## **GLOBALIZATION'S EFFECT ON THE MANUFACTURING INDUSTRY**







International Manufacturing Technology Show September 12 - 17, 2016 · McCormick Place · Chicago

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## **Spring 2016**



# Dual Apprenticeship Models — A win-win for companies and workers . . .

The GACC Midwest has found a solution to the workforce challenges that Illinois, like the rest of the country, is facing . . . ICATT is modeled after the German dual vocational training system.

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**ON THE COVER:** Pictured in FONA's laboratory are (from left) Cassie Krzeszewski, Senior Applications Technologist; Joseph Slawek, Chairman & CEO; and Jessica Lopez, Junior Flavorist

The Illinois Manufacturer is underwritten by Constellation — an Exelon Company

## **Mission Statement**

The object for which the Illinois Manufacturers' Association was formed is to strengthen the economic, social, environmental and governmental conditions for manufacturing and allied enterprises in the state of Illinois, resulting in an enlarged business base and increased employment.

#### Chairman

William M. Hickey, Jr.

#### President

Gregory W. Baise

#### Editor

Stefany J. Henson

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## Share your company news with IMA $\dots$

News information, press releases and articles may be sent to Stefany Henson, Editor and Director of Publications, Illinois Manufacturers' Association (IMA), 220 East Adams Street, Springfield, IL 62701, or email: shenson@ima-net.org.



## Hannover Messe a massive, exciting event



Our own Illinois
Department of
Commerce and
Economic Opportunity
and the newly created
Illinois Economic
Development
Corporation, led
by our good friend
Jim Schultz, created
a terrific display
touting Illinois'
proud manufacturing
presence in the
global economy.

f you've never heard of the Hannover Messe, you've never heard of the world's largest exposition for manufacturing technology, and it is massive! Imagine an event featuring more than 5,200 exhibitors held in 27 separate buildings, each of which is nearly comparable in size to Chicago's mammoth McCormick Place, and you have an idea of its magnitude.

Nearly 200,000 visitors entered the grounds, including President Barack Obama, German Chancellor Angela Merkel and U.S. Commerce Secretary Penny Pritzker. Along with IMA Board Chairman William Hickey, Jr., I was fortunate to be included on the trip as part of the Illinois and National Association of Manufacturers (NAM) delegations.

The fair began with an impressive opening ceremony featuring comments from both President Obama and Chancellor Merkel concerning the importance of U.S. — German relations in manufacturing as the world enters the era of Manufacturing 4.0.

For the first time in Hannover Messe history, the United States was the official partner for the 2016 event, and America really took advantage of the opportunity. Representatives of state government agencies and universities were present. Our own Illinois Department of Commerce and Economic Opportunity and the newly created Illinois Economic Development Corporation, led by our good friend Jim Schultz, created a terrific display touting Illinois' proud manufacturing presence in the global economy.

One of the most exciting moments of the week came when Illinois manufacturer HARTING, Inc. of Elgin was bestowed with the highly prestigious Hermes Award, one of the most important prizes in the world of industry. The award is given in honor of a technologically innovative product making its debut at Hannover Messe. Products entered for the award must have undergone industrial trials and/or already be used in industrial applications, and must be particularly innovative in terms of technical and economic impact. It's the second straight year that an Illinois manufacturer claimed the world's most coveted manufacturing award.

Later in the week, and at the invitation of Secretary Pritzker, IMA's Jim Nelson was part of an international panel discussion on the advantages of dual-system apprenticeships (see page 16). It was very satisfying to know that the IMA is earning world-wide recognition for the efforts of our Education Foundation along with our partners, [the] German-American Chamber of Commerce of the Midwest and William Rainey Harper College.

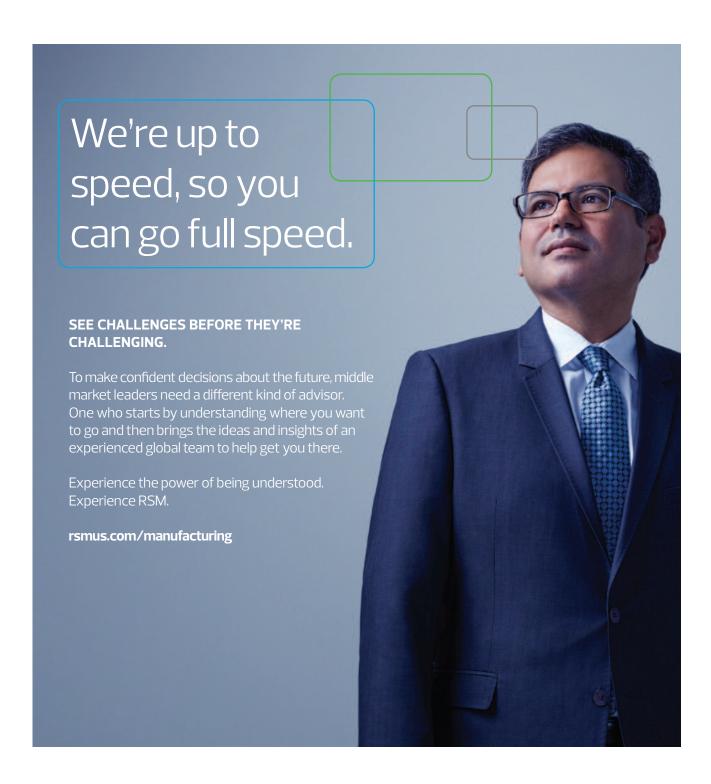
Major events like Hannover Messe and the International Manufacturing Technology Show (IMTS) in Chicago, September 12-17, are great venues for Illinois and our manufacturing community to showcase available opportunities in Illinois. It is also a great opportunity for young people to visit and see first-hand cutting edge technology and the careers available to them in manufacturing.

Illinois put its best foot forward in Hannover. However, there is still ample opportunity for us to bring even more of our state's advantages to the attention of the world's manufacturing community, and we look forward to helping bring that to reality.

By week's end, exhausted from trying to visit all 27 exhibition halls (we did make it to 17), it was time to return home.

On a side note, I also want to express sincere appreciation to our friends at the National Association of Manufacturers. President and CEO Jay Timmons and his staff went out of their way to include Bill Hickey and me in key Messe events, and made sure our trip was a success. Jay and the entire NAM team are effective advocates for small and medium manufacturers at the national level, and this was another opportunity for our two organizations to work together to promote manufacturing both in America and Illinois.





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## Middle class manufacturing jobs disappearing



. . . many lawmakers refuse to act because they claim they are "protecting the middle class."

've come to believe that the frequently used political slogan "protecting the middle class" may be the most overused slogan and most frequently broken promise by politicians in Springfield. If I had a nickel, or even a penny, for every time I have heard that phrase, I'd be writing this column from my Caribbean estate.

This year has been particularly frustrating because many lawmakers continue to block any type of structural reforms designed to help job creators. They attempt to justify their inaction by claiming to be standing up and protecting the middle class. However, it's become overwhelming apparent that these self-appointed protectors of the middle class are actually complicit in the reduction in standard of living often caused by the loss of manufacturing jobs.

Since 2000, Illinois has lost 302,000 manufacturing jobs including 14,000 in the last year alone. Each of these jobs averaged more than \$70,000 per year in wages and benefits allowing workers to live the American dream. Manufacturing provides an opportunity for an income adequate to raise a family, take a vacation and buy a new car. Manufacturing is the single largest supporter of the middle class.

In Illinois today, our politicians are not protecting the middle class — they are chasing away middle class jobs by enacting higher taxes and more regulations, and opposing efforts to make Illinois more attractive to job creators. Research & Development (R&D) is a perfect example. R&D is the lifeblood of manufacturers who must innovate and constantly build and improve products to sell around the world. Illinois' elected leaders have let the R&D credit expire for the fourth time in 13 years.

The IMA continues to fight vociferously for changes in workers' compensation because our costs are the 7th highest in the United States. Our average payment to injured workers is nearly 30 percent higher than the national average and many doctors are feeding at the trough because medical payments are far more lucrative under workers' compensation than private insurance or Medicaid.

As an example, an employee in Illinois with an arm injury will receive \$269,000 more for the injury than the national average according to ProPublica. Why does an injured worker with a leg injury in Illinois get \$242,000 more than the worker in Wisconsin with the same injury? In similar fashion, does it make any sense that an orthopedic surgeon in Illinois gets paid 369 percent more for operating on a patient covered by workers' compensation than for the patient who is on private health insurance?

Why should Illinois employers be on the hook for 100 percent of the cost of an injury when the workplace was not the primary cause of the injury?

Illinois is now in the unenviable position of having the highest average property tax rates in the United States, according to a recent national study, in addition to having the highest sales tax rates in Cook County. Democrat legislators bet on the trifecta this spring when they tried to advance a graduated income tax making Illinois' highest tax bracket a whopping 11.25 percent — second only to California. The IMA helped defeat this proposal when a few Democrats joined every Republican in opposing the measure. Raising taxes on a shrinking population and tax base is a losing proposition.

Taxes, workers' compensation, the lack of a balanced state budget and unconscionable pension debt are causing the loss of manufacturing jobs, and consequentially, the state's middle class. Yet, nearly every time these issues are raised, many lawmakers refuse to act because they claim they are "protecting the middle class."

Well, I have a message for them. Unless you act, and act soon, you won't have a manufacturing sector or middle class to protect anymore, because it will be gone. ■



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## Employee handbooks under attack — Will yours hold up?

mployee handbooks are an important tool to assist employers in clearly communicating policies, procedures and expectations. A well-written employee handbook defines the employment relationship and establishes a code of conduct for employees to follow, as well as informing employees about the workplace and their benefits. Employee handbooks also provide a framework for management when addressing violations of policies and codes of conduct. Handbooks that establish standard, non-discriminatory personnel policies are a first line of defense against lawsuits by employees.

