and is suited for 5/8" I.D. to 3" O.D. tubes. This powerful tool provides chatter-free operation without cutting oils for up to 60 minutes before recharging.

Lillbacka USA

Booth N6700 Finn-Power King Crimper 2000



Finn-Power King Crimper with 2000 tn force has capacity to crimp 28" diameter. Finn-Power King crimper series in-

cludes 800, 1200 and 2000 tn models which are offered with the latest control features and options.

Tube & Pipe Fabricating or Welding

Carell Corporation

Bending Machine

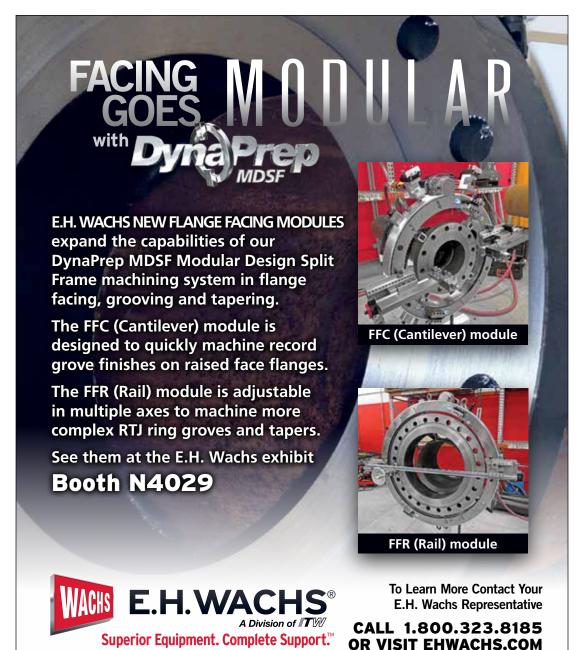


The ETM-90HD rotary pipe & tube bender and tooling are constructed from solid steel plate & billet with a capacity of 3" pipe and 3.5"0D tubing. Digital programming offers 40 programs of 5 bends each. High quality bends are produced swiftly without using a mandrel.

E.H. Wachs



The Flange Facing modules adapt users DynaPrep MDSF pipe cutting machine into a flange facer. The FFC (Cantilever) module machines record grove finishes on raised face flanges, the FFR (Rail) multi-axial module machines complex RTJ ring groves and tapers.



Tube & Pipe Fabricating or Welding

Lillbacka USA



Finn-Power watchman software provides features for an automated Finn-Power crimping cell. Crimping cell TC120 with full automatic die changer system and optional feeder/part stacker robot provides periods of unmanned production with constant rate.

Finn-Power NMS Series Crimpers



Energy efficient NMS series save energy and reduce hydraulic oil wear thus increasing the oil life time and saving on the PM expenses. All savings reduce the operating cost of the machine and bringing down the cost/crimp.

SigmaTEK Systems LLC

Booth C19078 SigmaTUBE

SigmaTUBE is a complete tube and pipe cutting software supporting round, square, rectangular, or triangular tube/ pipe along with structural material such as I-beams, H-beams, C-channel, angle iron, and other user-defined shapes.

Tri Tool Inc

Booth N5916 TRIMAX™ Machining Systems



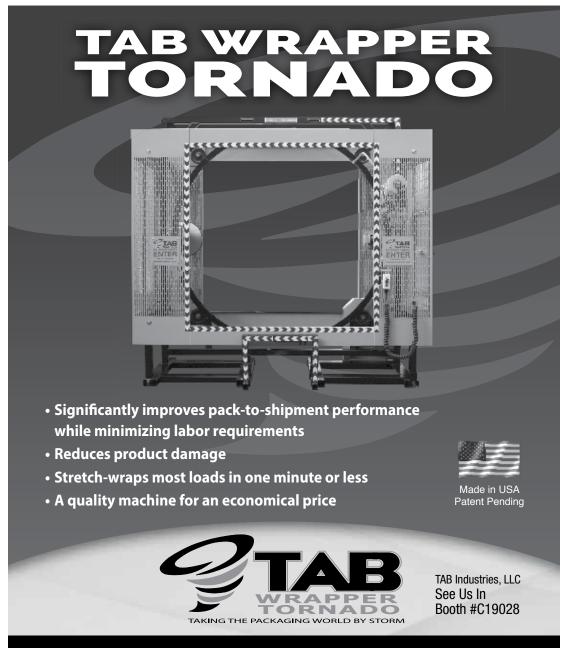
The revolutionary design of the TRIMAX machining system truly delivers maximum safety, performance and precision. Winner of three U.S. Patents, it provides the ultimate in speed, strength and stability for all demanding machining applications.

