

THE FUTURE OF MANUFACTURING STARTS WITH YOU

THE ILLINOIS **Manufacturer**

www.ima-net.org

Summer 2017



**Chicago and Cook County
Sick Leave Ordinances**

**Shedding Light on Working Capital
Management Challenges
and Best Practices**

Grand Bargain? More Like Grand Bust

Critical Cleaning - New Parts for Automation Equipment

Success Story

Activity: Critical Cleaning - New Parts
Industry: Industrial Equipment Manufacturing
Widgets: Automation Equipment Parts
Soils: Coolants / Metalworking Fluids
Method: Automated Spray Washer
Material: Aluminum
Product: Mirachem M2750 Cleaner / Degreaser
Key Features: Residue Free Cleaning / Performance



“We wound up with the best in the industry.”

It's all about dollars and sense.

Nobody likes to pay more than they have to. But when critical cleaning is a matter of useable parts or useless rejects, getting the lowest price can cost you an arm and a leg.

This high-end maker of manufacturing equipment needed help removing residue from their machined parts. They were concerned about forking over top dollar for a solution to their problem. They tried lots of cheaper options and wound up paying the devil.

That's when they decided to bank on the best and called Crystal Clean. With the right equipment and Mirachem aqueous cleaning technology, they found that quality is the better value, and that time really is money.

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This Midwest manufacturer had a tough cleaning job to do. They tried the rest, then came back to the best.

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- ✓ Worker Safety
- ✓ Easier EHS Compliance
- ✓ More Flexibility

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ss.mirachem.net/APP-110



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.

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Grand Bargain? More Like Grand Bust



**It is unconscionable
that the leaders
of the General
Assembly and
previous governors
have allowed
this situation to
grow into the
back-breaker
[Workers' Comp]
costs have become.**

The 2017 Illinois legislative session was the worst one in my entire 26-year tenure at the IMA. That's not hyperbole. Nothing is worse than being so close to taking important steps to solving long-festered problems and then having the rug pulled out from under your efforts. I would list all the negative adjectives that come to mind about the collapse of reason in Springfield, but I have a limit of 500 words for this article.

The recently-concluded legislative failure can be surmised as an historic loss of opportunity. Early in session, a so-called "Grand Bargain" circulated that would have been a positive move forward. Poof! The Grand Bargain disappeared: opportunity lost. Later in the session, House Republicans were in position to demand *and get* sorely needed first-step business reforms, but then 15 GOP members broke from their leadership and gave away any chance of success: opportunity lost again.

When the Failed Fifteen made their ill-fated decision to cave in, much of Springfield was dumbfounded. As the bad news emanated out, I heard it loud and clear from many IMA members who shared our dismay at the notion that taxes have been raised without addressing business reforms, state pension debt, education reform and rising property taxes. Property taxes alone continue to kill business growth in Cook County and will send younger families fleeing this state with their inability to pay these outrageous increases. Yet, most of us in Springfield were hearing that negotiations were heading toward some form of property tax freeze...until the cave-in occurred.

So where does that leave us, besides frustrated? The IMA will continue to seek consensus on spending, tax policy, workforce development issues, and the pension time bomb, and will re-launch a public information campaign to ensure the people of this state understand why there is little or no growth in the industrial sector. Giving up gets us nowhere.

Is workers' comp reform out of reach until after the next election? I have been in the middle of every serious Work Comp discussion held since 1991. And each time we sit down to discuss this issue, the Work Comp trial bar, members of organized labor, and the medical community have coalesced to stymie any real movement forward. It is unconscionable that the leaders of the General Assembly and previous governors have allowed this situation to grow into the back-breaker WC costs have become. The "red herrings" raised by those groups – lack of access to quality care; reforms will put people on welfare; it's really the insurance companies' fault – are all disguised to cover the real reasons of oppositions, **workers compensation is a golden goose for all of the aforementioned groups and they will not let go until the leaders of our state – ALL the leaders – say enough is enough.**

Can we work with the Governor and General Assembly? Of course. We have and we will. We simply cannot allow the failure of these last three years to go down in history as the tipping point of no return for the manufacturing sector of this state.

