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OFFICIAL SHOW NEWS | THURSDAY, NOVEMBER 21, 2013

Panel Offers Ways To Attract Skilled Workers

Judging by the comments at yesterday's *Solutions for a Qualified Workforce Pipeline* panel, it is going to be up to manufacturers to do the heavy lifting in recruiting and retaining qualified workers. While none of this should come as a big surprise to employers, panelists offered tips and suggestions on where to look and how to build alliances that will help find new, skilled employees. The panel was moderated by Pam McDonough, president and CEO for the Alliance for the Illinois Manufacturing/North Business & Industrial Council.

Community Colleges

All five panelists acknowledged the importance of reaching out to community colleges as a source for potential employees. "Become involved with the advisory boards of community colleges and maintain an open dialogue with

educators, letting them know what you're not seeing out of their students," said Jeanine Kunz, Director of Training and Development for SME.

Stacey DelVecchio of Caterpillar's product development and global technology team said her firm has strong ties with four-year universities and is working on a pilot program to have the same types of relationships with not only community colleges, but to begin dialogues with middle and high schools.

But what if you're not a global entity like Caterpillar and can't have similar systems in place? Joe Lampinen, director of engineering services at employ-



ment agency Kelly Services, says his firm acts as an intermediary between training centers and a consortium of smaller manufacturers, with an end result of programs that are almost like clerkships for skilled workers. His firm also manages internship programs for clients.

"Do students have good soft skills?" asked Scott Mazzulla, vice president of planning and development at the Hobart Institute of Welding Technology.

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FABTECH Launches Campaign to Help Illinois Storm Victims

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AWS 2013 Robotic Arc Welding Robotic Demonstration

9:00 a.m. – 3:00 p.m., Booth N2099

New Product Presentations

10:00 a.m. – 12:15 p.m.
FABTECH Theater, Grand Concourse

Artist Captures Emotions in Metal

Metal fabricator/artist Chris O'Rourke was working on a model of his new piece when his five-year-old son asked him, "Daddy, is this a family?" Considering that O'Rourke works in abstract contemporary form and likes to leave his work open to interpretation, his son's question struck a chord.

During FABTECH, visitors can see the six-foot-tall "Family," a gleaming stainless steel sculpture, in the middle of the Grand Concourse of McCormick Place. "My family was actually away in Thailand while I was work-

ing on this and I thought about them a lot," O'Rourke said. "They get to see it here for the first time too."

In a creative juxtaposition of shapes and spheres, the sculpture captures human closeness and translates the complexity and tenderness of family relations into tangible form. "A lot of people that stopped by actually thought it was part of the permanent collection here," O'Rourke said. It is fabricated from 14-gauge stainless steel with mirror finish. "The spheres are from Wagner, and it was all TIG

welded with a Miller 350 Syncrowave. Makita, Fein, Milwaukee, and Baldor all had electric motors and grinders in on the finish work," he said. "I used tons of 3M abrasives and JacksonLea polishing compound. The base plate is 2" thick steel and I did the edge detail with Harris gauge set and torch."

Originally from California, O'Rourke is the owner of Las Vegas-based Chris O. Creations and works out of a 3,500-square-foot studio, which can accommodate his large-scale

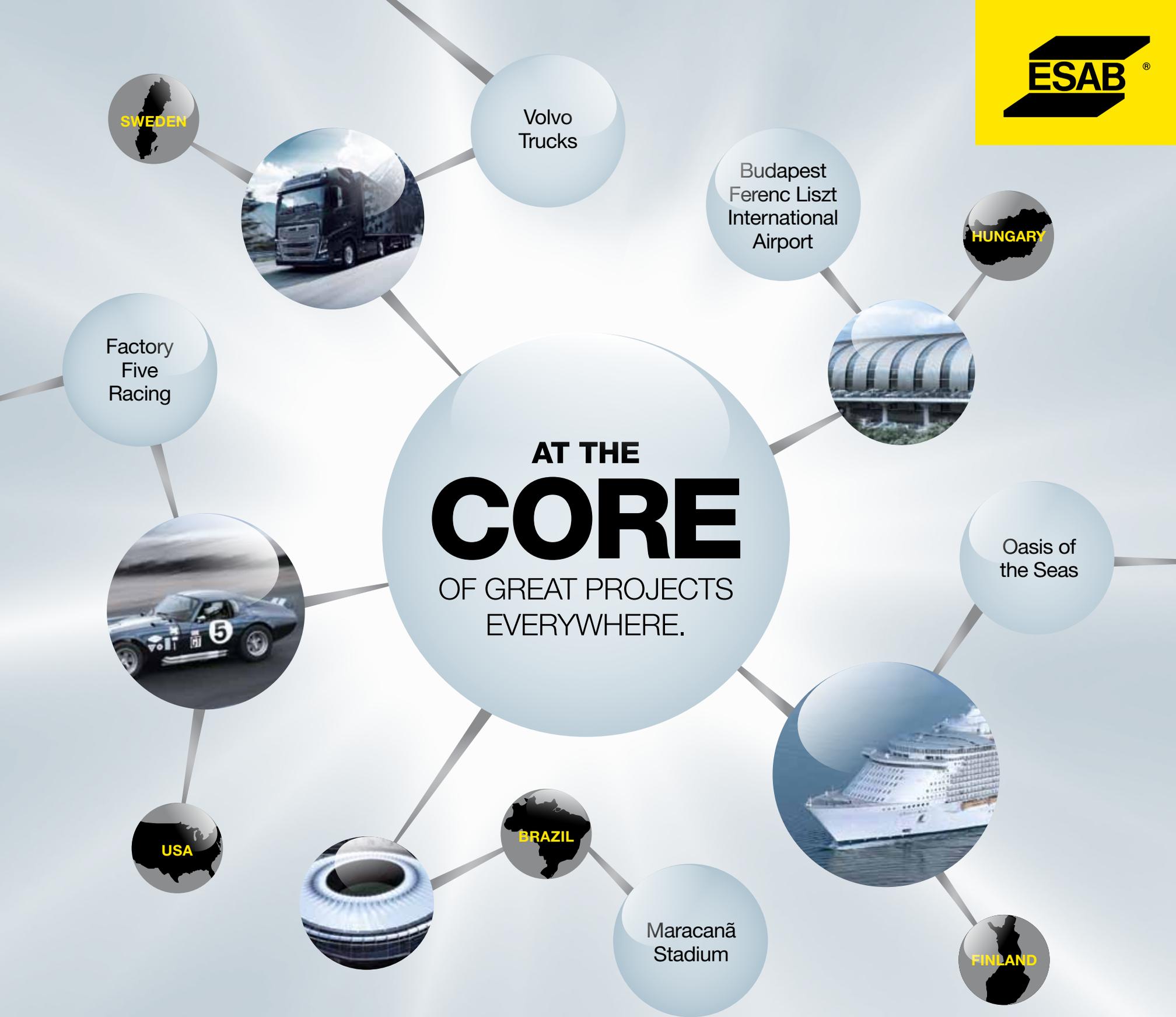
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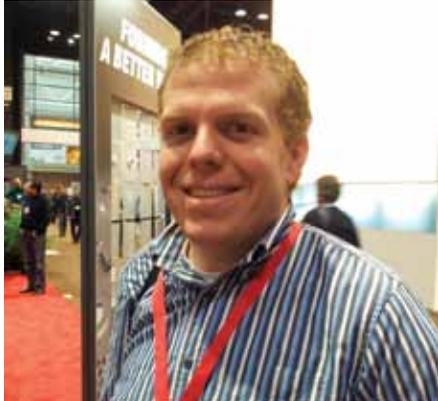
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Enthusiasm Strong on FABTECH Floor