Most employees in the private sector are not represented by a union; indeed, as of the end of 2015, the Bureau of Labor Statistics indicated that only 6.7 percent of private sector employees were members of unions. However, recently, the National Labor Relations Board ("NLRB") has begun carefully scrutinizing employee handbook provisions that have, for many years, raised no issues or controversy. All employers, whether union or non-union, are impacted by this change of course by the NLRB.

Over the last few years, the NLRB has issued inconsistent and confusing decisions declaring long used handbook policies unlawful under the National Labor Relations Act ("NLRA"). In light of the confusion, the NLRB General Counsel issued a guidance Memorandum to assist employers in updating their handbooks to comply with the NLRA. The Memorandum clearly portrays the NLRB's expansive view regarding employee rights under the NLRA. See www.nlrb.gov/reportsguidance/general-counsel-memos.

While the NLRA is intended to protect union workforces, employers

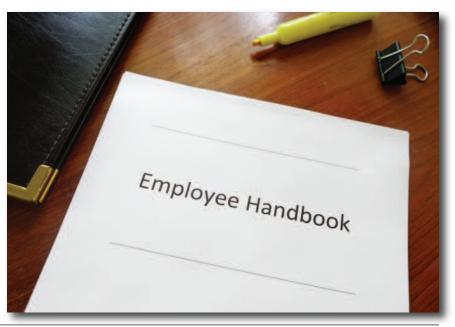
with non-union workforces are still at risk. The NLRB seems to be engaged in a concentrated effort to expand and solidify employee rights under Section 7 of the NLRA, which gives both union and non-union employees the right to engage in "concerted activities for mutual aid or protection." In Section 8 of the NLRA, employers cannot interfere with employees' right to engage in these concerted activities. If employers violate an employee's Section 7 rights, an employee could file an unfair labor practice with the NLRB. If an employer is found to have committed an unfair labor practice, it may be liable for financial penalties and other non-monetary relief.

The NLRB's Memorandum summarizes various rulings on employer handbook policies and provides examples of policies that it has found to be lawful and unlawful. The policies that the NLRB has recently found to be unlawful include many policies that have been historically accepted and are widely used in employee

handbooks. The handbook policies that have received the most scrutiny by the NLRB include confidentiality; employee conduct towards the company, supervisors and fellow employees; employee interaction with third parties; use of company logos, copyrights and trademarks; workplace photography and recording; employees leaving work; and conflicts of interest.

In many of its decisions, the NLRB relied on the standard of what employee's might "reasonably" construe as infringing upon their Section 7 rights in order to determine whether a handbook policy violates the NLRA. The NLRB's broad method of determination will allow employees to more easily argue that company policies hinder their ability to engage in concerted activities. The NLRB seems to be targeting overly broad language that contains any possibility that employees may find it to violate their Section 7 rights. Examples include:

see EMPLOYEE HANDBOOKS page 8



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### **EMPLOYEE HANDBOOKS**

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 The following policy regarding conduct towards fellow employees is considered to be unlawful because the terms would be reasonably construed to limit protected criticism of supervisors or managers.

"Do not make insulting, embarrassing, hurtful, or abusive comments about other company employees online" and "avoid the use of offensive, derogatory, or prejudicial comments."

• The following policy regarding confidentiality is considered to be unlawful because employees have a Section 7 right to discuss wages, hours and other terms and conditions of employment. In addition, the term "another's confidential information" could be interpreted to mean no disclosure of another employee's information as to wages or other terms and conditions of employment.

"Never publish or disclose the employer's or another's confidential or other proprietary information."

• The following policy regarding

employee conduct toward the company and supervisors is considered to be unlawful because employees have a Section 7 right to criticize their employer's policies or treatment of employees, and can do so publicly.

"No defamatory, libelous, slanderous or discriminatory comments about the Company, its customers and/or competitors, its employees or management."

It is highly likely that many employers currently have handbook policies that if challenged would be found to violate the NLRA. The NLRB has also included in its Memorandum examples of handbook policies it considers lawful under the NLRA. Employers should carefully review existing employee handbooks and either attempt to use language approved by the NLRB or contact a knowledgeable labor attorney to discuss the issue. Now that the NLRB has issued guidance and established its intended course of conduct as to handbook policies, it is more important than ever for employers to update their policies in an effort to avoid litigation or handbook violations.





## A new way to market for manufacturers to increase revenue and grow market share

anufacturers have an opportunity to grow their businesses and increase market share not seen since the post-World War II industrial boom. The window of opportunity is open, but is slowly closing. The opportunity to engage with the people in the target audience and create virtual relationships is unprecedented. It is both disruptive and revolutionary.

The opportunity can be seized by investing in a modern marketing function that meets your target audience where they are (on the World Wide Web) and when they are ready to engage with your firm. Those manufacturing firms willing and able to advance the practice of marketing within their firms will win in their competitive space. The old way to grow a manufacturing business is to leverage the sales channels to build relationships. Yes, sales is still important, but you cannot win with sales relationships alone. It's time for marketing to take the lead in creating relationships with your customers and prospective customers. Now is the time to seize this huge opportunity. Here's how it works.

## Stop pitching products and start educating your audience

Before you turn the page and write this article off as the ranting of a mad man, consider why and how this concept works. As a global marketing director and as an independent marketing consultant, I have proven the concept with three separate manufacturing companies. In the most successful case, we increased growth rates of a \$45 million dollar business segment from around four percent to 24 percent. Results from implementing

the 'new way' can be extraordinary in generating higher growth rates for manufacturing companies.

Let's get the tough love out of the way. The people in your target audience don't care about your product or your company. They care about WIIFM. We all ask ourselves this important question, "what's in it for me?" whenever we make a purchase. The people in your target audience care about what your product or company can do for them. If the receiver of a product pitch does not have an immediate need for the product, the message is discarded as noise and there is no engagement, interest or memory of the pitch. This is the reason product pitching is not effective at engaging with your audience. Imagine that particular target audience, sharing a common problem each person faces on a regular basis. If you could help them solve

that problem, help them advance their profession, help make their day a little easier or even enjoy a passion more completely, you have a much higher chance of engagement. Suppose your firm has expertise in solving that specific problem which is perplexing the majority of the people in your target audience on a regular basis. By sharing that expertise with your target audience, you can increase engagement and create a relationship with those folks so that when the day comes around and they are ready to buy the product you make, your firm is top-of-mind, has credibility and there is a strong desire for them to reciprocate. Your firm will be first in line and most likely will get the business, even at a higher price!

I'm not saying you never pitch your product. That would be the

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### **MARKETING**

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ranting of a mad man. There is a place for product pitching. That place is at the bottom of the funnel or after the prospective customer contacts your firm. After you have been helping the people in your target audience (by providing helpful useful content) with their problem for several weeks or even months, they will contact you first, over other companies, when they are ready to buy. Once they make that contact, it's time to pitch the features, benefits, and differences between your product, company, and the competition. The risk is, at that point, if you have not been helping the people with useful content and your competition has been marketing in this new way, you may have already lost out to a competitor that has embraced this concept and already built a relationship without pitching products.

If you want to engage with your target audience, stop pitching products and start sharing your expertise to build relationships well before they are ready to buy, establishing top-of-mind awareness, credibility and reciprocity.

## Connect the brand and the offering to the content without pitching the product

At this point you may be wondering, just how the said engagement actually helps you move more product. There is one crucial piece of the puzzle that must be included in the process of engagement by sharing expertise and helping your audience to be better. The target audience needs to be aware of the connection between the useful content which your company is providing and what that company offers as a product. The primary connection must be made without solely pitching the product.

An educational webinar illustrates just how this connection looks in practice. Consider an educational webinar, not a product pitch webinar focused on a particular pain point shared by most of the audience. The connection is made in a

very straightforward way as the webinar is being introduced. For example, when kicking off a webinar, I say something like this, "This webinar is created, produced and presented by Company ABC. If you don't already know ABC, we manufacture widgets designed for the oil and gas industry. We don't talk about the products during the webinar, but naturally, we would be delighted to hear from you if you have questions about widgets." At the end of the webinar, I restate the company name, remind the audience who is providing the valuable information and ask the audience to consider ABC whey they do have a need for widgets.

Each piece of useful content designed to engage without product pitching is branded with the company logo and colors. This offers an easy way to contact the company when the reader is ready to get more product information. It is also ok to include a small advertisement for a product right on the piece of content.

Again, be transparent about what your content piece is meant to be. If it is meant to promote a product, then be blatant about promoting the product. If your content piece is educational, do not try to be clever by inserting the product pitch pretending to be educational. A white paper that purports to be educational and is mostly about a certain product can be perceived as bait and switch causing damage to your brand.

## Pitching products fails where educational content sails

The reason product pitching only engages with a very small portion of your target audience is because the timing of product based engagement must be perfect to get any attention at all. The receiver of your product based message must be in the mode to buy that particular product at the very moment they see the product message. The chance of that timing being lined up perfectly is miniscule.

Now consider the same target audience. A large portion of that audience shares a common problem or pain point. They wrestle with this problem on a regular basis if not daily in many cases. As you offer educational content that solves a problem that is constantly vexing the

audience, timing is no longer an issue. The possibility of getting the attention of the audience is much easier and, in fact, almost guaranteed, because the timing issue goes away.

Consider the huge advantage a manufacturing firm who engages with education would have over a firm trying to engage with a product pitch. Marketing with educational content is like fishing with a big net whereas marketing by pitching a product is like using a spear.

## TOMA + credibility + reciprocity is the secret formula

TOMA is top-of-mind awareness. Educating the people in your target audience to help them relieve a pain by sharing your expertise is the key to broader engagement and more revenue. It's not a one-time activity. In order to gain TOMA, credibility and reciprocity, you will need to be persistent and consistent in delivering educational content. It takes time with the people in your target audience and it takes time internally to move that strong product culture from product pitching to educating.