The growing dissatisfaction with Illinois government is equal to the nation's disgruntlement with the Federal government. There are rays of hope across the nation. Increased manufacturing in other parts of the Midwest should inspire us to mimic the actions of other states.

But as long as we allow the forces who wish to stymie economic growth through the protection of old ideas, Illinois will not grow and will not provide opportunity for our families.

I have made over 30 speeches and answered hundreds of media requests over the last few months with the same message, "Illinois is closing one day at a time." **After this legislative session, the closing rate has sped up! ■**



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ADMINISTRATIVE AGENT AND
SOLE ARRANGER

LOAN SYNDICATIONS



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The Better Angels of Our Nature



**...we have to relearn
how to sit down
and engage in
conversations and
discussions to move
our state and nation
forward in the midst
of unparalleled
challenges...**

“We are not enemies, but friends. We must not be enemies. Though passion may have strained, it must not break our bonds of affection. The mystic chords of memory, stretching from every battlefield and patriot grave, to every heart and hearthstone, all over this broad land, will yet swell the chorus of the Union, when again touched, as surely they will be, by the better angels of our nature.”

Our nation's greatest president, Abraham Lincoln, penned these immortal words as the final sentence of his First Inaugural Address. These deeply personal words, spoken near the commencement of the Civil War, sought to speak to the better nature of Americans at one of the most trying times in our nation's history. Words matter – then and now.

Today, I'm reminded of these famous words as I ponder two recent events resulting from the lack of civil discourse and angry words in our country. Several weeks ago, in Washington D.C., a shooter who was unhappy about the current political climate, opened fire and wounded four people at a practice before the Congressional baseball game, an annual charitable fundraiser. My good friend, Congressman Rodney Davis, was in the batters' box at home plate and fortunately avoided the gunshots. However, another friend and colleague, Matt Mika from Tyson Foods, was shot in the chest and spent several weeks in the hospital and is currently recuperating from his injuries.

I called another friend who happens to be an Illinois state legislator who had voted in favor of the income tax increase only days before. As we were catching up about families and summer plans, he broke down. The anger and vile comments spewing forth on social media, through telephone calls, and in-person were spilling over into his personal life. After being threatened and cursed at his son's baseball game the night before, he skipped attending the baseball game the next night because he wanted to shelter his wife and young children from the abuse. Lawmakers today have a real fear about the potential of physical altercations and violence.

Lincoln uttered his words more than 150 years ago when our nation was divided and war was imminent. Unfortunately, today our country is divided and seems to be drifting further apart as tensions mount. Words become harsher and yelling becomes louder, stoked by fringe elements on both sides of the political spectrum with seemingly endless amounts of money to spend to get their points across.

Is it any wonder that good men and women eschew the political arena and are leaving or don't get involved in the first place? Are we surprised that voter participation is apathetic when politicians campaign by tearing down their opponents rather than sharing their vision for the future? Do we ask why politicians tweet in 140 characters or communicate by dueling press releases rather than sitting down in person for a real discussion of issues?

Americans are not going to agree on every issue because people come from diverse backgrounds and life experiences. But we have to relearn how to sit down and engage in conversations and discussions to move our state and nation forward in the midst of unparalleled challenges locally and globally. In today's political climate, “compromise” has become a dirty word but I'm here to say that we can find a middle ground without compromising our principles. We can and should tone down the rhetoric and end the hateful political discourse occurring every day in our country that is spiraling out of control and leading to violence.

Enough is enough. It's time that we again find the better angels of our nature. ■



Growth Capital for Illinois Manufacturers

Illinois manufacturers are a critical demographic within the state's economy, and typically seek growth funding from their local banks. When small and mid-scale banks do not offer manufacturers the financing options or flexibility they need to accommodate their growth, private funding can fill that gap.