New contracts, warm handshakes and lots of “a-ha moments” were fueling the enthusiasm on the FABTECH show floor yesterday. “I learned a lot of information about tools I didn’t



Christopher Roeder, Senior Manufacturing Engineer, AAR Mobility Systems, Cadillac, Mich.

know existed,” said trade show and conference attendee Christopher Roeder, senior manufacturing engineer with AAR Mobility Systems in Cadillac, Mich. He found the conference content informative and particularly enjoyed learning about the new turret presses. “We want to get a turret press and the sooner we do it, the sooner we’ll start saving money,” Roeder said. “Our budget is a little tight right now, but we have the volume to justify some targeted improvements. Our company could save a lot of money if we bring things in house instead of outsourcing.” What would he like to see more of next year? Custom automation, integrators, and custom machine builders.



Mark Prather, Welding Foreman, DTE Energy, Petersburg, Mich.

Mark Prather, welding foreman at a DTE Energy power plant in Petersburg, Mich. came to FABTECH to get face time with the companies he’s working to supply jackets, hoods, and other equipment for the 200 welders in his care. “I go through a lot of consumables,” he said. “Here I found an owner of the company that makes

jackets we’ve had issues with, and we figured it out.” In the past, he’d been frustrated with having to go through layers of communication to get to the right person. “When my guys are out there in the field welding and they need a jacket, I can’t tell them ‘I’ll get back to you.’ They need it right now,” he said. “Here I can make face-to-



Stacy Garza, Fox Valley Technical College, Appleton, Wisc.

face contact and build a relationship.” Competing in Welding Wars was the reason to make a trip to FABTECH for Stacy Garza and her teammates from Fox Valley Technical College in Appleton, Wis. “We’ve had

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Market Snapshot Shows a Healthy Industry

American manufacturing is built on the shoulders of small- to mid-size companies. In the metal fabricating sector, these smaller job shops and contract manufacturers serve as reliable indicators of what's happening in the industry as a whole. A new online survey conducted by the Fabricators & Manufacturers Association (FMA) is canvassing this group on a quarterly basis to get a pulse on the industry. Recent results are very promising and highlights include increases in current operating capacities, new order activity, and capital equipment purchases.

"Our goal is to provide the marketplace a snapshot of the job shop industry," said Edward Youdell, president of FMA, which supports the metal forming and fabrication industry. Survey results from this group can help

related businesses plan and react to the sensitive changes in the status of their customers and familiarize the greater public with the importance of manufacturing in the economy.

FMA's economic analyst Chris Kuehl's summation of the October 2013 report said that one of the most encouraging signals is that new order activity is up for 37% of the respondents and for another 42% the rate remained the same. Only the very smallest companies are seeing a significant decline in new orders and even for them only a little over a quarter are reporting reduced demand.

Projections for business in the coming quarter is very positive, according to Kuehl, with over half asserting anticipated improvement and another 36% believing that things will remain roughly as they are.

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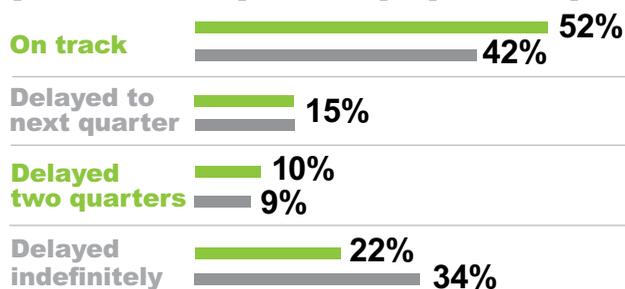
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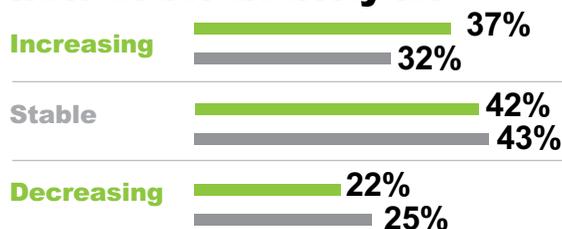
Compared to the previous quarter, planned capital equipment purchases are:



