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!
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 CI AJ. Amada has engineered Process Range Expansion into each of its innovative fabricating systems. For example, the CI 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.
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

**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 CCAI 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 onPeak, 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.
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Exhibit List
(as of 9/2/16)

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

Check out COE’s service van in booth C12060 at FABTECH to learn more.

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Insulate Painted Sheet Metal with Permanently Welded Fasteners

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

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- 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**
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.

**ABIMIG SpinArc**

**Becken Technology Development Limited**

Booth .............. N1620

Pre-Sharpened Thick Tungsten Electrode 1/4” Diameter

The pre-sharpened 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

**ESAB Welding & Cutting Products**

**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.

**Weld Engineering Co**

**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

Yoshikawa Iron Works Co Ltd 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.

**Burghardt + Schmidt GmbH**

**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.

**Carell Corporation**

**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.**

**Rebel EM 215ic (ESAB MIG)**

**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.
Bending/Forming

CMP Automation
Booth .............. N7025
Servo Nylon Tube Bender (SNB100)

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
Booth ............. C37085
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.

Starbend 3-Axis Electric CNC Bending Machines

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
Booth ............. C20127
End Bending Roll Machine with Horizontal Top Roll

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

MetalForming Inc
Booth ............. C35103
Schroeder Powerbend Industrial

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

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 3-D simulation.

Trilogy Machinery Inc
Booth ............. C29079
SWEBEND Plate Bending Rolls

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

American Welding Society
Booth ............. C17000
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.
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

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.

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).

SME
Booth ............. C22000

FABTECH
BOOTH
C29079

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SME
Booth ............. C22000

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Coil Processing

**Allor Manufacturing Inc/ Plesh Industries**
Booth ............. C48076
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 Straightener Design

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 System

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.

Rubber Blasting Tape
Masking Protection

**BT100-SH Series**

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.CAPPLUGS | sales@caplugs.com]
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- Lab & Testing Center
- R&D Resources
- Training

See for yourself
FABTECH 2016 Las Vegas • Booth # C48037
**Cutting**

**CS Unitec Inc**
Booth ............... N2311
AutoMAB 350 Portable Magnetic Drill

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
Plate-Fab

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**
Booth ............... C33085
MetalMaster 2.0

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**
Booth ............... C44101
iSHEAR B Series - Hydraulic Swing Beam Guillotine

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.

**Master Magnetics**
Booth ............... C20046
Grade 42 Neodymium Magnetic Assemblies

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.

**DCM Tech Inc**
Booth ............... C23031
IG380SD Precision Rotary Surface Grinder

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.

**Finishing**

**Carlisle Fluid Technologies**
Booth ............... C48037
DeVilbiss AG-360 Automatic Spray Gun Series

The DeVilbiss AG-360 series of automatic spray applicators feature DeVilbiss “QuickClean™” 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.

**EXEL North America**
Booth ............... C49021
SAMES InoBell® Powder Bell Applicator

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

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Lisa Johnson
COLE-TUVE, Inc.
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**Finishing**

**Rohner**
Booth .......... C50053
**In-Line Process (Conveyorized) Powder Booth**

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.

**Tower Oil & Technology Co**
Booth .......... C18025
**Rustbeat 66-SRP**


**Weiler Corporation**
Booth .......... N3704
**Weiler Wolverine Flap Discs**

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.

**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, CO2, O2, He, or H2 can be produced on-site in the exact ratios a process requires.

**Pronto-Si - Portable Silicon Detector**

The Pronto-Si is a handheld laser power meter with an integrated touchscreen 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.

**Inspection & Testing**

**Gentec Electro-Optics**
Booth .......... C19105
**Pronto-250 - Portable 250 W Power Meter**

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

**GoMeasure3D**
Booth .......... C15094
**HDI Advance R4x 3D Scanner**

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.

**Olympus’ iPLEX NX**

Olympus’ iPLEX NX combines the high-quality images available in a videoscope with an intuitive user interface, ergonomic design, and durability for efficient inspections in any environment.