Another phrase used to describe educational or knowledge marketing is 'content marketing'. According to the latest Content Marketing Institute research, B2B Manufacturing Content Marketing benchmark report, 81 percent of B2B manufacturers are using content marketing in their marketing mix. Only 18 percent feel they are effective. I suspect one of the reasons for lack of effectiveness is that the strategy is not deemed a long term strategy, but a short term lead generation strategy.

Let's be clear, marketing with educational content at the top of the funnel to gain higher engagement without pitching the product is not a sprint, it's a marathon. How much time does it take to start seeing results? You're changing the perception of your company in the minds of the people in your target audience and this takes time. You should start to see some preliminary results within six months and more significant revenue increasing results within 12-18 months.

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anufacturing executives scanning the news upon returning from the holidays in the early days of 2016 must have felt like Rip van Winkle when he awoke from his 20-year slumber through the Revolutionary War.

As 2015 wound to a close, increasingly sound U.S. economic fundamentals instilled enough faith in the Federal Reserve in December 2015 to raise interest rates by a quarter point, the first such increase since 2006. The Fed spoke glowingly about strength in the U.S. economy, employment and lack of inflationary fears. The economic stars seemed to be aligning, portending a continuation of the nearly seven-year long bull market that emerged from the rubble of the Great Recession.

Fast-forward a couple of weeks, rather than Rip's 20 years in deep slumber, and the world appeared to be in disarray. Weakness in China's economy, combined with fear that their stock market was nearing bubble territory, sent oil prices plummeting. As oil prices sunk, major producers such as OPEC, Russia and the U.S. shale industry refused to blink and cut production, continuing the vicious cycle.

Global markets and currencies have been on a wild ride since the Great Recession of 2008. More businesses than ever before, including within the manufacturing industry, are seeking to diversify internationally and engage in commerce overseas. In 2014, the Department of Commerce announced that exports

set a record for the fifth consecutive year at \$2.35 trillion, marking an increase of \$760 billion since 2009. World Trade Organization data shows merchandise imports into developing economies grew by five percent in 2014 versus an average global Gross Domestic Product growth rate of two percent.

If the first quarter of 2016 is any barometer, manufacturers engaged in cross-border commerce could be in for more volatility. In AFEX's 2015 Currency Risk Outlook Survey, nearly half (48 percent) of total respondents expected to increase their level of international trade. As globalization continues its torrid pace, it's increasingly more common for a manufacturer's bottom line to be impacted by factors entirely out of their control, such as geo-political events and economic policy.

In the past several years alone, Russia's annexing of Crimea, Scotland's secession vote and U.S. budget sequestration have all conspired to impact markets, sending currencies on wild swings that have impacted the bottom lines of even the savviest U.S. conglomerates.

What can a savvy manufacturing executive do to improve operational efficiency, strengthen their business and mitigate the effects of market swings and currency risk?

The complexities and challenges multiply rapidly as a business enters new markets, requiring a global payments partner to automate back office functions seamlessly and efficiently. Any manufacturer, small or large, and currently engaged in international trade, or seeking to increase their level of trade, would be wise to consider these five key components before engaging with a global payments partner.

#### 1) Automated payment infrastructure

An automated payments system should integrate with your existing interface, systems familiar to the business from which traditional payments and trades are made. Once the solution is implemented, time consuming processes are eliminated, the risk of human error is reduced and scalable efficiencies are achieved. No longer is the back office tasked with taking extra steps to export payment data to reports or Excel spreadsheets, communicate the data to an account executive or manually input individual payments into the payment interface. Beneficiaries are automatically validated, storing recipient banking details and proper payment format accurately. When it comes to paying suppliers or customers, delivery and execution are of paramount importance. Multiple settlement methods should be available, including wire transfer, check or direct debit, to ensure third parties and clients alike are satisfied with delivery.

#### 2) Extensive currency exchange

Be sure your global payments partner can allow you to access a broad range of currencies, ask for a complete list. The Group of Ten

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n 1987, Joe Slawek (pictured above) had already been in the flavor industry for years when he wrote three important words on a paper napkin: Nature, People, and Technology. Nearly 30 years later, that napkin is in a glass case at FONA International where flavors are developed and manufactured for some of the largest food and beverage brands in the world. Those three words created the basis for the company's mission and logo. But it's the focus on the second element, people, which has brought FONA, headquartered in Geneva, Illinois, the most national recognition.

The most recent award FONA received was in May, 2016: its 11th straight 101 Best & Brightest award for employee wellness, from the National Association of Business Resources. Other recognition includes being named the number three small/medium manufacturing company in the country by Great Place to Work and repeated national and local 101 Best & Brightest awards. Inc. magazine named the company one of the 5,000 fastest growing 2007-2013, and CEO Slawek was named the 2011 Ernst & Young Entrepreneur of the Year for Manufacturing in the Midwest.

The company attributes much of its success to thinking differently about the business of creating and manufacturing flavors for the food industry. According to Slawek, in the 1980s, it was clear that there were some companies with great technology and some companies that provided great service. There was an opportunity to create a flavor company that provided both.

"FONA was created to be different from the start," said Slawek.
"Our approach is to be the hightech, high-touch alternative to business as usual. We want to offer world-class capabilities with relationship-driven principles."

The company moved into its 82,000-square foot Geneva building in 2005, after a decade in Carol Stream. FONA currently employs more than 200 full-time personnel with divisions for manufacturing, shipping, regulatory, supply chain, food quality/safety and sales, among others. The laboratory and kitchens are filled with careers like flavor chemist, applications scientist, analytical chemist and sensory technician.

After a flavor is developed and perfected in the lab, FONA's manufacturing arm is responsible for the large-scale production. The techniques for scaling up depend on a variety of factors, such as the final product. Methods include spray drying, liquid compounding, specialty encapsulation, emulsions, liquid flavors and a host of other technologies.

"From spray dry operator to scientist to account executive, fostering employee engagement and growth is key for us," said Executive Vice President Amy McDonald.

She said when new people start at FONA, they are given a small wooden 2x4 with their name and start date inscribed, to represent the goal of doubling growth every four years. Each employee also gets a photo displayed outside the company auditorium.

McDonald mentioned that orientation also covers FONA's seven core values, including concepts like "Do the Right Thing," stewardship, generosity and what she calls a "Relentless Pursuit of Excellence."

"We don't necessarily seek perfection," McDonald said. "If you achieve perfection that's great but it's not sustainable. Instead, we try to pursue excellence. Excellence is attainable and repeatable."

FONA holds monthly meetings for the entire company, where every

department shares financials and status updates. Executive Vice
President TJ Widuch said those
meetings often address the concept
that it's OK to fail every once in a
while. "We want to win, of course.
But failure is not a bad word around
here as long as you fail forward and
learn from it," Widuch said.

According to McDonald, FONA's customers include some of the largest food, beverage and nutritional companies, who often take notice of the company's approach.

"We often hear from the industry and our customers that we really are different," said McDonald. "We want to foster incredible partnerships, and that means open communication and speedy responses, no matter what stage of the process."

According Great Place to Work's independent review of FONA (reviews.greatplacetowork.com/fona-international-inc), 95 percent of employees told the third-party survey that FONA has special and unique benefits; 95 percent say that it is a physically safe place to work, and 95 percent say that the company has a great atmosphere.

Every two years, FONA initiates a third-party audit to determine employee satisfaction and engagement. The survey in 2015, conducted by nonprofit trade association MRA, showed that 99 percent of employees were engaged (17 percent above the national average.) About 96 percent of employees agreed with the company's organizational practices and the same percentage said they were committed to FONA.

"We're above manufacturing industry norms in all categories," said Tonya Hubbartt, director of Human Resources. "But what's key for us is making sure our employees feel fulfilled. Our training and development efforts are an important component of that."

She added that FONA's educational focus is designed to help employees learn every day: "At FONA, growth is what we expect and learning is how we do it."

FONA provides 40 hours of continuing education per year to all employees. Corporate-sponsored development programs include English as a Second Language (ESL), Spanish as a Second Language (SSL)



### **FONA**

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and Flavorist Training, among others. More than 100 employees have also received their Certificate in Business Administration through a partnership between FONA and the University of Illinois at Chicago. Employees also can seek out other ways to fill their allotted 40 hours.

In addition, FONA made use of Illinois ETIP grants in the past through the Illinois Manufacturers' Association and the Valley Industrial Association. The grants went towards a variety of educational programs, including safety and compliance training. FONA holds annual compliance training in the areas of safety, Good Manufacturing Practices (GMP), fork lift operation and hazard communication. Free CPR and first aid courses are open to all employees.

In addition to employee education, FONA hosts two programs, free of charge to people outside of the company: Discover FONA and Flavor University\*. Discover FONA is a local community outreach program where students and teachers learn from FONA employees about food and flavor science.



According to Community Education Director Katie Sudler, some students don't realize that food science is a career possibility, or they don't know about the host of other jobs that might lead you to the food industry. Discover FONA was formally founded in 2012 and has reached 5,700 Illinois teachers and students, from 164 local cities and towns.

"The program is FONA's investment in community education," said Sudler. "Our goal is to help prepare the next generation of food industry professionals, and create passionate advocates for the industry."

Flavor University, now in its 20th year, is tuition-free education for professionals already in the food

industry. Attendees learn how to work with flavor in their product development. They also receive detailed information about regulatory matters, manufacturing processes and consumer insights as they relate to flavor . . More than 5,000 food professionals have attended the advanced flavor science seminars.

"Both Discover FONA and Flavor University are pretty unique," said Hubbartt. "It's a different kind of development opportunity. Our inhouse experts get to teach others about something they've dedicated their careers to: flavor."