Understanding the Need for Financing

Without consistent access to funding, manufacturers simply cannot accommodate growth, change, expansion, or innovation.

A recent survey by Pepperdine University indicated that 64% of respondents plan to finance growth or expansion in the next six months. Coincidentally, a survey by the National Center for the Middle Market indicated that, in the state of Illinois specifically, 68% of midsize companies are poised to invest.

Manufacturers typically seek out financing for any of the following reasons:

- Expansion & addition to staff
- Development or refinement of products or services
- Building additional facilities or locations
- Acquisition or vertical integration of another company
- Restructuring of a business's balance sheet

Many business owners are not aware of the broad range of options available to them beyond the traditional financing methods.

Typical Financing Solutions for Illinois Manufacturers

Manufacturers primarily seek financing from local banks. Per a study by the Milken institute, less than one third of mid-size manufacturers are aware of funding sources beyond the bank or private equity firms. Local banks' capabilities often restrict available financing options, amounts, and terms.

Getting to Know Private Funding

Private funding can be categorized as either debt or equity financing.

Debt Financing:

Certainly, manufacturers should use low-cost senior secured bank debt as a

basis for their financing structure. However, the financing potential offered by this senior debt is limited and constrained by the amount of a business's current assets as well as the lender's credit capacity.

To increase borrowing capacity, the addition of junior debt can open financing to even greater opportunities. Junior debt is typically less restrictive than senior debt and is often unsecured. While it comes with a higher cost than senior debt, junior debt can be a powerful tool for companies that are eligible to receive it.

Typical private debt funding involves a curated selection of both senior and junior debt depending on a business's specific qualifications, creditworthiness, and risk factors.

For example, senior lenders are often interested in lending based on a percentage of current assets. Typically, this formula falls in the range of 85% of accounts receivable and 50% of inventory value. Junior lenders will often "fill the gap" and take a second lien on these current assets, lending both on asset value and forecast cash flow. The combination of the two forms of private debt expands what the local bank is willing to commit.

Equity Financing:

Utilizing equity can also be a valuable tool if the amount of available credit does not meet a manufacturer's needs or if the cost of debt exceeds the company's resources. The need for this type of funding is often driven by a riskier strategy than could be financed through debt.

Equity financing is provided by funds that, themselves, are funded by investors seeking high returns on their money. These funds are either institutional in nature

(such as private equity funds) or personal (such as family offices). And, each source of equity financing has its own strategy, which drives its desire to invest in a business.

For example, some equity investors focus on certain industries such as manufacturing! Others focus on certain geographies, such as the Midwest.

The Benefits of Private Funding

With a broader and more diverse pool of financing options, private funding affords an impressive variety of benefits for manufacturers. These benefits include all the following:

- Diversify funding sources
- Expand funding capacity
- Reduce costs and improve terms
- Align funding strategy with business strategy
- Establish ongoing partnerships with financial institutions to grow with a company

Diversifying funding sources is like diversifying the supply of inputs to a manufacturer's operation. It reduces the dependence on one supplier such that, if that supplier chooses to discontinue its relationship with the company, there are other suppliers on which to rely. More financial providers may also lead to an expansion of how much financing a company may find. And, if those capital providers are hungry for new clients, they may compete for your relationship, leading to reduced costs of the financing.

Consult with an experienced financial advisor to determine how your company may use private funding to support your financing needs. ■



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Ingersoll: Manufacturing Out of This World

Founded in 1891, Ingersoll Machine Tools is a long-standing metal miller and manufacturer in Rockford, Illinois. Over the years, Ingersoll has been involved in projects with companies including General Electric, Mitsubishi, Boeing, and NASA. Though Ingersoll's mission hasn't changed over the last 126 years, the customized machines that are made there are nothing short of innovative.