**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**
Booth ............. C29037
LCG 3015 AJ

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**
Booth ............. C35069
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**
Booth ............. C31102
CL-960 Series Fiber Laser System

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

**Durma USA**
Booth ............. C29068
Fiber Lasers

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**
Booth ............. N5729
FiberCube Laser Engraving System

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**
Booth ............. C16115

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**

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

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Mazak Optonics Corp
Booth ................. C31068
Versatile Compact Laser - Tube 100

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®.

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®.

MVD Machine Ind
Booth ................. C44101
iLASER - Fiber Laser

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.

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New

Introducing the World’s Most Advanced Split-Frame Machining System
Lasers

**TRUMPF Inc**
Booth ............. C35041
TruMatic 1000 fiber

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 & Technology Co**
Booth ............. C18025
Kleneslat-RP

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.
UNCAGED & ATTACKING METAL

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
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.

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.

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.

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.

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 30° and 60°.
**NEW PRODUCTS**

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**JOIN THE 4TH**

**RUN4 MFG 5K**
Charity Run • Las Vegas, NV • Nov. 18, 2016

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

Cost: $35.00, After Nov. 4 $50.00

**JOIN THE 4TH!**

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

---

**TRUMPF Inc**
Booth ............. C35041

**TruPrint 1000**

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**
Booth ............. C17034

**iTool Visual Press Brake Cabinet (All Tool Styles)**

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

**Plate & Structural Fabricating**

**Carell Corporation**
Booth ............. C37085

**MRM-H , Hydraulic Initial Pinch Plate Rolls**

Carell introduces the 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.

---

**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
Booth C33103 R-3

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

Press Brakes

Amada America Inc Booth C29037 HG 2204 ATC

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.

JMT USA Booth C39047
Eco Bend Electric Press Brakes

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.

TRUMPF Inc Booth C35041
TruBend 5130

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 Booth C29037 LC 2515 C1 AJ

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 Booth C31085 M2044TS-S

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
Booth ............. N2336
Touch-Screen User Interface Controls

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.

Three Important Reasons To Visit Booth #N5922

1. Our Upper Electrode Feeder Reduces Cycle Times. See a Live Demo!
   - Simultaneous workpiece movement and nut feeding.
   - Accurate and secure nut positioning.
   - For 6, 8 and 10 millimeter square nuts.
   - Faster speed rate.

   - Direct configuration of weld current values makes it easy to fine-tune weld quality.
   - 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.

3. Check Out Our Newest & Most Compact Capacitor Discharge Welder Yet
   - Selectable current modes let you fine-tune weld quality.
   - 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.

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

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

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

Register at fabtechexpo.com
ESTA Extraction USA LP
Booth ............. N5300
DUSTOMAT 4 Mobile Dust Extractor

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
Booth ............. N1126
Laser Safety Cabin - Laser Castle G2

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.

Charge right through your next fab project!

It’s a jungle out there... be ready to handle any build, repair, or assembly job with the New Rhino Cart Mobile Fixturing Station. Quickly clamp and fixture at any point on the surface, store all your tools, and charge right through your projects!

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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-OEM, 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.

Bosch Rexroth Corp
Booth .............  C24080
IndraMotion MTX - CNC platform

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.

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.

CMMS App
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- Offline capabilities
- Labor timers

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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

I4Suite 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.

I4APS
I4APS 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
I4Production 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 I4Production 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 ¼” 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.
**NEW PRODUCTS**

**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**
Booth .......... C22035
Portable Tube Beveler

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

**Carell Corporation**
Booth .......... C37085
ETM-90HD Heavy Duty 3” Pipe 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”OD tubing. Digital programming offers 40 programs of 5 bends each. High quality bends are produced swiftly without using a mandrel.

**E.H. Wachs**
Booth .......... N4029
DynaPrep MDSF Flange Facing Modules

E.H. WACHS NEW FLANGE FACING MODULES expand the capabilities of our DynaPrep MDSF Modular Design Split Frame machining system in flange facing, grooving and tapering.