Tube & Pipe Producing

ASMAG USA Inc



ASMAG and SEUTHE provide stacking, bundling, and banding equipment as stand-alone systems or in-line with its mills, draw benches, straighteners, and cutting equipment.



WWW.TABWRAPPER.COM

610-921-0012

Waterjet

Jet Edge

Booth C25085 Permalign® V-Series **Mini Hopper**



Jet Edge's Permalign® V-Series Mini Hopper allows waterjet operators to easily make adjustments to abrasive flow, minimizing abrasive consumption. Its water resistant design helps prevent abrasive clogs and does not require an enclosure.

EDGE X-5 5-Axis Waterjet System



Built for 24/7 industrial use, Jet Edge's latest generation of EDGE X-5 5-Axis waterjet systems lead the industry in precision, accuracy and dependability.

KMT Waterjet Systems Inc Booth C25103

PRO-III 90,000psi Pumps



KMT introduces the MAX cut speed of 90,000psi PRO-III pumps. Offered in 60hp, it increases cutting 50-70% & 125hp dual head cuts in half the time. Patented intensifier for longer lifetime of the cylinder body/seal head connection and increases seal life.

Welding Consumables

Becken Technology Development Limited

Booth N1620



Unique Super Anti wear and super-thick brazed Clad Plate contains the steel base and the brazed clad layer of Nickel matrix with Cast Tungsten Carbide hard particles, without cracks. The thickness can be more than 30mm, which is a few times anti wear than anormal wear plate. It can be easily assembled by welding.



NEW PRODUCTS

Welding Consumables

Becken Technology Development Limited



BTD top quality Titanium Wires and Rods, 0.1-5.0mm for Welding and 3D printing are shaving spooled shiny wire with low impurity and level winding, as well as superior strength and elongation. The Titanium powders and Nickel alloy powders are highly spherical with excellent flowability. There are few satellite and porosity powders. The oxygen and other contaminants are very low. In addition, the particle size distribution is tailorable.

Continental Abrasives

Booth N5016 Ulticut Cutting and Grinding Wheels



Ulticut wheels made with Shieldtech grain provide increased life, cooler cutting & grinding and a better finish than the other premium product on the market. Ulticut wheels are perfect for both non-ferrous and ferrous metal like stainless steel.

COR-MET INC



Cor-Met Inc. offers a stainless steel TIG wire with a flux coating for welding root passes and eliminates the need for backing or purging. Available grades: 308L, 309L, 316L, 2209,625,82,80S-B6, 80S,B8. Plus special request alloys.

Weiler Corporation



Weiler High Performance Tiger cutting, grinding, and combo wheels cut faster and last longer so

you get maximum productivity at the lowest total cost. Designed for Welding & Fabrication professionals who need the best solution for the toughest jobs.



ALM Positioners Inc



Wireless communication is an option for a head and tailstock positioner that eliminates the need of hard wiring between the head and tailstock. There is a high degree of reliability due to trusted wireless 2.0 technology.

CMP Automation

Booth N7025 Welding Automation



CMP Automation designs and manufactures fully automated custom welding

systems and robotic welding solutions and offers high quality welding solutions for a broad range of applications.

HBS Studwelding Inc

Booth N5303 HBS CDi 502



The HBS CDi 502 provides effortless welding. Experience a perfect weld in 2 steps just select diameter and push the trigger.

Hypertherm

Booth N3724, C27069 Powermax45 XP



Hyperthem introduces its Powermax45 XP® – successor to the best-selling Powermax of all time – offering the most power and versatility in its class with 6.5

kilowatts of output power and the ability to easily cut, gouge, and mark any type of material.

Koike Aronson Inc/Ransome

Booth N4720 MD Positioner Line

The MD Positioner line features geared slew rings, variable speed AC drives, manual height adjusting bases and thru-holes for purging capabilities.

Miller Electric Mfg Co

Booth N3329 ArcReach™ Stick/TIG Remote



For use with the XMT® 350 CC/CV, XMT 450 CC/CV and Dimension™ 650 models that are ArcReach compatible, the remote allows welding operators to

change stick/TIG weld settings at the weld joint, which reduces downtime and improves safety.

Big Blue® Air Pak Welder/ Generator



This 600-amp machine features a powerful EPA Tier 4 Final and compliant Deutz engine rated at 65.7 horsepower that is ideal for industrial applications including rail, mining, construction and fabrication.