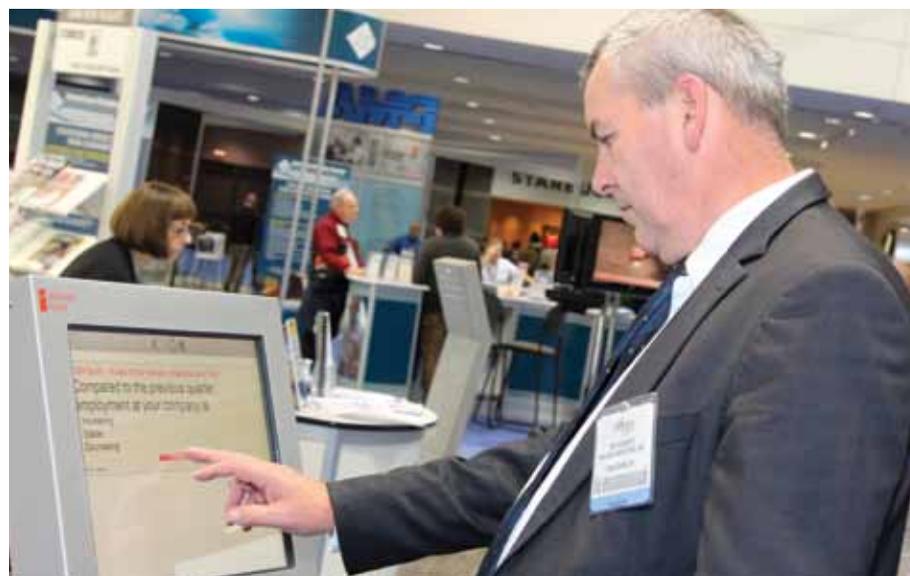
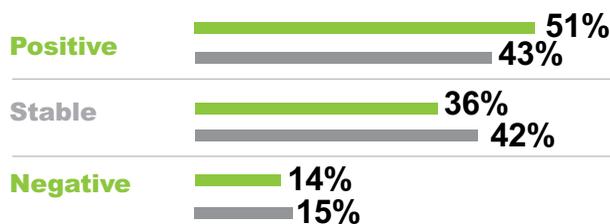
At what level of capacity is your business currently operating?



Compared to the previous quarter, new order activity is:



For the upcoming quarter, your company's business outlook is:



Stop by Booth N1400 to share how business is going for you.

FABTECH attendees can stop by **Booth N1400** to pick up a copy of the latest report and participate in an abbreviated onsite survey, which so far revealed that compared to the previous quarter, 75% of respondents said capital purchases are on track, with 16% being delayed to the next

quarter, and 8% being delayed two quarters or more.

The *Forming and Fabrication Job Shop Consumption Report* is free to metal forming and fabricating professionals at www.fmanet.org/store. ■



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Metal Fabricators Collaborate to Compete

Small business owners take networking to a new level, By Tim Heston, The Fabricator

Precision Sheet Metal User Groups consist of up to six noncompetitive, geographically dispersed metal fabricators. Group members have found they can learn a lot from others, especially from other shop owners who have endured and overcome similar business challenges.

In 2002 I visited a Midwest shop owner who had been in the business for decades. Over the years he had seen the effects of offshoring: community anchors—that is, large assembly plants—shuttered one after another, spelling the end for the network of contract manufacturing shops supplying those plants. I asked a question that must have made an already young magazine reporter sound even younger: What do you miss about the old days?

“The handshakes,” he told me.

Most of the country’s small and mid-sized contract manufacturers compete somewhat locally, serving plants within a few hundred miles. Their customers may play globally, assembling products sold across the ocean, but the contract manufacturer plays near its own backyard.

Decades ago global competition wasn’t a concern. The principles behind the Toyota Production System weren’t pervasive yet, so many customers ordered large quantities. Work-in-process flooded shop floors—then a telltale sign not of inefficiency and waste, but of eco-

nomic security and success. Machines punched away; fabricators had work and long backlogs.

Job shops spread work around when times were slow, and lent a hand during the busy times, taking overflow work. Work was steady, and so were those handshakes between competitors, which symbolized a close-knit manufacturing community.

This wasn’t the case anymore, the shop owner said. Sure, some of the old practices remained. During slow times he sent a little work to competing shops, just to maintain the relationship for when good times returned and he needed that shop’s capacity in a pinch. But with the onslaught of globalization, he told me that the business developed a harder edge.

It was no one’s fault, really—just a different time. The industry had always been fragmented to some degree. But now shops were adopting continuous improvement methods and new technologies. They cut costs while at the same time delivered better and faster.

Competition has spurred manu-



facturing excellence, and despite popular belief, the U.S. remains a manufacturing powerhouse because of it. Still, that competition has kept industry fragmented, a fact that was top of mind for Jon DeWys, president of DeWys Manufacturing, a contract fabricator near Grand Rapids, Mich. Three years ago he attended Metal Matters, The FABRICATOR’s Leadership Summit, a conference held every spring and organized by the Fabricators & Manufacturers Association (FMA).

During a break, DeWys started chatting with fellow attendees. After talking, they realized something: Many of the attendees didn’t compete for the same customers. What if some of them set up informal meetings to discuss issues, visit each other’s plants, and even share some benchmarking data?

This conversation led to some initial meetings and eventually the formation of the Precision Sheet Metal User Groups, or PSMUGs. The groups, supported by FMA, meet periodically, with members traveling to one fabricator’s plant. The group has dinner, tours the host’s plant the next morning, and then meets to discuss business issues. Members have no formal nondisclosure agreements, only an implicit trust. Chances are, if one member brings up a challenge, others have lived through it, be it a personnel problem, customer communication issue, or anything else.

“I was impressed with the caliber of the group and the openness for people to discuss their issues and to listen to what our issues were,” said Frank Girardi, president of Vestal, N.Y.-based PB Industries, who joined a newly formed PSMUG just this year. “You’re not operating in a vacuum.”

“This is a fragmented field,” DeWys said. “Often people don’t like to share their experiences or what they’ve learned. We almost live in silos. But at the end of the day, we can learn from others.”