The FFC (Cantilever) module is designed to quickly machine record groove finishes on raised face flanges.

The FFR (Rail) module is adjustable in multiple axes to machine more complex RTJ ring groves and tapers.

See them at the E.H. Wachs exhibit Booth N4029

**Tube & Pipe Fabricating or Welding**

**E.H. Wachs**
**NEW FLANGE FACING MODULES**

E.H. WACHS NEW FLANGE FACING MODULES expand the capabilities of our DynaPrep MDSF Modular Design Split Frame machining system in flange facing, grooving and tapering.

The FFC (Cantilever) module is designed to quickly machine record groove finishes on raised face flanges.

The FFR (Rail) module is adjustable in multiple axes to machine more complex RTJ ring groves and tapers.

See them at the E.H. Wachs exhibit Booth N4029
**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.

**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**

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.

**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.

---

**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.

**Tri Tool Inc**

Booth .............. N5916

TRIMAX™ Machining Systems

---

**TAB WRAPPER**

- Significantly improves pack-to-shipment performance while minimizing labor requirements
- Reduces product damage
- Stretch-wraps most loads in one minute or less
- A quality machine for an economical price

**TAB Industries, LLC**

See Us In
Booth #C19028

**TAB WRAPPER TORNADO**
NEW PRODUCTS

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.

**Jet Edge**
Booth ............. C25085
Permalign® V-Series Mini Hopper

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.

**KMT Waterjet Systems Inc**
Booth ............. C25103
PRO-III 90,000psi Pumps

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.

**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 normal wear plate. It can be easily assembled by welding.

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BOTH SIDES IN A SINGLE PASS – GET THE LISSMAC EDGE – THE ORIGINAL

Oxide Removal · Edge Rounding · Deburring · Deslagging · Finishing
**Welding Consumables**

Becken Technology Development Limited

Booth .............. N1620

Quality Titanium Wires and Powders

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 tailorabile.

Continentlal 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

Booth .............. N2018

QWP Flux Coated Stainless Steel Tig Rod

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

Booth .............. N3704

Tiger High Performance Bonded Wheels

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.

**DIMIDIE CLAMPS**

Like us on facebook or find us at DimideClamps.com

Support us on Kickstarter

Launching November 16th
ALM Positioners Inc  
Booth .................. N1814  
Head & Tailstock Positioner  
Wireless Communication

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  
Powermax®45 XP

Hypertherm 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.

COR-MET QWP Flux Coated TIG wire

Eliminate the need for gas purging and backing for TIG pipe welding. The QWP Flux Coated TIG rod forms a slag on the backside of the pipe protecting the weld from oxidation (sugaring).

Grades available
- 308H, 308L, 309L, 316L, 347, 16-8-2, 2209, 625, 82, B2, B6, B8

Call for special chemistry and diameter requests

Manufactured by COR-MET INC., Brighton, Michigan USA 800-848-2719  
www.cor-met.com / sales@cor-met.com  FABTECH 2016 Booth N2018
NEW PRODUCTS

Welding Machines/Equipment

Miller Electric Mfg Co
Booth ................ N3329
Multimatic™ 215 Multiprocess Welder

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

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 companies’ digital controls infrastructure, all at a lower cost.

TOUGH GUN™ Reamer Stand

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 Stud Welder

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.

Nederman Air Purification Tower

Innovative Ambient Filtration

Nederman’s Air Purification Tower is a cost-effective and creative approach to controlling welding fume when:

- Ducting cannot be easily installed in the workspace
- Welding on large objects and capture-at-source is not practical
- Robotics and automation obstruct localized filtration
- Complementary to capture at source or local extraction

Visit us at booth N2734
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, NOVEMBER 16