"We are very unique," said Tino Oldani, President and CEO of Ingersoll. "Ingersoll operates on the mentality and desire of pushing the envelope and doing things that have never been done before. We want to strengthen manufacturing while giving young engineers the opportunity to be brilliant, to follow their dreams, to follow their inspirations and bring ideas to the table."

The company is accustomed to making the impossible possible. In 2003, Ingersoll closed its doors and filed for bankruptcy, but was resurrected that same year after being purchased by the Camozzi Group, an Italian machine tool, automation, and machining company. It was at this time Oldani took over the operations at Ingersoll.

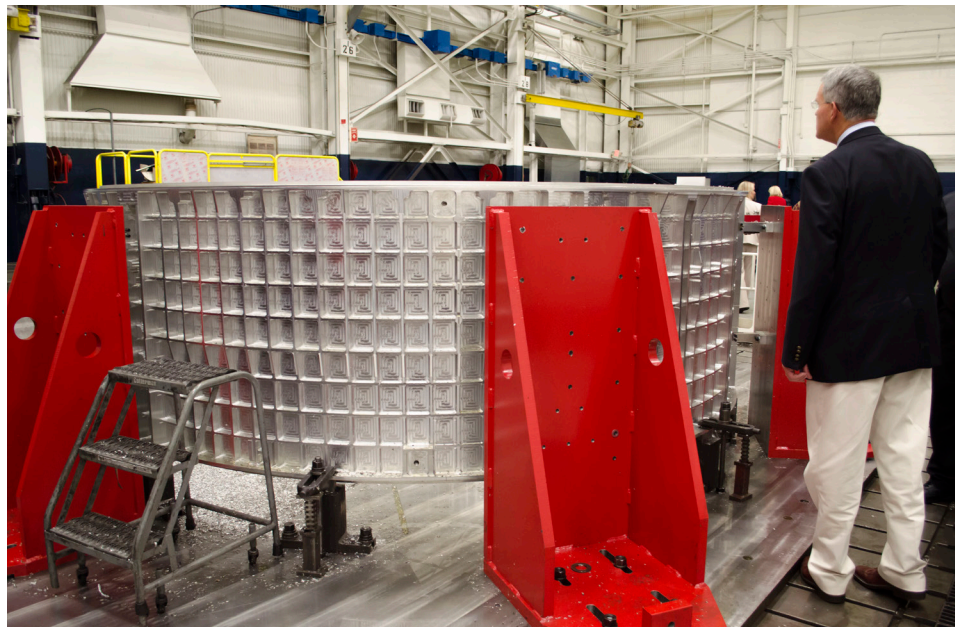
Ten years later, Ingersoll began working with Lockheed Martin and NASA on a new project – NASA's Orion Multi-Purpose Crew Vehicle (Orion MPCV), which will carry astronauts deeper into space than ever before. Within the next 20 years, the Orion MPCV will take four crew members on a two-year journey to orbit Mars and explore several asteroids.

Ingersoll is building four pressure vessel structures for the command module of the spacecraft, and has employed the help of other manufacturers to get the job done.