Welding Machines/ Equipment

Miller Electric Mfg Co



Delivering all-in-one multiprocess capabilities for MIG, flux-cored, DC TIG and DC stick welding, this compact machine weighs just 38 pounds and is capable of welding up to 3/8-inch thick mild steel in a single pass.

Nederman LLC

Booth N2734

Air Purification Tower

www.nederman.com



Stand-alone filtration at its best. Nederman's Air Purification Tower is the perfect choice if source extraction is not a satisfying option.

Optrel Inc

Booth N1223 Welding Helmet



Optrel introduces its radically reinvented automatic welding helmet, combining the Swiss maker's latest developments and top innovations in one product.

Tregaskiss

Booth N3733 TOUGH GUN™ TT3 Reamer



The reamer from Tregaskiss has been enhanced with digital Ethernet communications to simplify integration into companiesí digital controls infrastructure, all at a lower cost.

TOUGH GUN™ Reamer Stand



Stud Welder

Designed exclusively for Tregaskiss TOUGH GUN TT3 and TOUGH GUN TT3E Reamer robotic nozzle cleaning stations, this durable stand is customizable in heights ranging from 18 to 45 inches.

TRU-FIT Products TRU-Weld

Booth N5736 TW-4 - Capacitor Discharge



Tru-Weld Equipment is proud to introduce its line of TW-series capacitor discharge stud welding equipment. This line of machines delivers increased portability, functionality, as well as an intuitive touchscreen interface for rapid operation.



Special Events

There are a lot of great events happening this year at FABTECH. You won't want to miss the opening keynote, lively panel discussions, the RUN4MFG 5K, plus much more. All events are free and open to all attendees unless otherwise noted.

WEDNESDAY, NOVEMBE	ER 16	LOCATION
9:00 - 10:00 AM	OPENING KEYNOTE The Power to Win! Speaker: Sugar Ray Leonard, boxing legend and best-selling author of The Big Fight, My Life In and Out of the Ring Sponsored by:	FABTECH Theater Central Hall Lobby
12:30 - 1:30PM	PANEL DISCUSSION State of the Industry: Post-Election Analysis	FABTECH Theater Central Hall Lobby
THURSDAY, NOVEMBER	17	LOCATION
7:30 - 10:30 AM	Women of FABTECH Breakfast with Tech Tour Speaker: Jennifer Cipolla, Center for Additive Technology Advancement, GE Cost: \$15	Room N101
8:30 - 9:30 AM	PANEL DISCUSSION Development Trends in Additive Manufacturing and 3D Printing	FABTECH Theater Central Hall Lobby
12:30 – 1:30 PM	PANEL DISCUSSION Advanced Manufacturing: Creating Competitive Advantages for Product Development Sponsored by:	FABTECH Theater Central Hall Lobby
3:00 - 5:00 PM	NETWORKING EVENT Happy Hour Complimentary beverage ticket included with event registration	Exhibit Halls
FRIDAY, NOVEMBER 18		LOCATION
6:30 - 8:30 AM	RUN4MFG 5K Run/Walk Registration Open: 6:30 AM Event Start: 7:00AM Cost: \$35.00, After Nov. 4 \$50.00	Town Square Las Vegas
9:00 - 10:00 AM	Shop Talk With Counting Cars From the hit reality series Counting Cars, show stars Kevin Mack and "Horny" Mike Henry will be at FABTECH to talk shop with attendees.	FABTECH Theater Central Hall Lobby
WEDNESDAY, NOVEMBE	R 16 - THURSDAY, NOVEMBER 17	LOCATION
Wed: 9:00 AM - 5:00 PM Thurs: 7:00 AM - 1:00 PM	Welders Without Borders: Welding Thunder Team Fabrication Competition	Silver Lot