Author Deirdre Burgess is a writer in Aurora, Illinois. She can be reached at da.quinn@gmail.com.

### **MARKETING**

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#### **Getting started**

If you've reached this part of the article, I'm guessing you like the idea or are at least intrigued by the idea and you may be wondering how to get started. Changing the product culture is like boiling the ocean or eating the elephant in one bite. It can't be done. Your mission, should you choose to accept it, is to introduce the concept of higher engagement, TOMA, credibility and reciprocity without pitching products at the top of the funnel. You can accomplish the mission by starting a pilot program.

A pilot program is low risk, shows innovative thinking and will prove the concept to your stakeholders. I've never met a manufacturing company that did not value innovation. Choose a tactic that shows meaningful numbers, collects

contact information and delivers qualified leads to sales. Educational webinars are highly effective in proving this concept. Assuming you choose an engaging topic, educational webinars can deliver hundreds or even thousands of leads to the sales pipeline. A subscription based email newsletter is also very effective as a pilot program.

Eat the cultural elephant one bite at a time with the first bite being a pilot program. With each bite, you'll be making a small but incremental change moving from product pitching to education.

#### **First movers win**

It is true that there is a huge opportunity open to manufacturers who can adopt the new way of marketing. Although it is a new way for manufacturing, the practice of marketing without pitching products has been used by tech companies for many years. They have proven the concept over and over by growing

multi-million dollar, or multi-billion dollar in some instances, companies with a marketing foundation built on helping the target audiences to be better at their profession. Now, it is hard to find a tech company that is not marketing with educational content to engage with their target audiences. They're all doing it.

Eventually, all the B2B manufacturing companies will be marketing as described in this article. It might take another five or 10 years, but it will happen. Now is the time for manufacturing marketers to take the lead. The window of opportunity is open because not many manufacturers have adopted the new way of marketing. Those firms that can make the cultural shift will win market share over those that cannot, or will not, adapt.

This is your time, manufacturing marketers. Seize the moment with the new way to market for manufacturers. Engage deeper and broader with-

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## MARKETING Cont. from page 14

out pitching products. Start a pilot program and prove to your leadership that they can grow the business and increase market share with the new way to market. Finally, take your seat at the leadership table and advance the practice of marketing at your manufacturing company.

Author Bruce McDuffee is the Founder and Executive Director of the Manufacturing Marketing Institute (MMI), an organization dedicated to belping manufacturers advance the practice of marketing in their firms and in the manufacturing industry as a whole. MMI offers marketing services to the manufacturing sector to help

leverage the new way to market.
Services include manufacturing marketing strategy consulting, pilot program development and execution, marketing plan development and freelance marketing management. Bruce also recently published 'The New Way to Market for Manufacturing' available on Amazon. Bruce bosts a podcast, Manufacturing Marketing Matters, available at iTunes, Stitcher and the mmmatters website.



### **RISKY BUSINESS**

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(G10) currencies are most commonly traded, but should a manufacturer find itself engaged in an emerging market, it will need access to buy and sell them at a fair rate of exchange. Also check that the payments firm has expertise in China.

#### 3) Deploy risk mitigation strategy

Having the ability to access currencies throughout world demands that you have a suitable risk management strategy in place to mitigate the threat of currency risk. While the turbulent market swings grab headlines, even small movements in currencies can impact your bottom line. If conglomerates with large financial teams can have their earnings or revenues hit by volatility, any business is vulnerable, including manufacturers engaged in the importing or exporting of raw materials. Your provider should be familiar with your business and the manufacturing industry and work with you to decide what percentage of revenue to hedge. In terms of products, spot or forward contracts suffice to reduce currency risk. Inquire as to whether the payments firm has more sophisticated products such as options available, should your business require them as you expand. Your needs today may not be the same in the future.

#### 4) Data security

With fraud an omnipresent threat, be sure the solution has dynamic, intelligent fraud protection systems in place to thwart potential nefarious activity. Data breaches are becoming more commonplace, so be sure to inquire about what security protocols are in place to protect your

banking details. Automated security features can detect suspicious activity within an account and block payments temporarily, until the client can verify them. The provider should also adhere to international banking and ever-changing compliance requirements, including Anti-Money Laundering (AML) laws.

#### 5) The human touch

Technology has affected our lives in so many beneficial ways, including the streamlining and automation of payments. However, there are still times when personal guidance or advice is needed. Seek a provider with high-touch service, ideally one with a single, dedicated point of contact who fully understands your business model and can offer assis-

tance when questions arise. Technology is only as good as the support and service backing it and the human element should not be overlooked when selecting a global payments provider.

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## Metalworking skills such as welding, milling, lathing and grinding are essential parts of the ICATT curriculum



## Dual App: A win-win for

ver the last years, the globalization of markets, new technologies and work organization, and further demographic developments have dramatically changed the demands of job markets. In order to be a competitive player in the markets of the future, companies require fresh approaches to attract, train and retain a qualified workforce, especially for so called "middle skill jobs" in manufacturing. The existing skills gap that so many companies experience refers to the need for technically oriented, skilled positions that demand non-routine problem-solving but simultaneously do not require a higher degree.

Indeed, the skills gap is developing into more of a workforce crisis. In ten years, it is estimated that around 3.4 million positions will be left unfilled in the manufacturing sector, most of which will be a result of an aging and retiring workforce. Currently, 83 percent of manufacturers are unable to locate the skilled workers needed. Of the open

positions, 60 percent cannot be filled by the current talent pool. Despite these shortages in the labor market, two-thirds of high school graduates opt to go to college, of which only 25 percent graduate.

"When speaking with manufacturers about their workforce needs, the common response is that 'the barn is on fire.' To mitigate the skills gap, which will become a workforce crisis in the next five to ten years, companies are acting now and use the advantages of apprenticeship programs," says Mario Kratsch, Director, Skills Initiative, GACC Midwest.

One reason for the challenge to fill these much sought positions is that despite immense technological progress and economic potential, manufacturing still has an image problem: public perception of jobs in manufacturing does not capture the essence and environment of modern production facilities realistically. Hence, many manufacturers face the challenge to find people qualified enough to run their complex machines. An imbalance in the number of machines versus those that can actually operate them creates inefficiencies in production, which, on a broader scale, renders the U.S. less attractive as an investment and production location.

#### **Introducing ICATT**

The German American Chamber of Commerce of the Midwest (GACC Midwest) has found a solution to these workforce challenges that Illinois, like the rest of the country, is facing. In order to close this skills gap, GACC Midwest is working with industry, education and other stakeholders on the implementation of a model of workforce training that is quickly gaining in popularity across the country: Dual apprenticeship programs. One of the pioneer programs in this field is ICATT (Illinois Consortium for Advanced Technical Training). ICATT is modeled after the German dual vocational training system, which is one of the main reasons for the country's strikingly low youth unemployment rate.

## renticeship Models or companies and workers.

Germany has an honorable reputation across the world for its apprenticeship system, which meets the workforce demands of multiple industries such as business administration, STEM fields, and manufacturing. In Germany, around the age of 16, students can start working for a company while taking classes directly tied to their field of work. Students spend two-thirds of their time training on-the-job and one-third of their time in school learning the theoretical aspects over two to four years. There is a very strong focus on preparing youth for skilled careers. Employers participating in the ICATT program see significant value in such an immersive apprenticeship program. The program creates highly skilled, well-rounded employees who are extensively knowledgeable about the company and invested in the company's success.

The ICATT program through GACC Midwest offers the same structure and curriculum as the German apprenticeship programs, but is tailored to meet American needs and work laws. The first cohort of Industrial Maintenance Technicians started August 2015.

ICATT's currently participating companies consist of both German and American firms. It comes as no surprise that German companies in the U.S. are among the first ones choosing this option when it comes to workforce development; they are familiar with the system, its outcomes, and its advantages. But the word has already spread far beyond



the German business community — U.S., French, Japanese, and Italian companies are joining the programs in GACC Midwest's territory to train their own workforce based on their specific company's needs and adhering to the certified standards.

#### A model that works around the globe

Dual vocational training programs have already been successfully

around the globe, and are highly relevant for the U.S. labor market. In the Midwest, programs such as MAT2 in Michigan and KY FAME in Kentucky are examples beyond ICATT. All of those programs combine classroom and business, theory and practice, learning and working, and are recognized worldwide as a highly effective models to create a competitive workforce. GACC Midwest is proud to be supporting states and companies involved in these regional programs by assisting in curriculum alignment and the examinations that lead to the coveted German certificate.

adapted and applied in countries

#### How it works

With GACC Midwest's headquarters located in Chicago, it is the Illinois manufacturing community to whom ICATT primarily caters. Last year, the IAAC (Illinois Advanced Apprenticeship Consortium), of which ICATT and the Illinois Manufacturers' Association are a part, received a Department of Labor grant to scale ICATT throughout the state. Therefore, GACC Midwest is striving to build up new clusters of ICATT programs not only in Chicagoland, but also other parts of the state. The ICATT program is structured to be implemented in a similar fashion anywhere in the nation. GACC Midwest is working hard to introduce the ICATT model to further states, for example, Wisconsin and Colorado.

#### Occupational profiles offered

With its company and industry driven approach, ICATT is able to address the concrete needs of manufacturers and their challenge in finding skilled workers. The ICATT apprenticeship program's current occupational profiles include Industrial Maintenance Technician, CNC Professional and Freight Forward and Logistics Agent. Since the types of occupations offered in the ICATT



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## **MODELS**

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program are driven by the demand of industry, training programs in further occupational fields can be introduced once a critical mass of companies has been identified.

#### The apprentices

Those applying to take part as apprentices in the program are typically high school graduates. However, employers might decide on an incumbent worker or simply an older candidate with more work and life experience. The employer agrees to hire an apprentice and, during the three-year program, apprentices enjoy a combined onthe-job training at companies and theoretical training at a college for the profession of, in the current cohort, Industrial Maintenance Technician.