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Location</th>
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<tbody>
<tr>
<td>9:00 – 10:00 AM</td>
<td>OPENING KEYNOTE</td>
<td>FABTECH Theater</td>
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<tr>
<td></td>
<td>The Power to Win!</td>
<td>Central Hall Lobby</td>
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<td></td>
<td>Speaker: Sugar Ray Leonard, boxing legend and best-selling author of <em>The Big Fight, My Life In and Out of the Ring</em></td>
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<td>Sponsored by: MITSUBISHI LASER</td>
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<tr>
<td>12:30 – 1:30 PM</td>
<td>PANEL DISCUSSION</td>
<td>FABTECH Theater</td>
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<tr>
<td></td>
<td>State of the Industry: Post-Election Analysis</td>
<td>Central Hall Lobby</td>
</tr>
</tbody>
</table>

### THURSDAY, NOVEMBER 17

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 – 10:30 AM</td>
<td>Women of FABTECH Breakfast with Tech Tour</td>
<td>Room N101</td>
</tr>
<tr>
<td></td>
<td>Speaker: Jennifer Cipolla, Center for Additive Technology Advancement, GE</td>
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<tr>
<td></td>
<td>Cost: $15</td>
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</tr>
<tr>
<td>8:30 – 9:30 AM</td>
<td>PANEL DISCUSSION</td>
<td>FABTECH Theater</td>
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<tr>
<td></td>
<td>Development Trends in Additive Manufacturing and 3D Printing</td>
<td>Central Hall Lobby</td>
</tr>
<tr>
<td>12:30 – 1:30 PM</td>
<td>PANEL DISCUSSION</td>
<td>FABTECH Theater</td>
</tr>
<tr>
<td></td>
<td>Advanced Manufacturing: Creating Competitive Advantages for Product Development</td>
<td>Central Hall Lobby</td>
</tr>
<tr>
<td></td>
<td>Sponsored by: PLEX</td>
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<tr>
<td>3:00 – 5:00 PM</td>
<td>NETWORKING EVENT</td>
<td>Exhibit Halls</td>
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<td></td>
<td>Happy Hour</td>
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<tr>
<td></td>
<td>Complimentary beverage ticket included with event registration</td>
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</tbody>
</table>

### FRIDAY, NOVEMBER 18

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30 – 8:30 AM</td>
<td>RUN4MFG 5K Run/Walk</td>
<td>Town Square Las Vegas</td>
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<tr>
<td></td>
<td>Registration Open: 6:30 AM</td>
<td>Event Start: 7:00AM</td>
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<td></td>
<td>Cost: $35.00, After Nov. 4 $50.00</td>
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</tr>
<tr>
<td>9:00 – 10:00 AM</td>
<td>Shop Talk With Counting Cars</td>
<td>FABTECH Theater</td>
</tr>
<tr>
<td></td>
<td>From the hit reality series <em>Counting Cars</em>, show stars Kevin Mack and “Horny” Mike Henry</td>
<td>Central Hall Lobby</td>
</tr>
</tbody>
</table>

### WEDNESDAY, NOVEMBER 16 – THURSDAY, NOVEMBER 17

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wed: 9:00 AM - 5:00 PM</td>
<td>Welders Without Borders: Welding Thunder Team Fabrication Competition</td>
<td>Silver Lot</td>
</tr>
<tr>
<td>Thurs: 7:00 AM - 1:00 PM</td>
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</tr>
</tbody>
</table>
# Education Program