Education Program

TEDNESDAI, I	NOVEMBER 16	3CHE	DULE-AT-A-GLANCE
TECHNOLOGY	8:00 AM - 10:00 AM	10:30 AM - 12:30 PM	1:30 PM - 3:30 PM
FINISHING		C20: The Basics of a Successful Powder Coating Operation B	C30: NEW! Improving Powder Coating Processes
		C21: The Basics of a Successful Electrocoating Operation B	C31: NEW! Pretreatment Chemistries & Operation Basics
		C22: The Basics of a Successful Porcelain Operation	C32: Conveying Parts Efficiently
CUTTING	F10: NEW! Waterjet Cutting Advancements and Technology		
LASER	F11: NEW! Overview of Solid State/ Fiber Laser and Selection for Design Considerations	F21: NEW! High Power Laser Applications	F31: NEW! Robotic Laser Design and Concept Applications
LEAN	F12: Lean Principle: Strategic Planning and Organizational Alignment	F22: Lean Principle: Developing People and Processes	F32: Lean Tools: Flow and Pull B
ADDITIVE MANUFACTURING		F23: NEW! Fundamentals of Additive Manufacturing for Fabricators	F33: NEW! Big Area Additive Manufacturing and the Future
WORKFORCE DEVELOPMENT	F14: NEW! Next-Gen Workforce and Conflict Management	F24: NEW! Creating Frontline Leadership for a Performance-Based Organization	F34: NEW! Accelerating Workforce Performance Through Best Practices in Learning and Development
MANAGEMENT	F15: NEW! Accelerating Profitability for Successful Manufacturers	F25: NEW! Preparing for Industry 4.0 B	F35: NEW! Marketing 101 for Fabricators B
JOB SHOP SOLUTIONS	F16: NEW! Smart Machines and Manufacturing Applications	F26: NEW! Selecting the Right Partners & Overcoming Challenges in China for Manufacturing Businesses	F36: NEW! Lean Principle: Design Sustainability for the Job Shop
AUTOMATION	F17: NEW! Connected Enterprise for the Factory Floor 4.0	F27: NEW! Machine Monitoring and Cyber Risks for the Factory Floor	F37: NEW! Robotic Automation Systems
FORMING &	F18: Advancements in Press Brake Technology A	F28: Coil Processing: Leveling and Slitting	F38: Roll Form Tooling Installation, Troubleshooting and Lubricants
FABRICATING		F29: Press Brake Selection	F39: NEW! Tube Fabricating 101
STAMPING	S10: NEW! Lubricant Application and Cleaning B	S20: NEW! Material Properties B	S30: NEW! Tool Steel and Heat Treatment B
	S11: Improving Formability [S21: Error Proofing B	S31: In-Die Technologies
WELDING			
SEMINARS	W10: D1.1 - Code Clinic 8:30 AM - 4:30 PM W11: Crash Course of Welding Inspection Technology Seminar (WIT) 8:30 AM - 4:30 PM W12: D17.1 - Code Clinic 8:30 AM - 4:30 PM W13: The Why and How of Welding Procedure Specifications - Beginner 8:00 AM - 12:00 PM W14: The Why and How of Welding Procedure Specifications - Advanced 1:00 PM - 5:00 PM W15: The Why and How of Welding Procedure Specifications - Both 8:00 AM - 5:00 PM W16: ASME Section IX, B31.1 & B31.3 Code Clinic - Day 1. 8:30 AM - 4:30 PM		
CONFERENCES	W25: Destructive and Non-Destructive Testing Conference 8:00 AM - 5:00 PM W26: Thermal Spray Coatings - FREE 1:00 PM - 5:00 PM W27: So You're the New Welding Engineer - Day 1 8:00 AM - 5:00 PM		
PROFESSIONAL PROGRAM	W31: Session 1: Welding Metallurgy & Weldability Session A. 2:00 PM - 5:00 PM Session 2: Modeling. 2:00 PM - 5:00 PM Session 3: Arc Welding. 2:00 PM - 5:00 PM		
EDUCATIONAL SESSIONS	W36: National Center for Welding Education and Training, Weld-Ed		
SPECIAL PROGRAMS	· ·	oldering Symposium — FREE	