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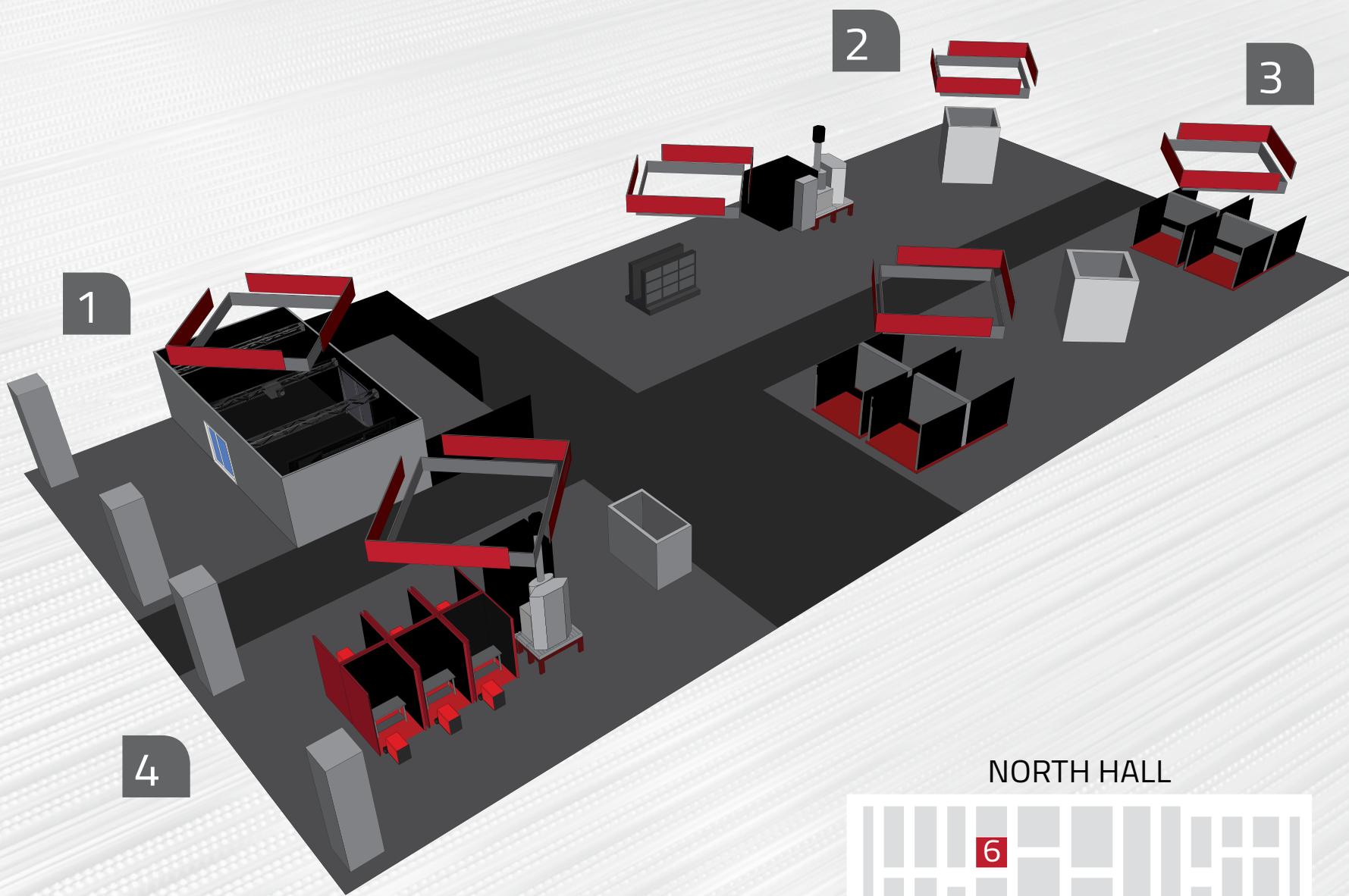
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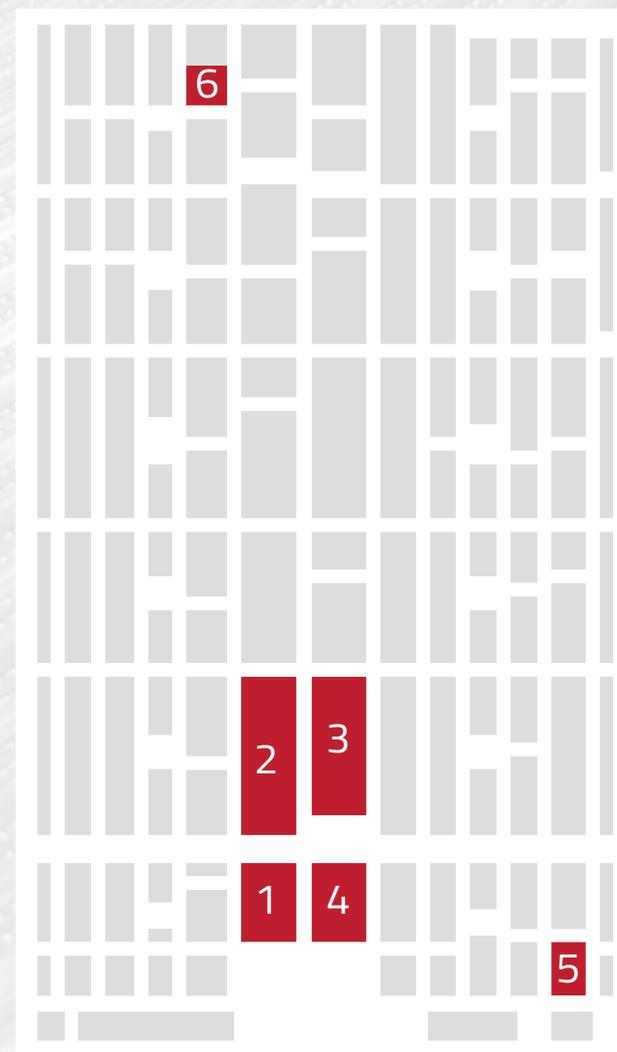
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DISCOVER THE POSSIBLE.



Assessing a Company's International Preparedness

By: Bob Dobrowsky, METALFORMING Magazine

Recently, my colleague Lou Longo gave a presentation on globalization concepts and terminology, at the Manufacturing for Growth Meeting in Hawaii. The feedback was surprising. "I came in thinking there were a few items I didn't know or understand," one business owner said to us. "Now I realize it's more like 30 items. It's very unsettling."

He then went on to ask if we of-

fered international-readiness assessments. We told him that, yes, we do. The reaction was huge. It made us think—if this group of business owners was that bowled over by what they didn't know, others likely are in that same position.

To paraphrase Donald Rumsfeld, there are things we know that we know, things we know that we don't know, but also things we don't know

we don't know. It's that last category that's especially dangerous.

Certificates of Origin: Customer-oriented issues like certificates of origin can be problematic for many internationally active organizations. Very simply, businesses typically provide these certificates incorrectly and often don't understand the rules behind how origin is determined, or the liability exposure they're accepting.

Often, businesses sell an item that they've certified as U.S. content to a customer. The customer relies on that, but when he goes to export it, realizes that it's actually content from a foreign country. This can result in significant duties and interest that are passed down from the customer to the business.

Export Licenses: Many organizations believe they can export anything out of the United States. This isn't the case. The United States maintains a list of products and product categories (often technology- or weapons-related) that require an export license. There also are certain countries to which you cannot export, such as Iran; moreover, you cannot knowingly export to another country that plans to export to Iran.

Importer of Record: When it comes to exporting products, who is the importer of record? Phrased another way, who has the responsibility for duties, taxes and the legal importation of products when they cross borders? Many clients don't understand the prevailing rules and, in some cases, lose money when they ship products to a foreign country only to find that the amount they owe exceeds their profit margin.