## WEDNESDAY, NOVEMBER 16

<table>
<thead>
<tr>
<th>TECHNOLOGY</th>
<th>8:00 AM - 10:00 AM</th>
<th>10:30 AM - 12:30 PM</th>
<th>1:30 PM - 3:30 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINISHING</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>C20</strong>: The Basics of a Successful Powder Coating Operation</td>
<td><strong>C30</strong>: NEW! Improving Powder Coating Processes</td>
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<tr>
<td></td>
<td></td>
<td><strong>C21</strong>: The Basics of a Successful Electrocoating Operation</td>
<td><strong>C31</strong>: NEW! Pretreatment Chemistries &amp; Operation Basics</td>
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<tr>
<td></td>
<td></td>
<td><strong>C22</strong>: The Basics of a Successful Porcelain Operation</td>
<td><strong>C32</strong>: Conveying Parts Efficiently</td>
</tr>
<tr>
<td><strong>CUTTING</strong></td>
<td><strong>F10</strong>: NEW! Waterjet Cutting Advancements and Technology</td>
<td><strong>F11</strong>: NEW! Overview of Solid State/ Fiber Laser and Selection for Design Considerations</td>
<td><strong>F12</strong>: Lean Principle: Strategic Planning and Organizational Alignment</td>
</tr>
<tr>
<td><strong>LASER</strong></td>
<td><strong>F13</strong>: NEW! High Power Laser Applications</td>
<td><strong>F31</strong>: NEW! Robotic Laser Design and Concept Applications</td>
<td><strong>F32</strong>: Lean Tools: Flow and Pull</td>
</tr>
<tr>
<td><strong>LEAN</strong></td>
<td><strong>F14</strong>: Lean Principle: Developing People and Processes</td>
<td><strong>F15</strong>: NEW! Big Area Additive Manufacturing for Fabricators</td>
<td><strong>F16</strong>: Next-Gen Workforce and Conflict Management</td>
</tr>
<tr>
<td><strong>ADDITIVE MANUFACTURING</strong></td>
<td><strong>F17</strong>: NEW! Fundamentals of Additive Manufacturing for Fabricators</td>
<td><strong>F18</strong>: NEW! Smart Machines and Manufacturing Applications</td>
<td><strong>F19</strong>: NEW! Selecting the Right Partners &amp; Overcoming Challenges in China for Manufacturing Businesses</td>
</tr>
<tr>
<td><strong>WORKFORCE DEVELOPMENT</strong></td>
<td><strong>F20</strong>: NEW! Creating Frontline Leadership for a Performance-Based Organization</td>
<td><strong>F21</strong>: NEW! Preparing for Industry 4.0</td>
<td><strong>F22</strong>: NEW! Accelerating Workforce Performance Through Best Practices in Learning and Development</td>
</tr>
<tr>
<td><strong>MANAGEMENT</strong></td>
<td><strong>F23</strong>: NEW! Accelerating Profitability for Successful Manufacturers</td>
<td><strong>F24</strong>: NEW! Marketing 101 for Fabricators</td>
<td><strong>F25</strong>: NEW! The Why and How of Welding Procedure Specifications – Beginner</td>
</tr>
<tr>
<td><strong>JOB SHOP SOLUTIONS</strong></td>
<td><strong>F26</strong>: NEW! Smart Machines and Manufacturing Applications</td>
<td><strong>F27</strong>: NEW! The Why and How of Welding Procedure Specifications – Advanced</td>
<td><strong>F28</strong>: New to Industry 4.0</td>
</tr>
<tr>
<td><strong>AUTOMATION</strong></td>
<td><strong>F29</strong>: NEW! Connected Enterprise for the Factory Floor 4.0</td>
<td><strong>F30</strong>: NEW! The Basics of a Successful Job Shop &amp; Operation Basics</td>
<td><strong>F31</strong>: NEW! Thermal Spray Coatings – FREE</td>
</tr>
<tr>
<td><strong>FORMING &amp; FABRICATING</strong></td>
<td><strong>F32</strong>: NEW! Press Brake Selection</td>
<td><strong>F33</strong>: NEW! Tube Fabricating 101</td>
<td><strong>F34</strong>: NEW! New to Industry 4.0</td>
</tr>
<tr>
<td><strong>STAMPING</strong></td>
<td><strong>S10</strong>: NEW! Lubricant Application and Cleaning</td>
<td><strong>S20</strong>: NEW! Material Properties</td>
<td><strong>S30</strong>: NEW! Tool Steel and Heat Treatment</td>
</tr>
<tr>
<td><strong>WELDING</strong></td>
<td><strong>S11</strong>: Improving Formability</td>
<td><strong>S21</strong>: Error Proofing</td>
<td><strong>S31</strong>: In-Die Technologies</td>
</tr>
</tbody>
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**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: | D1.2 - 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 |
| 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 |
| W31: | Session 1: Welding Metallurgy & Weldability Session A | 2:00 PM - 5:00 PM |
| W32: | Session 2: Modeling | 2:00 PM - 5:00 PM |
| W33: | Session 3: Arc Welding | 2:00 PM - 5:00 PM |
| W36: | National Center for Welding Education and Training, Weld-Ed | 9:00 AM - 3:30 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 |
| W32: | Session 2: Modeling | 2:00 PM - 5:00 PM |
| W33: | Session 3: Arc Welding | 2:00 PM - 5:00 PM |