THURSDAY, NO	THURSDAY, NOVEMBER 17 SCHEDULE-AT-A-GLANCE			
TECHNOLOGY	8:00 AM - 10:00 AM	10:30 AM - 12:30 PM	1:30 PM - 3:30 PM	
FINISHING	C40: NEW! Adding Finishing to a FAB Shop - Design Criteria	C50: NEW! Adding Finishing to a FAB Shop - Part Cleaning & Spray Booths	C60: NEW! Adding Finishing to a FAB Shop - Coating Application & Curing	
	C41: NEW! Efficient Paint & Powder Coating Batch Operations B	C51: NEW! Pretreatment Regulations [C61: NEW! Hooks, Racks & Stripping Technologies B	
	C42: NEW! Advanced Electrocoating Concepts A	C52: Efficient Curing with Infrared B		
CUTTING			F60: Comparative Cutting With a Tech Tour B	
LASER	AWF100: NEW! Laser Welding for Toda	ay's Fabricator Workshop 👖	F61: NEW! Laser Joining Applications	
LEAN	F42: NEW! Lean: Lessons in Kata and Visual Workplace for Managing Fabrication	F52: Value Stream Mapping: Addressing the Differences Between the Office and Shop Floor	F62: Lean Tools: Quick Changeover and TPM B	
ADDITIVE MANUFACTURING	F43: NEW! Laser Metal Fusion and Laser Metal Deposition for Additive Manufacturing B	F53: NEW! Design and 3D Merging Technologies for Additive Manufacturing []		
WORKFORCE DEVELOPMENT	F44: NEW! Building Teams and a Quality Culture for Team Leaders B	F54: NEW! Delegate, Influence and Motivate Employees for Effective Management	F64: NEW! Manufacturing Workforce: Veterans, Skilled Labor and Resources for Dedicated Employees B	
MANAGEMENT	F45: Create Lasting Strategic Business Value	F55: NEW! Research Like a Pro to Grow Your Business B	F65: NEW! Leveraging Disruptive Technologies to Become the Fabricator of the Future	
JOB SHOP SOLUTIONS	F46: NEW! Software Solutions for Fabricators	F56: Structural Fabrication Technology B	F66: NEW! A Competitive Roadmap and Strategic Plan for the Fabrication Industry	
AUTOMATION	F47: NEW! Automating the Shop Floor and Reducing Lead Time B	F57: NEW! Robotic Joining Technology	F67: NEW! Predictable and Virtual Concepts and Design	
FORMING &	F48: Press Brakes for Engineers B	F58: Tube Producing/Joining B	F68: Roll Forming Basics and Justification B	
FABRICATING	F49: Tube Laser Processing 101 B	F59: Press Brake Safeguarding: Changes to ANSI B11.3	F69: Punching	
STAMPING	S40: NEW! Formability Analysis B	S50: NEW! Solving Progressive Die Problems	\$60: Lubrication Technology	
	S41: Sensor Basics B	S51: Press Maintenance	S61: NEW! ANSI Z244.1	
WELDING				
SEMINARS	W16: ASME Section IX, B31.1 & B31.3 Code Clinic - Day 2 8:30 AM - 4:30 PM W17: D1.5 - Bridge Code Clinic - 2015 8:30 AM - 4:30 PM W18: Ethics Seminar for Certified Welding Inspectors - Part A 8:00 AM - 12:00 PM W19: What to Expect as a New Certified Welding Inspector - Part B 1:00 PM - 5:00 PM W20: Ethics Seminar for Certified Welding Inspectors & What to Expect as a New Certified Welding Inspector (Part A & B) 8:00 AM - 5:00 PM W21: Better Understanding of Welding Symbols (A2.4 and A3.0) 8:30 AM - 4:30 PM W22: The NEW Visual Inspection Workshop 8:00 AM - 5:00 PM W23: Fundamentals of Liquid Penetrant Testing for CWI's and Quality Assurance Personnel 8:30 AM - 4:30 PM			
CONFERENCES	W27: So You're the New Welding Engineer - Day 2			
RWMA SCHOOL	W28: Distortion Control Conference 8:00 AM - 5:00 PM W29: RWMA Resistance Welding School - Day 1 7:45 AM - 5:00 PM			
PROFESSIONAL PROGRAM	W32: Session 4: Plenary Session. 8:00 AM - 10:00 AM Session 5: Battery Welding 10:00 AM - 12:00 PM Session 6: Honorary Symposium for Prof. T. Eagar - Session A. 10:00 AM - 12:00 PM Session 7: Mechanical Properties. 2:00 PM - 4:30 PM Session 8: Honorary Symposium for Prof. T. Eagar - Session B. 2:00 PM - 5:00 PM Session 9: Sensing and Analysis. 2:00 PM - 5:00 PM			
EDUCATIONAL SESSIONS	W37: AWS Education Sessions			
SPECIAL PROGRAMS	W40: AWS Awards Luncheon			

Education Program (cont'd)