#### The benefits

Benefits are many for both companies and apprentices: the structure allows for debt-free education, with an associate's degree, and comprehensive, standardized on-the-job training. For companies, the long-term investment in their employees creates high loyalty between apprentices and companies, thus increasing worker retention, efficiency in their workflow, and ultimately, productivity. The employer will find that he has a fully productive maintenance technician after only the second year of training.

After the apprentice completes the three-year training and education, the employer and apprentice agree to continue employment for a minimum of two additional years. At this point, the apprentice already knows the company well, and vice versa, and has gained the necessary skills to be an invaluable worker. Upon successful completion, ICATT apprentices will have earned an associate degree, an internationally recognized German certificate and even a nationally recognized DoL apprenticeship certificate if the company decides to have its apprentice registered with the DoL, which is optional. It is a package full of benefits for employers and apprentices.

## Licensed to the gold standard

**GACC** Midwest's network with the Chambers of Industry and Commerce in Germany and its umbrella organization, the DIHK in Berlin, makes our workforce programs unique: The GACC network is the only entity licensed to administer the written and practical examinations developed by experts in the field (all adapted to U.S. market needs by the GACC Midwest exam board), which means the program maintains a verifiable and internationally rec-

ognized quality standard. Companies in the U.S. are attracted to this program because they know they are developing quality employees, increasing employee loyalty and ultimately giving themselves an edge in the market.

It was essential to create a longlasting, sustainable program. It was also important to be able to attract talented candidates to the program. That is why ICATT was structured so that the companies cover the tuition of the apprentices while they attend the college portion of the training. That way, both the company and the apprentice are deeply invested in one another and build a mutual feeling of loyalty. Upon completion of the program, the apprentice is then free of student loan debt and less tempted to pursue a position at a competing company for a couple dollars more an hour.

## GACC Midwest helps companies through the program

When working with the ICATT program, GACC Midwest provides guidance and support from the first information session through to the graduation of the apprentice at the end of his or her three-year train-



ing. There is a close collaboration between the companies, the colleges and GACC Midwest to ensure that the high quality standards demanded by the German framework are met. GACC Midwest also plays a critical role in trainer preparation with 'Train the Trainer' courses, and a suite of training manuals and materials that are provided to the participating companies before the first day of the program. These tools enable a trainer, who might lack experience in training an apprentice and with a large generational gap, to confidently enter the program and pass on his knowledge and years of experience to the incoming apprentice.

Companies interested in learning more about the ICATT program, proposing new company clusters or occupational profiles, should contact Mario Kratsch, Director, Skills Initiative at GACC Midwest, at kratsch@gaccmidwest.org.

To learn more about ICATT, see www.thinkicatt.com, sign up for our skills newsletter, and follow us on facebook.

## **Significant EEOC litigation rulings in 2015**

he EEOC's Fiscal Year 2015 was another year of blockbuster decisions that significantly changed the landscape of EEOC litigation. FY2015 also saw the EEOC nearing the end of its 2013-2016 Strategic Enforcement Plan ("SEP"). We have monitored the EEOC's activities throughout the life of the plan and have seen how the Commission has evolved its tactics to conform to the goals and metrics set out in the SEP. Viewing the trends and developments in the context of the SEP has revealed how regulatory trends are created and developed with the guiding hand of the EEOC.

We are always looking for ways to make our annual overview of EEOC litigation enlightening and valuable to corporate counsel and business executives. A working understanding of EEOC trends and developments is critical for employers to structure and implement personnel decisions and litigation avoidance strategies. This year, we are introducing a number of new features to add to that understanding.

Part I of this book is structured as a "Corporate Counsel's Guide to EEOC Litigation: Developments in FY2015." In that section, we address the important developments in FY2015 as they relate to each stage of an EEOC enforcement action, from the filing of a charge of discrimination through settlement or a determination on the merits. The Guide includes a special section devoted to the pivotal Supreme Court ruling in Mach Mining, LLC v. EEOC, which arguably changed the game with respect to the conciliation phase, a crucial phase of any EEOC matter. We served as amicus counsel for the defense in the U.S. Supreme Court briefing of Mach Mining.

Part II provides a broad overview of the substantive theories that the EEOC has focused on in FY2015, paying particular attention to how those theories relate to the enforcement priorities set out in the SEP. As we do every year, we have analyzed the EEOC filings in FY2015 by statute and by discrimination type under Title VII. This year, we have also taken a closer look at those trends as they relate to particular industries. The "Industry-By-Industry," section collects the number and types of filings that affect particular industries, and analyzes what this reveals about what particular industries must keep top of mind going into 2016.

We have also explored significant rulings arising under the Americans With Disabilities Act ("ADA"). Every year, ADA litigation comprises a significant portion of the EEOC's filings and the complexity of this statute often confounds employers. This year, in our "Spotlight On The Americans With Disabilities Act: An ADA Survival Guide," we have analyzed what certain filings and significant decisions mean for employers when responding to accommodation requests, and the often tricky prospect of dealing with EEOC charges that arise under the ADA.

Part III examines important legislative and political developments and takes a look at what may be on the horizon for EEOC litigation. The EEOC has increasingly focused its energies on the strategic use of large, high-profile "systemic" cases to drive its mission. These are cases that address policies or patterns or practices that have a broad impact

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## Purchasing your electricity via the Illinois Manufacturers' Association energy program

any Illinois manufacturers have benefited from the competitive electricity market. Illinois Manufacturers' Association (IMA) endorsed Constellation, a competitive electricity supplier, as its exclusive energy provider to their members. A competitive electricity supplier is a company that purchases electricity from the wholesale market and sells it directly to the customer. While there are other options available, we believe that choosing Constellation through IMA presents an opportunity to meet all of your energy needs while benefitting the Association and its members.

## Choosing an electricity supplier is an important business decision Understand what you're buying

When purchasing electricity, it's ok to ask a lot of questions. The terms of a contract should be given careful consideration, as they may differ greatly. You need to understand more than just the price quote. A fixed rate provides budget certainty, which is one of the chief benefits of the deregulated market. However, some suppliers may offer a fixed price for a year or longer, while others may offer a price that varies from year to year or even month to month. It is also especially important to understand when the contract begins and ends and whether terminating the contract early will result in an early termination or cancellation fee, and how that fee will be determined. Don't sign a contract unless you are sure you understand it. If, after reading your contract carefully, you are unsure about any of the terms, ask for clarification.

#### Other energy products

There are many innovative energy solutions you may want to consider when making your electricity

supply purchase. Manufacturers that can commit to reduce their consumption of electricity by at least 100 kilowatts during peak times can sign up to participate in a demand response\* program. Manufacturers participating in a demand response program agree to reduce their energy output for a specific period of time to make more energy available on the regional power grid. Participants in this program can reap significant financial incentives. Some electricity providers can offer this option at the same time as your electricity purchase.

Earnings through demand response programs can also be utilized by manufacturers that are looking to match energy demand with renewable energy. The most common way to do this is to purchase renewable energy certificates, or RECs. Not all electricity providers offer RECs, however. If your business is interested in exploring its full array of innovative electricity options, you may want to consider a

supplier — such as Constellation — that can offer a comprehensive approach to energy procurement.

#### **Options for purchasing electricity**

You can purchase electricity directly from a competitive electricity supplier such as Constellation or retain a third party broker or consultant to act on your behalf. As mentioned above, a competitive electricity supplier is a company that purchases electricity from the wholesale market and sells it directly to the customer. A broker or consultant is a person or firm that acts as an agent, usually representing the customer, in the sale and purchase of electricity; they broker the deal between the electricity supplier and the customer, but they never own the electricity. Be aware that some brokers may ask you to sign a letter giving them exclusivity and thus giving up your option of working directly with a competitive electricity supplier. If you purchase electricity see **ELECTRICITY** page 28



**Constellation** is the preferred energy provider for IMA members. For more information, visit www.constellation.com/IMA. Or, you may contact Constellation's Richard Cialabrini at 888-312-1563 or Richard.cialabrini@exeloncorp.com.

### **EEOC LITIGATION**

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on a region, industry or entire classes of employees or job applicants. The EEOC believes that the pursuit of those cases gives it the most "bang for its buck" because they impact a large number of employees directly, and because they can drive change in company policies and industry standards.

Part IV contains every significant court decision that came down in 2015 regarding EEOCinitiated litigation. They are categorized according to subject matter so as to provide corporate counsel with a practical reference manual for those decisions.

The EEOC's focus on systemic cases has come under withering criticism from Congress and the business community. Congress has repeatedly voiced its concern that the EEOC's methods often result in overly aggressive litigation positions with respect to emerging theories of discrimination. Employers that find themselves being used as a "test case" for the EEOC's latest theories have legitimate concerns about how the EEOC is accomplishing its goals. Although the Commission may argue that such cases eventually effect change in industry practices, it does so at the expense of the handful of

employers that find themselves in the crosshairs.

When confronted with unfamiliar theories or enforcement tactics, employers are often left wondering, "how did we get here?" To help explain how the EEOC exerts its power to shape anti-discrimination law in the United States, we have included in this year's book three "Case Studies" in regulatory power.

• Case Study No. 1: Strategic Litigation. Our first case study examines the lead up to Mach Mining and its immediate aftermath to demonstrate how the EEOC takes advantage of its role as the chief enforcer of the antidiscrimination statutes to advance favored legal theories. By taking one, uniform position in cases around the country, the EEOC can often knit a handful of successes into a body of precedent that supports its favored legal position. The Seventh Circuit was the only circuit willing to break with its sister circuits and endorse the outer edges of the EEOC's argument that the federal courts have no power to review its conciliation process. That was after a long campaign waged by the EEOC to advance that theory in case after case around the country. Fortunately for employers, the Supreme Court did not agree. But now that the Mach Mining

#### decision is in, we are once again seeing how the EEOC is working to develop precedent to entrench its favored interpretation of that decision into U.S. law.