**EDUCATIONAL SESSIONS**

| W36: | National Center for Welding Education and Training, Weld-Ed | 9:00 AM - 3:30 PM |

**SPECIAL PROGRAMS**

| W38: | AWS Prayer Breakfast | 7:00 AM - 8:30 AM |
| W39: | 40th International Brazing and Soldering Symposium — FREE | 8:00 AM - 5:00 PM |

Welders Without Borders: Welding Thunder Team Fabrication Competition | 9:00 AM - 5:00 PM |
**THURSDAY, NOVEMBER 17**

<table>
<thead>
<tr>
<th>TECHNOLOGY</th>
<th>8:00 AM - 10:00 AM</th>
<th>10:30 AM - 12:30 PM</th>
<th>1:30 PM - 3:30 PM</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>C42: NEW! Advanced Electrocoating Concepts</td>
<td>C52: Efficient Curing with Infrared</td>
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</tr>
<tr>
<td>CUTTING</td>
<td>F60: Comparative Cutting With a Tech Tour</td>
<td>F61: NEW! Laser Joining Applications</td>
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</tr>
<tr>
<td>LASER</td>
<td>AWF100: NEW! Laser Welding for Today’s Fabricator Workshop</td>
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</tr>
<tr>
<td>ADDITIVE MANUFACTURING</td>
<td>F43: NEW! Laser Metal Fusion and Laser Metal Deposition for Additive Manufacturing</td>
<td>F53: NEW! Design and 3D Merging Technologies for Additive Manufacturing</td>
<td>F64: NEW! Manufacturing Workforce: Veterans, Skilled Labor and Resources for Dedicated Employees</td>
</tr>
<tr>
<td>WORKFORCE DEVELOPMENT</td>
<td>F44: NEW! Building Teams and a Quality Culture for Team Leaders</td>
<td>F54: NEW! Delegate, Influence and Motivate Employees for Effective Management</td>
<td>F65: NEW! Leveraging Disruptive Technologies to Become the Fabricator of the Future</td>
</tr>
<tr>
<td>MANAGEMENT</td>
<td>F45: Create Lasting Strategic Business Value</td>
<td>F55: NEW! Research Like a Pro to Grow Your Business</td>
<td></td>
</tr>
<tr>
<td>AUTOMATION</td>
<td>F47: NEW! Automating the Shop Floor and Reducing Lead Time</td>
<td>F57: NEW! Robotic Joining Technology</td>
<td>F67: NEW! Predictable and Virtual Concepts and Design</td>
</tr>
<tr>
<td>FORMING &amp; FABRICATING</td>
<td>F48: Press Brakes for Engineers</td>
<td>F58: Tube Producing/Joining</td>
<td>F68: Roll Forming Basics and Justification</td>
</tr>
<tr>
<td>WELDING</td>
<td>S41: Sensor Basics</td>
<td>S51: Press Maintenance</td>
<td>S61: NEW! ANSI Z244.1</td>
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</table>