Regional Rationalization: Another item to be aware of is rationalization. Suppliers should evaluate their customers and their current and future needs by geographic region, and plan accordingly.

For example, automotive companies have been significantly decreasing the number of platforms they produce—Ford is shrinking its number of global platforms from 29 down to seven. Are you nimble enough to change your shipping strategy when your customer commonizes suppliers and products?

This kind of consolidation also is occurring in the medical-device and aerospace industries. Suppliers must consider these issues and develop a strategy. That doesn't necessarily mean setting up a facility or plant in every location, but you will need a viable solution—a strategic alliance or joint venture, for example—to meet customer requirements in those markets. Further, it's important to conduct this analysis regionally versus country-specific, since you may be



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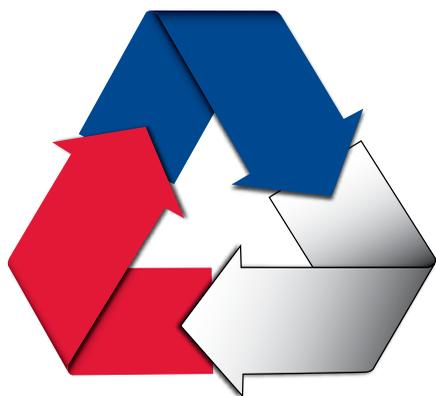
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FABTECH 2013 Exhibitor Video Contest Winner: Xiris Automation, Booth N2217

FABTECH exhibitors were given one minute on camera to deliver their best pitch on why their booth is a "must-see" for show attendees. Xiris Automation came out on top with 4,282 votes! Scan this QR code to see the winning video, and make plans to stop by **booth N2217**.



Metal Fabricators Collaborate to Compete

"You meet people who are living in your shoes," Girardi added.

"We talk about nearly everything," said Steve Hasty, president of A&E Custom Manufacturing in Kansas City, Kan. "Most of us bring one or two people with us. And none of us are competitors. That's the key, really."

"It lends credence to some of our improvement efforts," said John Peterson, co-president of Atlas Manufacturing in Minneapolis. "For instance, some of our lean initiatives were reinforced by what we saw at other [PSMUG member] shops. We share information and best practices. That's what launched it, and it has worked great until this day."

Members share a significant number of operational metrics: customer returns as a percent of sales; scrap and rework as a percent of sales; labor as a percent of sales; on-time delivery; quote turnaround times; quick ratio; debt-to-equity ratio; inventory turns; gross margins; and more. They don't share everything, of course, and such benchmarking remains private among members of the PSMUG, which usually maxes out at about six participating companies, all noncompeting and geographically dispersed.

Members have told me that such benchmarking is incredibly valuable not only because it allows them to see



how their businesses compare, but also because sometimes they can witness exactly how a shop achieves a certain metric. For instance, one fabricator saw that another PSMUG company touted extremely high annual inventory turns. During a subsequent shop visit, he found out how the company achieved all those turns. Later the owner and several managers visited the same company and observed how operators ran over a two-day period, taking notes on part flow, inventory control, and material handling. This wasn't your nickel shop tour.

Such benchmarking gives valuable context. PSMUG members actually see how certain metrics relate to operational practices, and what exactly makes successful companies tick. For example, one member said that

for decades his business had maintained a conservative balance sheet and minimal debt. But after joining a PSMUG, he observed that one fabricator with impressive margins and sales growth also happened to have a high debt-to-equity ratio. Just seeing the numbers is one thing, but actually talking to the business owner who provided them—asking him questions and touring his shop—is something else entirely. Such insight literally can change how fabricators run a business.

"These guys are the survivors," Hasty said. "They run good businesses, and if you can align yourself and learn from them, it makes you a better businessperson and a better company." ■

"International Preparedness"

(continued from p. 10)

able to cover a broader footprint from one location over another close to a specific customer.

Internal Controls: Clients don't focus on their foreign operations as much as they should. This often leads to lax internal controls and weak documentation.

If we walk into a client and ask for copies of their foreign subsidiaries' last two years of tax returns and all relevant licenses, odds are the organization can't provide them. They rely on the foreign subsidiary to keep records—a terrible practice. It's fine to trust your CFO, but CEOs need to verify reporting guidelines/deadlines and monitor them closely to confirm compliance. It's not sufficient to solely rely on the CFO or subsidiary controller. This is the equivalent of putting all of your eggs in one basket. ■

The author thanks Lou Longo, a consulting partner with Plante Moran specializing in international business, for contributing to this article.



FABTECH Bistro

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Bold Moves Pay Off for Wisconsin Fabricator

By Tim Heston, *The Fabricator*

Troy Berg, entrepreneur and president of Dane Mfg. in Dane, Wis., champions small businesses, and for good reason. Small shops—indeed, small companies in general—remain this

country's primary employment engine, and Berg cited Census data attesting to this fact. "About 95 percent of Americans work for companies that employ fewer than 50 people, and about 97

percent of the American workforce are employed by companies of fewer than 100 people. At the time it had a stable group of about 20 customers. It wasn't shrinking, but it wasn't growing sig-



Troy Berg, president, Dane Mfg. in Dane, Wis.

nificantly either."

When Berg purchased Dane in 2002, he described the company as a small stamping shop, one that was perhaps slow to change. The nature of change in business hinges on how owners perceive risk. Many owners feel it's risky to grow too big too quickly, in part because it involves a loss of control and they need to delegate more. Sometimes they don't want to become too dependent upon just a few large accounts.

The last is why he has viewed sales diversification as essential for long-term survival. In 2002 Dane had a little more than \$1.5 million in sales, manufacturing 500 part numbers for a customer base of 25 companies—and almost 40 percent of sales came from one account. Berg characterized it as low-product-mix, medium-volume work. In 2012 the company closed the books with well more than \$9 million in sales. Most important, those revenue dollars came from an active customer base of 150 companies that provide 8,000 part numbers. The job mix makes the fabricator a truly high-mix, low-volume operation.

Over the years he augmented the company's stamping capabilities with more sheet metal fabrication equipment. In 2002 about \$776,000 of Dane's revenue came from stamping, the rest from low-volume fabrication processes. By 2012 the contract stamping revenue dropped to \$207,000, while almost \$7 million came from contract fabrication. Another \$2.3 million came from the company's two product lines.