- Case Study No. 2: Quasi-Judicial Power. Another tool at the EEOC's disposal is the quasi-judicial power that it has as the administrative agency empowered to hear and decide some types of discrimination disputes. In Macy v. Holder, the EEOC decided — under its power to hear discrimination claims brought by federal sector employees — that transgender discrimination is a form of sex discrimination. This decision, which some would argue was purely the EEOC's creation, then took on a life of its own in the federal courts as the EEOC built upon that precedent to establish a new and growing body of court decisions adopting its approach. Employers must be wary of this potentially viable and growing theory.
- Case Study No. 3: Administrative Rulemaking.

Perhaps the most obvious tool that the EEOC has to shape the law is through its power to issue regulations and guidance interpreting and implementing the anti-discrimination laws. In our third case study, we examine how the EEOC has used this authority to advance new regulations governing employer health and wellness plans that are in some respects inconsistent with the regulations adopted by the Departments of Labor, Health and Human Services, and Treasury. This case study reveals how different agencies' rulemaking powers intersect, and sometimes conflict, and how the EEOC in particular appears to feel itself unbound by what other federal agencies are doing.

As always, the best way for employers to avoid EEOC litigation is to stay informed about the latest trends, and to develop a deeper understanding of how the EEOC does what it does. We hope that this book gives employers the tools they need to survive in this rapidly evolving landscape.

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## 3D printing new jobs

#### One machine does it all

S manufacturing output has steadily increased since the end of World War II, but manufacturing jobs peaked around 1975 and have been declining ever since. This means that U.S. manufacturers have become very efficient, making more things with fewer people. But as we lose jobs to faraway places, a big question arises: What are Americans to do for work? As I explain in my new book, 3D Printing Will Rock the World (available on Amazon or Kindle), 3D printing may be a big part of the answer to that question.

#### **Bringing jobs home**

Because 3D printers can make entire parts or products with fewer machines, fewer steps, and therefore fewer people, they can eliminate the benefits of making things where labor is cheap. The implications are obvious: more manufacturing in America, but not many jobs running the machines. Ten manufacturing jobs lost in low-wage countries may create only one job in a 3D printing economy, but let's be careful to compare apples to apples. If it takes ten people to operate the traditional machines needed to make a single part, it may take only one person to operate the 3D printer that makes that part in America. To the optimist, that is one more manufacturing job than we had without 3D printing. To the pessimist, we still need nine more jobs. But the pessimist is missing an important point: if the part is made in America by a local worker operating the 3D printer, most of the supply, support, and distribution chain will be here too.

#### Regional and distributed manufacturing

Because chasing cheap labor is unnecessary in a 3D printed world, this technology can break the grip

of centralized manufacturing. But don't assume that huge factories will simply replace their traditional machines with 3D printers. As 3D printers become more and more capable of making almost any finished product, centralized mass production may no longer be needed and, as a business model, may become as antiquated as the dinosaur. 3D printing will pull manufacturing away from the manufacturing hubs and redistribute it, product by product, among thousands or tens of thousands of smaller factories across the globe. Many parts and products will be made regionally, close to where they will be used.

#### **End of the line**

The days of thousands of unskilled American factory workers performing highly repetitive, mindless tasks along an assembly line are gone for good. The factory of the future will be inhabited mostly by 3D printers, robots, and other advanced machines, all driven by software. Some people will be needed on the

factory floor to make sure everything is humming along, but the jobs they will do may not exist today.

As technology advances, there will be little place on the factory floor for unskilled workers. In fact, even today there are fewer and fewer jobs for workers without skills or a college education. Between October 2008, when the world economic crisis began, and mid-2014, the U.S. unemployment rate hovered in the 6-10 percent range. During that same time period, the unemployment rate for college-educated workers was only about 3-5 percent.

In a 3D printed world, the demand for skilled workers will increase, but we don't know yet exactly what their jobs will be like. Some of those jobs are easy to guess. People will be needed to run the 3D printers, robots, and other machines. People will be needed at every step of the now-localized supply and distribution chain, even though their jobs will be radically different than

see 3D PRINTING page 29



**John Hornick** is a partner with the Finnegan IP law firm, based in Washington, DC and the author of the new book, *3D Printing Will Rock the World*. As the founder of Finnegan's 3D Printing Working Group, he advises clients about how 3D printing may affect their businesses. Hornick frequently speaks and writes on 3D printing and has been recognized as a thought leader in this space.



early 400 manufacturing and retail leaders gathered in Springfield on Wednesday, May 11th, to meet with the Governor (pictured above), lawmakers, and key officials about key issues including the state budget, tax policy and workers' compensation reform. Attendees were also treated to a presidential election update from Amy Walter with the Cook Political Report.

The IMA Board of Directors visited with Governor Bruce Rauner, House Speaker Michael J. Madigan, Senate President John Cullerton, and House Republican Leader Jim Durkin. Manufacturing leaders witnessed firsthand the intense rift

between the Governor and Democrat leadership resulting in the unprecedented budget impasse. It is vital that business leaders meet with their elected officials and present a unified voice at a time when the state is hemorrhaging manufacturing jobs and racking up billions of dollars in new debt.

Amy Walter explained the "new normal" in elections that has resulted in two unpopular candidates — Donald Trump and Hillary Clinton — who will be facing each other in November to become President of the United States. While handicapping the current race in Clinton's favor, she noted that Trump appeals to "uneducated" voters who have not

been targeted in previous campaigns.

The IMA appreciates every member who took time to come to the Capitol and talk about the importance of manufacturing jobs.

## Governor and leaders meet but still no budget deal

As of press time for this issue of *The Illinois Manufacturer* magazine, the clock is ticking toward adjournment for the spring legislative session and no immediate budget resolution is in sight. For only the second time this year, Governor Bruce Rauner and the four legislative leaders sat down to discuss a state budget on May 17th or 18th? This was following the receipt of a budget blueprint from a bipartisan working group of rank and file lawmakers.

The budget framework couples \$5.4 billion in new tax revenue. \$2.6 billion in budget cuts and borrowing \$5 billion to help pay down the backlog of bills totaling more than \$10 billion according to the Comptroller. Revenue would be generated through a permanent increase in the income tax (to 4.85 percent for individuals and 7 percent for corporate rates), imposition of a sales tax on services similar to the Wisconsin law, a new one cent per ounce tax on soda and sugary beverages, elimination of various tax incentives including the qualified production activities deduction, noncombination rule, and outer continental shelf. The working group recommended extensions of the Research & Development tax credit,



Manufacturers Purchase Credit, and Graphic Arts exemption along with eliminating the corporate franchise tax and coupling the Illinois estate tax with the federal law that would increase the exemption from \$4 million to \$5.3 million.

Governor Rauner and Republicans continue to insist that real structural reforms are necessary before any agreement can be reached on increasing taxes. The IMA supports many of these reforms and has been engaged in discussions on reforming Workers' Compensation to reduce costs for employers that are significantly higher than other states. Key reform ideas include primary causation standard, strengthening AMA guidelines, and making further reductions in the Medical Fee Schedule. Other reforms supported by the Administration include property tax relief and changes to collective bargaining.

The Governor and leaders, including Speaker Michael J. Madigan, agreed to assign staff and legislators to working groups to delve into these issues. While the Speaker reportedly agreed in the meeting to negotiate on a property tax freeze, pension reform, and workers' compensation, his office released a statement following the meeting expressing opposition to these elements of the Governor's Turnaround Agenda. In an even more ominous note, top Madigan lieutenant Representative Lou Lang (D-Skokie) told an assembled crowd Following the luncheon and a busy afternoon of lobbying at the Capitol, Business Day participants were treated to the music of The Schwag, a Grateful Dead tribute band from St. Louis, Missouri, and food and drink from the many sponsors and supporters of the IMA and IRMA

at an organized labor rally outside the capitol recently, "We might not have a budget during the term of Bruce Rauner."

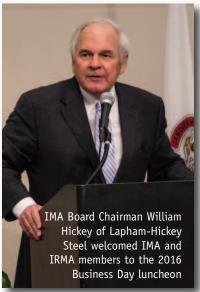
According to reports, House Democrats on working groups are insisting on specific actions before negotiating these reforms. For example, they have requested that an AFSCME contract must be negotiated and signed by the Administration before they will discuss changes in collective bargaining.

Illinois has gone an unprecedented eleven months without a state budget. Despite the lack of a budget, the state is on pace to spend nearly \$38 billion this year because of court orders, consent decrees, and the K-12 education budget that was signed into law so schools opened on time in 2015. With rev-

enue of only \$32 billion this year, Illinois' backlog of bills is skyrocketing and will total more than \$10 billion at the end of June.









During their trip to Hannover Messe, IMA Board Chairman William Hickey, Jr. and IMA President & CEO Gregory W. Baise visited the Hannover Regional Technical School in Neustadt, Germany to learn about apprenticeships. Here they witness an Industry 4.0 production line trainer that brings together production, assembly and packaging functions in one combined process.

## Abbott introduces new 'foodie' inspired snack brand: Curate

As snacks and smaller meals continue to be a big part of daily diets, people continue to look for snacks that are nutritious — made with wholesome, real food ingredients — but also have rich, complex flavors. With this in mind, Abbott is introducing Curate — a new brand that takes a culinary approach to snacking by creating unique flavor combinations that taste like they were handcrafted by a chef.

"Even with countless nutritious snack options in store, people told us they still weren't quite satisfied and were often looking to make their own snacks using ingredients from their kitchen," Dustin Finkel, General Manager, Nutritious Snacks, Abbott, said. "We saw this as an opportunity to create a snack brand that tastes handcrafted, with rich textures and flavors you would expect from a chef and blends of ingredients you can find in nearly every grocery or natural food store."