**SEMINARS**

<table>
<thead>
<tr>
<th>SEMINARS</th>
<th>8:30 AM - 4:30 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>W16: ASME Section IX, B31.1 &amp; B31.3 Code Clinic – Day 2</td>
<td>8:30 AM - 4:30 PM</td>
</tr>
<tr>
<td>W17: D1.5 – Bridge Code Clinic – 2015</td>
<td>8:30 AM - 4:30 PM</td>
</tr>
<tr>
<td>W18: Ethics Seminar for Certified Welding Inspectors – Part A</td>
<td>8:00 AM - 12:00 PM</td>
</tr>
<tr>
<td>W19: What to Expect as a New Certified Welding Inspector – Part B</td>
<td>1:00 PM - 5:00 PM</td>
</tr>
<tr>
<td>W20: Ethics Seminar for Certified Welding Inspectors &amp; What to Expect as a New Certified Welding Inspector (Part A &amp; B)</td>
<td>8:00 AM - 5:00 PM</td>
</tr>
<tr>
<td>W21: Better Understanding of Welding Symbols (A2.4 and A3.0)</td>
<td>8:30 AM - 4:30 PM</td>
</tr>
<tr>
<td>W22: The NEW Visual Inspection Workshop</td>
<td>8:00 AM - 5:00 PM</td>
</tr>
<tr>
<td>W23: Fundamentals of Liquid Penetrant Testing for CWI’s and Quality Assurance Personnel</td>
<td>8:30 AM - 4:30 PM</td>
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**CONFERENCES**

<table>
<thead>
<tr>
<th>CONFERENCES</th>
<th>8:00 AM - 5:00 PM</th>
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<tbody>
<tr>
<td>W27: So You’re the New Welding Engineer – Day 2</td>
<td>8:00 AM - 5:00 PM</td>
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<tr>
<td>W28: Distortion Control Conference</td>
<td>8:00 AM - 5:00 PM</td>
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</table>

**RWMA SCHOOL**

<table>
<thead>
<tr>
<th>RWMA SCHOOL</th>
<th>7:45 AM - 5:00 PM</th>
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</thead>
<tbody>
<tr>
<td>W29: RWMA Resistance Welding School – Day 1</td>
<td>7:45 AM - 5:00 PM</td>
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</table>

**PROFESSIONAL PROGRAM**

<table>
<thead>
<tr>
<th>PROFESSIONAL PROGRAM</th>
<th>8:00 AM - 10:00 AM</th>
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</thead>
<tbody>
<tr>
<td>W32: Session 4: Plenary Session</td>
<td>8:00 AM - 10:00 AM</td>
</tr>
<tr>
<td>Session 5: Battery Welding</td>
<td>10:00 AM - 12:00 PM</td>
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<tr>
<td>Session 6: Honorary Symposium for Prof. T. Eagar – Session A</td>
<td>10:00 AM - 12:00 PM</td>
</tr>
<tr>
<td>Session 7: Mechanical Properties</td>
<td>2:00 PM - 4:00 PM</td>
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<tr>
<td>Session 8: Honorary Symposium for Prof. T. Eagar – Session B</td>
<td>2:00 PM - 5:00 PM</td>
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<tr>
<td>Session 9: Sensing and Analysis</td>
<td>2:00 PM - 5:00 PM</td>
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</table>

**EDUCATIONAL SESSIONS**

<table>
<thead>
<tr>
<th>EDUCATIONAL SESSIONS</th>
<th>8:30 AM - 5:00 PM</th>
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</thead>
<tbody>
<tr>
<td>W37: AWS Education Sessions</td>
<td>8:30 AM - 5:00 PM</td>
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</table>

**SPECIAL PROGRAMS**

<table>
<thead>
<tr>
<th>SPECIAL PROGRAMS</th>
<th>12:00 PM - 2:00 PM</th>
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</thead>
<tbody>
<tr>
<td>W40: AWS Awards Luncheon</td>
<td>12:00 PM - 2:00 PM</td>
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</table>

Welders Without Borders: Welding Thunder Team Fabrication Competition | 7:00 AM - 1:00 PM |

Detailed session descriptions, speakers, pricing, room locations and more can be found at fabtechexpo.com/edu.
## Education Program (cont’d)