The product lines came from acquisitions of two small product-line manufacturers. In 2008 Dane purchased Rockford, Ill.-based Precision Fab. With about \$1 million in sales, Precision Fab was a small division in

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continued on page 19

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Time:	Company	Technology	Topic
10:00 a.m.	RoboVent	Fabricating	Breakthrough Air Cleaning Technology - RoboVent's Vortex 3
10:45 a.m.	SERVO Robot Inc.	Fabricating / Laser	DIGI-I/Z - Servo-Robot New 3D Laser Vision System for Multi-Pass Welding Automation
11:30 a.m.	Trilogy	Fabricating	iPunch - CNC Ironworker Programming

Conference-At-A-Glance

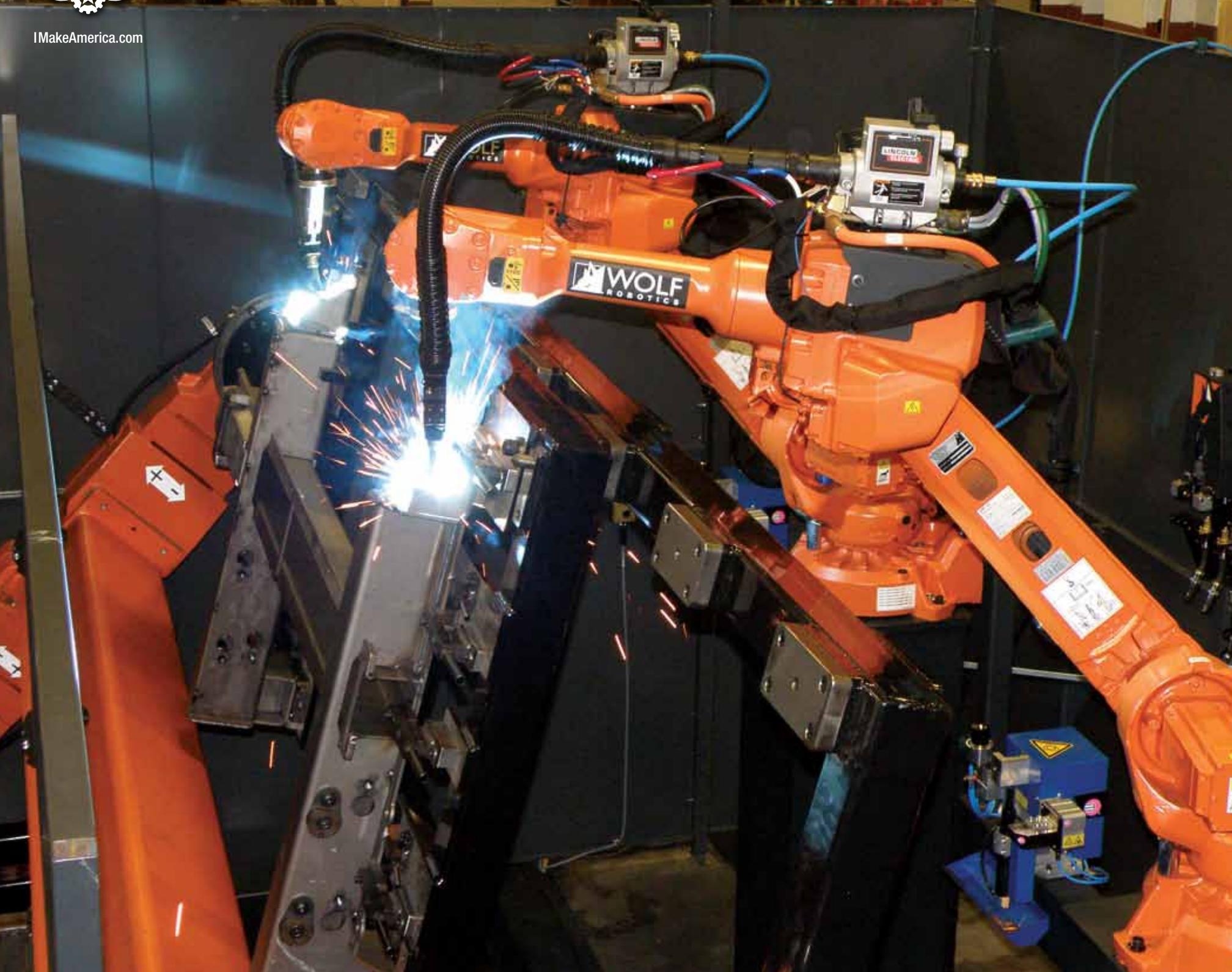
On-site registration for paid educational events is available in the **Grand Ballroom (S100), West Transportation Lobby,** and the **2.0 level concourse.**

THURSDAY, NOVEMBER 21

TECHNOLOGY	8:00 a.m. – 10:00 a.m.	10:30 a.m. – 12:30 p.m.
STAMPING	S100: NEW! Deep Draw Technologies B Room S405a	
LASERS	F100: NEW! Laser Scanning I Room: S402b	
FORMING & FABRICATING	F03: WORKSHOP: NEW! Precision Sheet Metal Operation Prep Course and Certification Exam A Room: S404bc	
JOB SHOP SOLUTIONS	F102: Low Volume High Variety I Room: S401a	
LEAN	F104: NEW! Lean Tools: 3 Proven Paths to Major Profit Improvement A Room: S401d	
MANAGEMENT	F105: NEW! Strategically Growing Business in North America I Room: S403a	
WELDING		
SEMINARS	W21: Build it Better – Day 2 • Room N134 8:30 a.m. – 4:30 p.m. W22: Corrosion of Welds: Causes and Cures • Room N138 8:30 a.m. – 3:00 p.m.	
RWMA SCHOOL	W27: RWMA Resistance Welding School – Day 2 • Room N227a 8:00 a.m. – 3:45 p.m.	
PROFESSIONAL PROGRAM	W31: Session 14: NSF-CIMJSEA Mechanical & L Corrosion Properties • Room N139 8:00 a.m. – 11:30 a.m. Session 15: Weldability Topics • Room N140 8:00 a.m. – 11:30 a.m.	
SPECIAL PROGRAMS	AWS Certification Exam (advance application required) • Room N230 7:00 a.m. – 6:00 p.m.	



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Victor Thermal Dynamics' new Ultra-Cut XT systems feature a modular design that enables end-users to quickly and easily increase cutting capacity. Shown here, a technician installs a 100-amp inverter block to create a 400-amp system

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The Ultra-Cut XT Series is available in 100 to 400-amp configurations for cutting plate up to 2" (50mm) thick, and its modular design makes upgrading quick and easy. A field technician can install additional inverter blocks in less than 30 minutes to expand cutting capacity when the need arises.