Every Curate snack starts with hand-selected, real food ingredients like Mission figs, Marcona almonds, balsamic vinegar, quinoa, chia seeds and elderberry. Each bar brings these flavors together in unique ways to create unexpected, yet brilliant flavor combinations.

Curate is launching with six flavor recipes. These snack bars are a good source of plant-based fiber, contain protein and are made without artificial preservatives, flavors or colors.

In addition to the six flavors in the current line-up, Curate will introduce Curate Kids bars this spring, with other new snacks coming later this year.

Curation – finding and purposefully bringing together seemingly disparate elements – is what we do best. For more on Curate, visit www.curatesnacks.com.

## Benda Manufacturing, Inc. celebrates 30 years

IMA member Benda Manufacturing is celebrating 30 years in business. The Tinley Park, Illinoisbased manufacturer builds conveyor systems and controls for specialty markets, including food processing, contract and OEM packaging, and pharmaceutical.

The Benda family incorporated

the manufacturing company that bears their name on April 1, 1986 with a 1,200-square-foot facility in Lockport, Illinois. In the beginning, George Benda handled sales and engineering while his wife Shirley managed all parts ordering and accounting. After working day jobs, the couple's six sons would come into the shop and build the conveyor equipment.

Today, the Benda family has ushered in a new era of innovation for the company by marketing complete system solutions equipped with robotic and automation control. All six sons remain executives of the company which has grown to more than 50 employees, and includes an on-staff team of mechanical, electrical and robotic engineering experts. Benda installations span the globe. Conveyor systems meet USDA, FDA, 3A Dairy, BISSC and UL standards.

"From day one as an entrepreneur your focus is survival and growth. We're very proud of our longevity," said Benda Manufacturing President Terry Benda. "You don't spend a lot of time thinking about what your company will look like 30 years down the road. So when you get there and think about all the customers you've helped, it is really rewarding. Many of our original customers are still with us and have become lifelong friends."

Still, with all the milestones over the past three decades, the company's founding values remain intact: a corporate culture emphasizing respect and compassion, teamwork that maximizes individual and company potential, customer-centric thinking, pursuit of the most innovative solutions, and a healthy worklife balance.

Benda Manufacturing has long been proud of its made-in-America roots. Even machine parts used by the company for its product handling systems are sourced from Americanowned companies. "When we buy American, we're helping to support other families and their local and state economies," said Terry Benda.

Benda Manufacturing, Inc. is located at 18501 Graphics Court in

Tinley Park. To receive product updates and news, visit the Benda Manufacturing website at www.bendamanufacuring.com. For more information, call 708-633-4600.

## IMA member Maro Carton looks to the future

The year 2016 is well on its way and it looks to be the best year yet for Maro Carton and their clients. The Maro Carton team looks to partner its award-winning operation with your business to help you achieve record results. Maro Carton, Inc. is a premium manufacturer of folding cartons and other related paperboard products. Located in the heart of Chicago, Maro Carton services some of the largest corporations in the Midwest with national shipping capabilities. Their client retention is one of the highest in the industry.

Two main areas of products are offered: folding cartons and microfluted corrugated packaging. Within folding cartons (chipboard boxes), the main board types are SBS, SUS, Clay-Coated News-back (CCN) and Tan Bending Chip (TBC) in a thickness range from .18 to .36. Their microfluted corrugated packaging is mainly in E-flute kraft and litho-laminated options. Maro services food, automotive, hardware, cosmetic and household product manufacturers, with customized solutions for other manufacturers as well. They offer other options, such as shrink-wrapping and windowing, and can provide various closure options to give your operation the best efficiency in pack-out.

Sustainability is of the highest importance, which is why Maro Carton sources renewable/recyclable materials for the best ecological and financial impact. They support long term relationships with suppliers of paper and soy-based inks that maintain the highest standards of ecological consciousness. Through consistent engagement of stakeholders, their mills ensure responsible stewardship of the forests that feed our supply-chain. The result is more young trees pulling higher amounts of carbon-dioxide out of the atmosphere. This strategy guides their ecocentric operations.

There are stringent quality management systems in place that are very similar in scope and purpose to the ISO standard and include the following elements: Quality policy, management review, roles and responsibilities, complaint procedures, inspection procedures, calibration systems, training and records management. As a result, the program provides complete transparency and traceability to clients. As a result. Maro Carton has never had a quality complaint in their history. They are in the process now of becoming BRC certified through AIB.

With increased customer demands and budgets to maintain without affecting quality, Maro Carton understands the pressures their clients are under. They utilize all the latest advances in technology and training to service their clients' every need. Capabilities include an award-winning design team that can customize packaging that grabs the attention of the consumer while protecting the product. High capacity 7-Head print lines and glue lines combined with their in-house die/tooling department and CAD table renderings allows Maro Carton to provide turnkey solutions on all sizes of orders with ease, accuracy and efficiency, giving the client the best operational leverage. With increased capacities and quick delivery, Maro Carton can turn large orders in a short amount of time, which helps minimize your on-hand inventory, maximizing your footprint without maxing out your budget. Together with Maro Carton you can make 2016 the best year yet. For more information, visit www.marocarton.com.

## Global Metals Awards CEO of the year to Marsha Serlin, United Scrap Metal, Inc.

Did you get your invitation to the "recession party?" United Scrap Metal CEO Marsha Serlin says she did: "We saw it coming. We just



chose not to go." As instability in

the global metals markets reverberates all along the value chain, the recycling industry is in crisis, with falling profi ts forcing many recyclers to close their doors or succumb to bankruptcy. Serlin, bucking the trend, has led her \$200 million company to notch recent double-digit growth in annual volume.

United purchases, processes and markets recyclable commodities for customers in the manufacturing, utilities, service centers and construction industries across the U.S. Serlin founded the company in 1978 armed only with \$200, a rented truck and boundless determination. At that time, she was a divorced single parent of two young children. To support her family, she began gathering scrap from alleys, manufacturers and facilities. She stood out as a woman in a male-dominated business, often loading her truck while awestruck workers looked on.

Competitors predicted her startup would fail as the industry entered an economic recession, but she persisted, learning lessons that she would apply to her company whenever difficult financial climates threatened. She also worked doggedly to stand apart from her competitors by professionalizing her business, building a reputation for honesty, transparency and fair pricing. Today, her status is what judges called "the favored supplier over many institutions" has led to a strong, stable business. United claims more than 4,000 clients nationwide and enjoys an exceptionally high customer retention rate.

United Scrap Metal, Inc. is an IMA member and Marsha Serlin serves on the IMA Board of Directors.

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## Advance Illinois Manufacturing (AIM) coalition launches in Illinois

A diverse group of business industries across the state have launched a coalition committed to advocating for modern and permanent extensions of four critical tax incentives that will provide stability and predictability for job creators.

Advance Illinois Manufacturing (AIM), led by the IMA, includes members in the manufacturing, agriculture, printing, biotech and other important sectors of the state's economy. The AIM Coalition is advocating for permanent tax solutions to ensure that a wide variety of industries in Illinois remain competitive in the marketplace. AIM is hoping the legislature will support a series of legislative measures that must be adopted to create a secure business environment to further existing manufacturing interests as well as future investment.

"We need to do more in Illinois to embrace the compromising spirit and attract business growth and development here," said state Rep. Mike Zalewski, D-Riverside, the bill's chief sponsor. "These tax credits will provide targeted incentives with measurable benefits for employers large and small." **AIM Legislative Agenda – HB 5717** 

- sponsored by Rep. Zalewski:A Permanent R&D Tax Credit
- Reform the Manufacturers Purchase Credit (MPC)
- Modification to Graphic Arts Sales Tax Exemption
- A Permanent Coal, Aggregate Exploration, Mining and Off-Highway Sales Tax Exemption

"Illinois needs a stable tax code that will lead to new job creation and increase our position of strength in technology and innovation," said Mark Denzler, Vice President & COO, IMA. "In the R&D space, Illinois is one of the few states without a permanent tax credit and it's the lifeblood of manufacturing. It's imper-

ative that we advance these four critical tax incentives to keep Illinois manufacturing competitive and to effectively advocate for an industry that employs 570,000 workers in Illinois and contributes \$101 billion in total manufacturing output."

Bill Gibson, Illinois State Director at Great Lakes Graphics Association echoes the importance of this legislation.

"Presently 49 other states offer some kind of economic incentive to commercial printers engaged in manufacturing activity, so the renewal of these incentives is critical to the survival of the commercial printing industry in Illinois," said Gibson. "Unfortunately, due to gridlock in Springfield and the expiration of several pro-business credits, Illinois companies are at disadvantage in the marketplace. When lawmakers talk about making Illinois more competitive . . . this is exactly the type of legislation they should be supporting."



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via the IMA Energy Program, you will work directly with an experienced representative from Constellation.

Brokers usually charge a fee and you should ask what those fees are and how they will be paid. A broker may receive a flat fee or may charge a certain rate per kilowatt hour. The fee may be billed directly to a customer or be embedded in the purchase price and disbursed to the broker by the electricity supplier (there is nothing wrong with that but it should be clear that the fee is still being paid by the customer). Beware any broker that tells you their services are free.

Endorsement programs like the IMA and Constellation program usually involve a minimal fee paid to the Association by the electricity supplier for the benefit of the Association and its members.

Whatever choice you make, you need to fully understand the process and your options. Ask suppliers and brokers how long they have been in business, check references and ask your colleagues and associates about their experiences. Also, confirm that any entity you are working with is licensed in the Illinois region by your state's Public Service

Commission. The list of licensed competitive suppliers can be found on your state's Department of Public Services website.