FRIDAY, NOVEMBER 18 SCHEDULE-AT-A-GLANCE			
TECHNOLOGY	8:00 AM - 10:00 AM	10:30 AM - 12:30 PM	1:30 PM - 3:30 PM
	C70: NEW! Pretreatment Performance & Analysis	C81: NEW! Trends in Liquid Industrial Finishing	
FINISHING	C71: NEW! Presentación en Español: En Polvo Automatización, Eficiencia y Control de Procesos — Ideas para Su Compañía (Powder Coating Automation, Efficiency, and Process Control — Ideas for Your Company)	C82: NEW! Safety First & Maintenance Predictability A	
CUTTING	F70: NEW! Technical Advancements in Plasma Cutting	F80: NEW! Cutting Tools and Applications B	
LEAN	F72: Lean Tools: 5S Workplace Organization and Standardization B	F82: NEW! Lean Principle: Working Together with Six Sigma and Case Studies on Transformation and Continuous Improvement	F92: NEW! Lean Principle: Transformation and Productivity B
WORKFORCE DEVELOPMENT	F74: NEW! Workforce: Funding and New Contract Labor Rules B		
MANAGEMENT	F75: Succession Planning 101 B	F85: NEW! Social Media and Branding 101 B	F95: NEW! Operating in the Manufacturing Environment: Risk Assessment and New Rules for R&D Tax Credits
JOB SHOP SOLUTIONS	F76: NEW! Marketing and Sales for Fabricators	F86: Sustainable and Revenue Savings for The Job Shop	F96: Safety Strategies for Fabricators B
AUTOMATION	F77: NEW! Benefits of Deburring and Leveling in Today's Manufacturing Environment B		
FORMING &	F78: Press Brake Tooling	F88: Advanced Roll Forming Tooling and Line Troubleshooting A	
FABRICATING	F79: NEW! Steel Metal 101: Mill to Fabricator B	F89: Advanced Metals & Materials A	
STAMPING	S70: Springback Analysis A	S80: NEW! AHSS Tooling Technology B	
	S71: NEW! Modern Press Technology	S81: In-Die Sensing B	
WELDING			
SEMINARS	W24: Fundamentals of Radiographic Inspection for CWI's and Quality Assurance Personnel		
RWMA SCHOOL	W29: RWMA Resistance Welding School - Day 2		
PROFESSIONAL PROGRAM	W33: Session 10: Dissimilar Joining Applications 8:00 AM - 12:00 PM Session 11: Solid-State Processes 8:00 AM - 12:00 PM Session 12: Overlay and Additive Manufacturing 8:00 AM - 12:00 PM Session 13: Welding Metallurgy & Weldability Session B. 1:00 PM - 4:30 PM Session 14: Applied Technologies 1:00 PM - 4:30 PM Session 15: Advanced Controls and Systems 1:00 PM - 4:30 PM		
SPECIAL PROGRAMS	AWS Certification Exam (advance application required)		

EXPERIENCE LEVELS

Use this key along with the Schedule-at-a-Glance to find the education that meets your needs.

- **B** Basic Recommended for the attendee who is new to the industry or needs a refresher on the topic.
- **Intermediate** Designed for the attendee who already has a basic understanding of the subject matter.
- A Advanced For the attendee with several years of experience who is seeking more in-depth information.





• POWER • VERSATILITY

Zoom, Zoom with Mitsubishi Laser

Mitsubishi Laser is the only company with ZOOM Fiber technology. Our all in one ZOOM Fiber head design allows our ZOOM series to be the most versatile laser cutting machines available. Visit mcmachinery.com today or call 630-616-5920 for a complete overview on Zoom Technology.



Experience the difference: mills designed with fab shops in mind

With 30 years experience delivering sophisticated solutions for a variety of shops, we know what fabricators need in a mill. From versatile, cost-efficient models to sophisticated 5-axis machines we've built a line to meet your needs. Partner with us, and leverage a single source provider with expertise in shop floor integration, automation, and the industry's leading service and support network.

MC Machinery's product line includes Laser, Milling, Press Brake, Turning, EDM, and Additive Machines.

To learn more, call 866-994-7856 or visit www.mcmachinery.com



💗 Follow us on Twitter @mc mits





Fabricators & Manufacturers Association, Int'l® 833 Featherstone Road Rockford, IL 61107-6302

NORTH AMERICA'S LARGEST METAL FORMING, FABRICATING, WELDING AND FINISHING EVENT

NOVEMBER 16-18, 2016

Las Vegas, Nevada USA



Scan code with your mobile device to watch FABTECH in action!

SAVE \$50.

Register at fabtechexpo.com

Use Promo Code

BUILDING MOMENTUM

MARK YOUR CALENDAR FOR MORE FABTECH® EVENTS









FABTECH Mexico

May 2-4, 2017

Monterrey, Mexico



FABTECH Chicago
Nov. 6-9, 2017
Chicago, IL USA



FABTECH Canada

Spring 2018

Toronto, Ontario Canada