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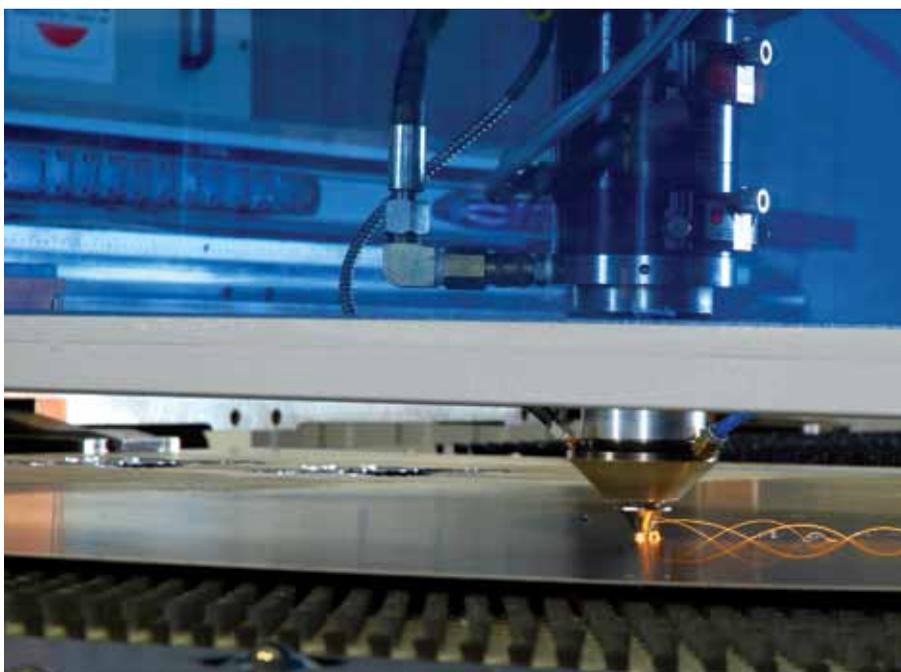
Research Shows Technology is Transforming Manufacturing

At a time when technological innovations offer new growth opportunities for the manufacturing sector, a lack of talent from rising generations threatens its future vitality, according to Industry Market Barometer® (IMB) research from ThomasNet.com®, New York City.

The annual survey of more than 1,200 U.S. manufacturers paints a picture of an industry that is thriving and reinventing itself every day, but is in danger of slowing down if it doesn't replenish its talent pool. Most of these respondents are from small and midsize manufacturing companies, representative of their sector.

Currently the future is bright for these companies: Fifty-five percent grew in 2012, and 63 percent expect to grow in 2013. They credit their people, brands, technology, and innovation as the assets that are helping them to compete. Sixty-seven percent plan to introduce new products or services this year.

A closer look at the findings, however, reveals a disconnect between the growth of these manufacturers and their lack of urgency when it comes



to bringing in fresh talent to carry them forward. The survey respondents mirror today's manufacturing workforce, which is heavily populated by employees who are 45 and older. With Generation Y projected to make up 75 percent of the workforce by 2025, manufacturers need a collective succession plan to maintain their momentum. Yet, eight out of

10 respondents report that this generation represents a small fraction of their employee base, and most don't see that changing soon. In short, despite more opportunity ahead, manufacturing's "biological clock" is silently ticking away.

"As a foundation of our economy, the manufacturing sector remains vibrant, but cracks are coming to the

surface. Changes in the workforce demographics and old attitudes about manufacturing as a career threaten the industry's expansion. It's time for those who love American manufacturing to double their efforts to engage the next generation," said Eileen Markowitz, president of ThomasNet.

From the back office to the factory floor, technologies are making manufacturing a hotbed of innovation, improving companies' operations and increasing their growth. For example, manufacturers are boosting productivity with more advanced CAD software, CNC equipment, and cloud computing. They are making custom products through additive manufacturing. They are relying on visual boards for top-line views of their plants and using smartphones and tablets to monitor inventory for stocking and pricing. More than half say their websites are their most effective business-building tactic.

A report on the findings can be downloaded at www.thomasnet.com/imb. ■

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“Bold Moves Pay Off for Wisconsin Fabricator” continued from page 12

a larger company that was looking to divest it. The division made tanks and reservoirs for use in mobile hydraulic systems, such as those used in mobile lifts. Then in November 2009 Dane purchased The Rockford Co., another Rockford firm that made the levelers that go underneath dishwashers and refrigerators.

The timing of these acquisitions, particularly the latest one, suggests that Dane grew even during the worst of times. But Dane didn't make it through the recession unscathed. To the contrary, in 2009 Dane's sales declined by 40 percent, and Berg laid off 13 people, a third of the workforce.

And this is when he bought a company?

Manufacturing Your Future Student Program

The fifth session of Manufacturing Your Future student program is being held today, Thursday, November 21st. Students from area high schools, colleges, and training institutes focused on manufacturing careers to have the opportunity to interact with a panel presentation and take a tour of the show floor led by manufacturing industry mentors. The program is designed to give students aged 16-21 more insight into the possibilities of manufacturing careers and the paths to get there.

The student program committee recognizes and thanks panelists, participating schools, manufacturing industry mentors and student friendly exhibitors.

Panelists:

Erik Berard, Knuth Machine Tools

Chas Manning, Praxair

Alex Pazkowski, Previous AWS

Skills USA winner

Karolina Stuts, Triton College

student and Milton Industries intern

Participating schools:

Austin Polytechnical Academy

East Leyden High School

Elk Grove High School

Illinois Institute of Technology

Lincoln Way East High School

Prairie State College

Rockford Public High Schools – Au-

burn, East, Guilford, and Jefferson

Wheeling High School

For more information about the **Manufacturing Your Future** program, contact Audrey Long at 815-227-8206.

“Yes, I'm probably a little bit nuts. I'm just a contrarian,” he said. “When everyone comes out of the movie theater and goes right, I go left. But the best time to buy a company is at the bottom of the business cycle. You can get the best price. And our bank was really good. They trusted me, and lent

us the money.”

The decision to buy Rockford Co. at the depths of the recession wasn't made lightly, either, but at the time Berg perceived it to be the least risky path. It also helped achieve a top priority: It allowed him to rehire the workers he had to let go. “We care about

our people and put a lot of money and training into them, and we don't want to lose that,” he said. “The last thing I want to do is give those people up to a competitor, or to unemployment.”