## Choosing Constellation through IMA makes sense

Experience

An entity will be better able to serve you if they have experience working with other companies in your industry. Constellation is the largest retail supplier in the United States and offers a variety of products to suit each customer's needs. When you work with Constellation, via IMA, you get the benefit of their experience and you support your Association as well.

## After-sales services and continuing customer education

Being well informed about your electricity usage on an ongoing basis is important for effective electricity management. For the benefit of IMA members, Constellation offers access to a variety of educational materials including webinars, seminars, or inperson discussions.

#### **Customer service**

One of the reasons why IMA has endorsed Constellation is because of their commitment to exemplary customer service, energy education and attention to customer needs throughout the term of the contract.

For more information on purchasing electricity and the programs offered by Constellation, contact Rich Cialabrini, Senior Association Manager, at 888-312-1563 or richard.cialabrini@constellation.com.

\*Demand Response is offered by CPower Corp. through a strategic alliance with Constellation.

Constellation — Over 15 years as the IMA's endorsed energy supplier

## **3D PRINTING**

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they are today. People will be needed to build the factories, the 3D printers and other machines, and to make the materials the printers will use.

#### Think about the horse

So if 3D printing factories will not employ many people and most of the jobs will be for skilled workers, how will 3D printing spark a new industrial revolution, a manufacturing renaissance, and bring jobs home? Think about the horse. When the horse was the main form of transportation, there were many horse-related jobs: saddle makers, blacksmiths, wagon makers, stable owners, feed suppliers, etc. When the automobile came along, most of those jobs were lost. But think of how many new jobs were created by the invention of the automobile. 3D printing has the same potential.

Just as the nascent automobile industry looked nothing like the horse industry, the 3D printed manufacturing renaissance will look nothing like the Industrial Revolution. Factories of the 3D printing renaissance will be cleaner, safer, and employ fewer people. They will also be smaller, regional, and distributed all over the world.

## Which industries will be disrupted first?

Industrial companies reliant on parts revenue are at high risk. But many products are consumer products. As time marches on, individual consumers will be more and more able to make such products themselves, or to have them made locally.

Companies that plan for such disruption of their industries may safely dodge the 3D printing freight train and hop aboard. Other companies will fail, either because they are stuck in horse thinking or because their business models are as unsustainable in a 3D printed world as camera stores and record stores are in the digital world.

#### New businesses, new jobs

3D printing will spawn businesses, products, services, and jobs that are as unimaginable today as the auto industry was at the dawn of the

twentieth century. Of course my crystal ball is not perfect, but some types of 3D printing-related jobs are suggested by its strengths.

Regional manufacturing means most players will be independent fabricators. A growing number of 3D printing fabricators can be found throughout the world. Some have been 3D printing for a long time, operating as rapid-prototyping shops. Some are start-ups. New companies like iMaterialise and Shapeways are well equipped with state of the art 3D printers and ready to print parts and products at multiple locations.

3D printing fabricators are the regional and distributed manufacturers of the 3D printing age. They are the employers of the factory workers of the 3D printing–fueled manufacturing renaissance. Individually, they may not employ a large number of people, but together they will be a major source of factory jobs.

Customization is one of 3D printing's strongest points. It is hard to

The days of thousands of unskilled American factory workers performing highly repetitive, mindless tasks along an assembly line are gone for good.

imagine today how deeply customization will work its way into our everyday lives, but I suspect that in 2025 using customized 3D printed products will be as common as using mass-produced ones today. But those may be products that don't exist today or that are very different versions of today's products. Custom - izing products is a job generator.

As more and more 3D printers are sold, they will probably be networked, whether in professional networks or what I call "Friends Networks." 3D printer networks like 3DHubs, which connects users to thousands of 3D printers around the world, are already springing up.

The number of 3D printable blueprints available on the Internet is growing exponentially. They are being offered for use by a variety of startups. Some of these companies are providing libraries of existing product and part designs. Others provide software tools that enable users to create and customize designs.

3D printable digital blueprints are a company's crown jewels. If they lose control of them, their businesses could be destroyed. Enter the security entrepreneurs. Several startups have their sights set on this problem and have created data-management, encryption, and blueprint-security companies.

Computer programmers in the 3D printing job market will be like kids in a candy shop. They will be in high demand to write, update, and manage software to meet 3D printing—related software needs for anticounterfeiting, authenticating parts and products, customization, design, encryption, manufacturing, networking, quality control, and many other needs yet to be discovered.

#### **Innovators** needed

Skilled 3D printing-related jobs soared 1,384 percent from 2010 to 2014 and were up 103 percent from 2013 to 2014. The three jobs most in demand were industrial and mechanical engineers and software developers. These jobs are being filled by the innovators of today. Tomorrow's innovators are kids today. They are just starting to be initiated into the world of 3D printing, using consumer-grade machines.

#### Making us makers, again

We are all makers at heart. For all of human history, except the last hundred years or so, when people needed something they made it. Then came the industrial revolution and eventually we became buyers, not makers. Makers and small businesses are the key to job creation. A quarter of U.S. manufacturing companies employ fewer than five people and 60 percent of new jobs generated from 2009 to 2013 were created by small businesses. 3D printing can take us back to our maker roots, fostering technical innovation, new businesses, and jobs we never heard of.

## **New IMA members**

ARCELORMITTAL USA, INC.

Chicago, IL

**BARTON MANUFACTURING** 

Decatur, IL

BAXALTA, INC.

Bannockburn, IL

FAEGRE BAKER DANIELS LLP

Chicago, IL

FMI, INC.

Elk Grove Village, IL

**HELLA ELECTRONICS** 

Flora, IL

HIGHLAND RIDGE CAPITAL

Chicago, IL

INX INTERNATIONAL INK COMPANY

Schaumburg, IL

**K V F QUAD CORPORATION** 

East Moline, IL

MAZAK OPTONICS CORPORATION

Elgin, IL

**METAL SALES MANUFACTURING** 

CORPORATION

Rock Island, IL

**MILLER CANFIELD** 

Chicago, IL

MISSION CONTROL SYSTEMS

Elk Grove Village, IL

**NUDO PRODUCTS** 

Springfield, IL

PIRTEK ON-SITE HOSE SERVICE

Elk Grove Village, IL

**SOUTHWIRE COMPANY** 

Flora, IL

## **2016 Calendar of events**

Thursday, June 30, 2016 WEBINAR: Mythbusting Self-Funded Initiatives

9:00-10:00 am CST — presented by Manufacturers Insurance Services of Illinois (MIS-360) — Visit https://attendee.gotowebinar.com/register/52809 8005251811074 for information

Thursday, July 28, 2016 WEBINAR: Value Based Benefits Design (VBBD)

9:00-10:00 am CST — presented by Manufacturers Insurance Services of Illinois (MIS-360) — Visit https://attendee.gotowebinar.com/register/53870 12511719521282 for information

Thursday, August 25, 2016

WEBINAR: The Real Cost of Non-Compliance

9:00-10:00 am CST — presented by Manufacturers Insurance Services of Illinois (MIS-360) — Visit https://attendee.gotowebinar.com/register/66803 62541914294530 for information September 12-17, 2016 IMTS 2016 — International

**Manufacturing Technology Show** 

McCormick Place, Chicago — Visit the IMA

Education Foundation at the Smartforce Student

**Summit area** — Visit www.imts.com for more information

Thursday, September 29, 2016 WEBINAR: Automation in Manufacturing

9:00-10:00 am CST — presented by Manufacturers Insurance Services of Illinois (MIS-360) — Visit https://attendee.gotowebinar.com/register/67289 81846582925058 for information

Friday, October 7, 2016 Manufacturing Day

October is Manufacturing Month in Illinois

Save the date and plan to participate in Manufacturing Day 2016. Illinois celebrates Manufacturing Month (October) in Illinois by gubernatorial proclamation— Visit www.mfgday.com for information Thursday, October 27, 2016 WEBINAR: Exit Strategies

9:00-10:00 am CST — presented by Manufacturers Insurance Services of Illinois (MIS-360)) — Visit https://attendee.gotowebinar.com/register/26897 78547389670914 for information

November 2-3, 2016 Midwest Environmental Compliance Conference (MECC)

Chicago Marriott O'Hare

This conference, will provide a regional perspective on the RCRA, Air and Wastewater compliance issues you care about every day, including enforcement and policy/regulation changes — mecconference.com/chicago-november-2-3-2016

SAVE THE DATE ... Friday, December 2, 2016 IMA's Annual Luncheon

JW Marriot, Chicago — 9:00 am-2:00 pm Keynote Speaker: Dennis Muilenburg, President & CEO of The Boeing Company

Visit http://www.ima-net.org/calendar-of-events for information, pricing, registration, etc., related to all IMA events. For more information on IMA events, contact Kimberly McNamara at kmcnamara@ima-net.org, 800-875-4462, ext. 9371

# Is Your Employee Handbook Up To Date? THINK AGAIN!

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The absence of needed information specificity on electronic communications usage, social media, and privacy/search related issues.



Failure to properly address the leave of absence state and federal requirements applicable to a business based on the size of the employer.



Inaccurate & misstated wage and hour requirements that state specific meal and rest periods, timekeeping, etc.

One of the most important things to consider for your business is an Employee Handbook. Out of date handbooks and misstated or incorrect information could have a devastating financial affect on your business. A sound handbook is your company's best defense against wasted time in court and thousands of dollars in lawyer fees.

But before you invest in a handbook, make sure the one you're buying is trustworthy and current! Many websites offer you a one-size-fits-all approach to handbooks. The problem? One size does not fit all.

Once you use our service, you have the opportunity to keep it "Evergreen". This means that every year, as a client of ours, you will receive the Federal and State required annual Labor Law updates to incorporate into your handbook, ensuring it's up to date with the law... completely free of charge. This includes:

- A review process that is designed for the ease of your business.
- Provided to you at a significant discount, because you are a client of ours.
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