### FRIDAY, NOVEMBER 18

<table>
<thead>
<tr>
<th>TECHNOLOGY</th>
<th>8:00 AM – 10:00 AM</th>
<th>10:30 AM – 12:30 PM</th>
<th>1:30 PM – 3:30 PM</th>
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</thead>
<tbody>
<tr>
<td><strong>FINISHING</strong></td>
<td></td>
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<tr>
<td>C70: <strong>NEW!</strong> Pretreatment Performance &amp; Analysis</td>
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<tr>
<td>C81: <strong>NEW!</strong> Trends in Liquid Industrial Finishing</td>
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<tr>
<td>C82: <strong>NEW!</strong> Safety First &amp; Maintenance Predictability</td>
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<tr>
<td><strong>CUTTING</strong></td>
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<tr>
<td>F70: <strong>NEW!</strong> Technical Advancements in Plasma Cutting</td>
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<tr>
<td>F71: <strong>NEW!</strong> Technical Advancements in Soldering</td>
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<tr>
<td><strong>LEAN</strong></td>
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<tr>
<td>F72: Lean Tools: 5S Workplace Organization and Standardization</td>
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<tr>
<td>F82: <strong>NEW!</strong> Lean Principle: Working Together with Six Sigma and Case Studies on Transformation and Continuous Improvement</td>
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<tr>
<td>F83: <strong>NEW!</strong> Lean Principle: Transformation and Productivity</td>
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<tr>
<td><strong>WORKFORCE DEVELOPMENT</strong></td>
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<td>F74: <strong>NEW!</strong> Workforce: Funding and New Contract Labor Rules</td>
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<td><strong>MANAGEMENT</strong></td>
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<tr>
<td>F75: Succession Planning 101</td>
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<tr>
<td>F85: <strong>NEW!</strong> Social Media and Branding 101</td>
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<tr>
<td>F95: <strong>NEW!</strong> Operating in the Manufacturing Environment: Risk Assessment and New Rules for R&amp;D Tax Credits</td>
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<tr>
<td><strong>JOB SHOP SOLUTIONS</strong></td>
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<tr>
<td>F76: <strong>NEW!</strong> Marketing and Sales for Fabricators</td>
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<tr>
<td>F77: <strong>NEW!</strong> Benefits of Deburring and Leveling in Today’s Manufacturing Environment</td>
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<tr>
<td><strong>AUTOMATION</strong></td>
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<td>F78: Press Brake Tooling</td>
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<tr>
<td>F79: <strong>NEW!</strong> Steel Metal 101: Mill to Fabricator</td>
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<td><strong>FORMING &amp; FABRICATING</strong></td>
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<tr>
<td>F80: <strong>NEW!</strong> Press Forming</td>
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<tr>
<td>F81: <strong>NEW!</strong> Press Tooling</td>
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<tr>
<td>F82: <strong>NEW!</strong> Press Line Troubleshooting</td>
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<tr>
<td><strong>STAMPING</strong></td>
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<tr>
<td>S70: Springback Analysis</td>
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<tr>
<td>S71: <strong>NEW!</strong> Modern Press Technology</td>
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<tr>
<td>S72: <strong>NEW!</strong> Modern Press Technology</td>
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<tr>
<td>S80: <strong>NEW!</strong> AHSS Tooling Technology</td>
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<td>S81: In-Die Sensing</td>
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<tr>
<td><strong>WELDING</strong></td>
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<tr>
<td><strong>SEMINARS</strong></td>
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<tr>
<td>W24: Fundamentals of Radiographic Inspection for CWIs and Quality Assurance Personnel</td>
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<tr>
<td>W29: RWMA Resistance Welding School – Day 2</td>
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<tr>
<td><strong>RWMA SCHOOL</strong></td>
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<tr>
<td>W33: Session 10: Dissimilar Joining Applications</td>
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<td>Session 11: Solid-State Processes</td>
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<td>Session 12: Overlay and Additive Manufacturing</td>
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<td>Session 13: Welding Metallurgy &amp; Weldability Session B</td>
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<tr>
<td>Session 14: Applied Technologies</td>
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<tr>
<td>Session 15: Advanced Controls and Systems</td>
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<tr>
<td><strong>SPECIAL PROGRAMS</strong></td>
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<td>AWS Certification Exam (advance application required)</td>
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### EXPERIENCE LEVELS

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

- **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.
- **Advanced** – For the attendee with several years of experience who is seeking more in-depth information.

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