Considering the company's recent successes, those bold moves paid off. ■



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Victor Technologies™ Intelligent Automated Plasma Systems

continued from page 16

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Tweco will unveil its new line of safety products, including jackets, gloves, glasses and helmets. In addition, Tweco's Switchable Magnetic Products will also be available for demonstration. These products use powerful rare earth magnets that enable metal fabricators to easily manipulate and handle steel sheet, plate, tube and pipe with greater efficiency, convenience and safety.

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“Enthusiasm Strong on FABTECH Floor”

continued from page 3

a great time here and got some great contact,” she said. When asked why she chose a career in welding, Garza said that she saw the big demand in the market and that she likes manufacturing and factory work. After getting her one-year certification, she is now wrapping up her second year and is planning to pursue a four-year degree to become a contract engineer. While at the show, Garza connected with exhibiting companies that in the past had supported Fox Valley Tech with equipment and secured their interest in future help. “There’s so much to see and learn here,” she said. “I love it.”



Kris Kolaas, Design Engineer, Mobile Track Solutions, Elkader, Ia.

Design Engineer Kris Kolaas with Mobile Track Solutions in Elkader, Iowa came to FABTECH to find material handling and marking equipment. “It’s been a great show for us,” he said. “We found a company to help us with label making to track our product within the facility and we’re still looking at material handling options.” Kolaas noted that it’s much easier for their company to travel to the show when it’s in Chicago than in other destinations. He said, “It’s exciting to see all the changes since the last time it was here. It seems like everything is moving away from manual control to automation and you can now control so much with your cell-phone or tablet. That’s a big change.”

The group from the United Tool and Die Company in West Hartford, Conn. was on the way to Happy Hour after a productive show scoping out new technologies and equipment. “We’ve been looking at lasers, hydraulic presses, and supporting equipment,” said Facilities Manager Robert Roberts. “It seems like there’s more to see this year than last year.” Press Room Foreman Dinis Freitas added, “You get a lot of ideas here on how to cut production times. When

you see it, it’s easier to envision in action. Sometimes it’s several months later you realize how you can use it, and it clicks.”

When asked about their spending budgets, Freitas said, “We were told yesterday we picked out \$1.6 million in equipment we wanted. That’s a possibility.” ■

Matt Pawelkiewicz, Dinis Freitas, David Brunette, Robert Roberts, United Tool and Die Co., West Hartford, Conn.



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“Panel Offers Ways To Attract Skilled Workers” continued from page 1

Are they dependable and on time? Do they do drugs? “If they don’t show up, what good are they?” he asked, knowing employers demand answers to these questions and that schools need to be highly aware of these needs.

Another sensitive topic was employers not being able to wait for students to earn a two-year degree and how they needed students to be trained quickly. A compromise with professional training programs is something employers might want to push for.

Alternative Educational Methods

Another trend Kunz has witnessed first hand is flipping the classroom—a practice where instructional videos are the homework and class time is devoted to hands-on training with an instructor. SME has accelerated learning programs that use this technique to great success.

Somewhere along the way manufacturing got a bad name, to the point of

classes with that title being largely unpopular. McDonough suggested entry level manufacturing classes be renamed Pre-Engineering, as current manufacturing trends require more engineering skills than they have in the past.

Professional Societies

DelVecchio is president of the Society of Women Engineers and stressed how organizations like these not only can be great sources for potential employees, but also can serve as a means to get kids interested in science, technology, engineering, and math. It’s how you frame the conversation, she said, referring to how manufacturing is viewed. “Talk about where the end product is going to be used instead of where the worker will be in the silo.” Her example was explaining how an integral component of equipment that Caterpillar manufactured went into generators that were used for first responders at the World Trade Center on September 11.

McDonough concurred, citing how Triton College has a summer Camp GADgET program for girls age 12–16.

Veterans

Perhaps one of the largest untapped pools of skilled workers is with veterans of the U.S. armed services. “Hiring a veteran is not a charity,” Mazzulla said, “It’s an absolute investment.” And training/educational benefits go beyond veterans, he said, extending to their spouses and children. Veterans are highly trained and Kunz mentioned how SME is working with the Department of Defense to match military job skill codes to available civilian manufacturing jobs for recent and future veterans.

Lampinen said that Kelly Services has had great success in working with the Department of Defense to find field technician jobs for veterans.

Increase Awareness

Social media and technology can help increase awareness about well-paying careers in manufacturing. Since the younger generation is so closely tied to tablets, smartphones, and computers, it would be a good idea to broadcast the merits of manufacturing via social media on those platforms. Kunz suggested using edgfactor.com to tell stories about careers in manufacturing and Lampinen has sponsored many open houses for students and young adults on Manufacturing Day to spark interest in working at these modern plants.

Being creative and assertive and taking a proactive role will help manufacturers reach future employees. At first they might not seem the logical candidates for this role, but their persistence will lead to a more qualified and educated workforce. ■

“Artist Captures Emotions in Metal” continued from page 1

public art projects. One of his latest pieces, “Go Figure,” has been commissioned for the entrance to LA Fitness club in Oro Valley, Arizona. Another large piece “Windows” has participated in several top-rated art shows around the nation. “I love working

with abstract contemporary because it’s going to be whatever you see,” he said. “There are so many things in society that divide us and art is one thing that can unite us because it evokes a conversation.”

O’Rourke got his first inspira-

tion for working with metal when he learned how to build custom motorcycles from The Godfather of Choppers himself, Pat Kennedy. “Pat is a master of metal fabrication and these motorcycles were my first sculptures,” O’Rourke said. Over time, he started



putting together creative pieces from scraps. “I found other metal sculptors shying away from stainless steel due to the difficulties in its workability. This drew me to it like a moth to light!”

Stainless steel continues to be one of his favorite media as he works full time on custom furniture, architectural fixtures, and sculpture. Visitors to his home will open a giant safe door, complete with a turning wheel, stainless steel bars and locks, and cast-bronze Buddha hands. In his living room they would see colorful “Tubes” and artistic “Mother,” constructed with stainless steel rod and portraying a woman expecting a child.

O’Rourke’s hands-on approach and love of craft stem from quality time with his grandfather, who encouraged him and his brother to work on wood trinkets. “We would sand and stain them, attach clothes clips and turn them into our own personal mail holders,” he said. Now he tries to share the same precious moments with his young son, who loves to help him in the shop, keeping it all in the family. ■

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