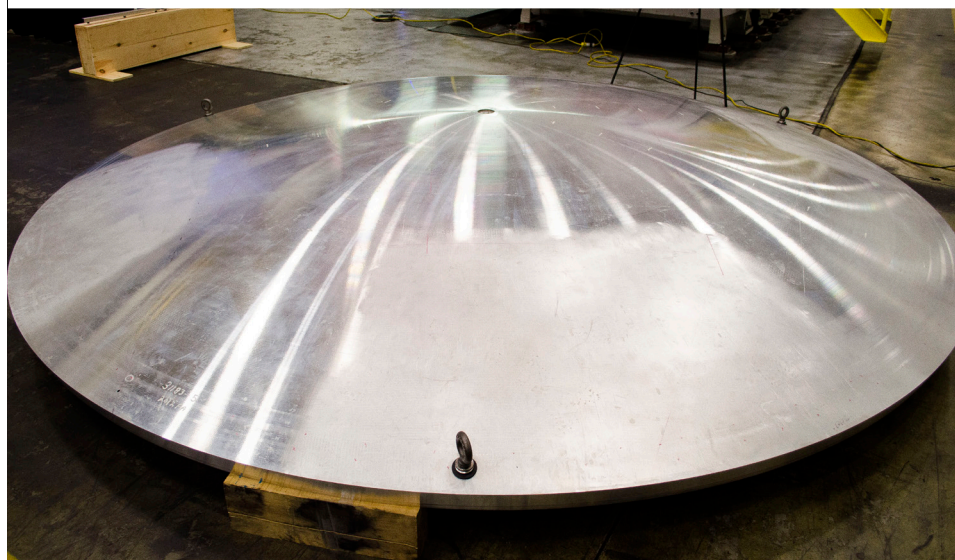
"The aluminum for the Orion PV Bulkhead is spun in order to give more strength to the material. We have a company in Massachusetts that does this for us," Oldani said. "You'll start off with a slab of aluminum that goes into a spinning machine and is stretched, which will turn a flat configuration into the convex configuration you see on the bulkhead."

The Orion PV Bulkhead will be situated behind the seats of the crew members, and will literally and figuratively have their backs covered.

For a project such as this, a simple change in design could save, or spend, millions of dollars. When it takes one pound of fuel to propel one ounce of spacecraft, every milligram counts. That's why Ingersoll is taking



Shedding 93% of its weight, this barrel section now weighs 800 pounds.



The convex shape of the Orion PV Bulkhead makes the part stronger.

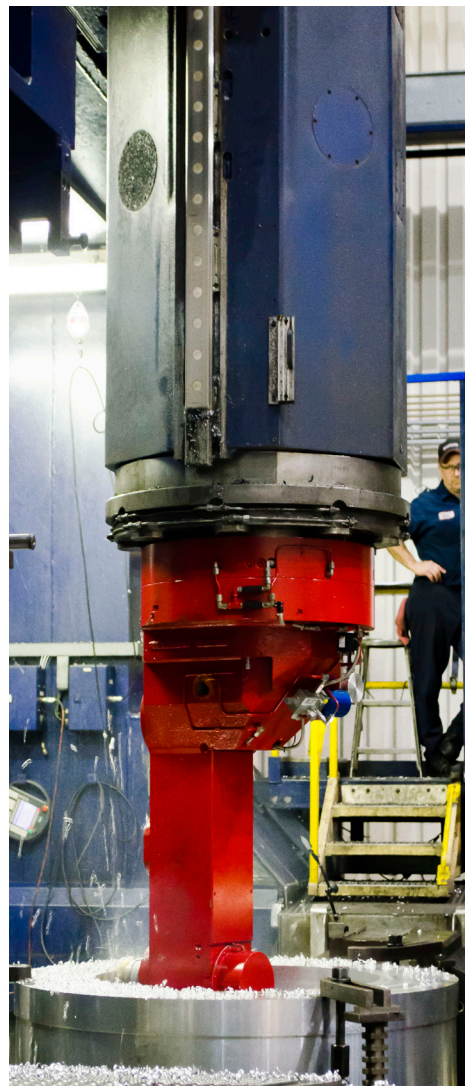
charge of milling the barrel for the Orion MPCV.

"We cut squares out of the barrel in order to remove excess weight," Oldani said. "This makes for a very light structure that is resistant to the environment in space, and that is very important. We are taking 12,000 pounds of raw material and turning into a part that weighs around 800 pounds, all while keeping the strength of the part intact."

While Ingersoll is making four parts for the spacecraft, manufacturers all over the

country are working on other pieces to this massive puzzle, which will all come perfectly together to form the most sophisticated spacecraft NASA has ever created. It truly is a national effort, one of which Oldani is honored to take part in.

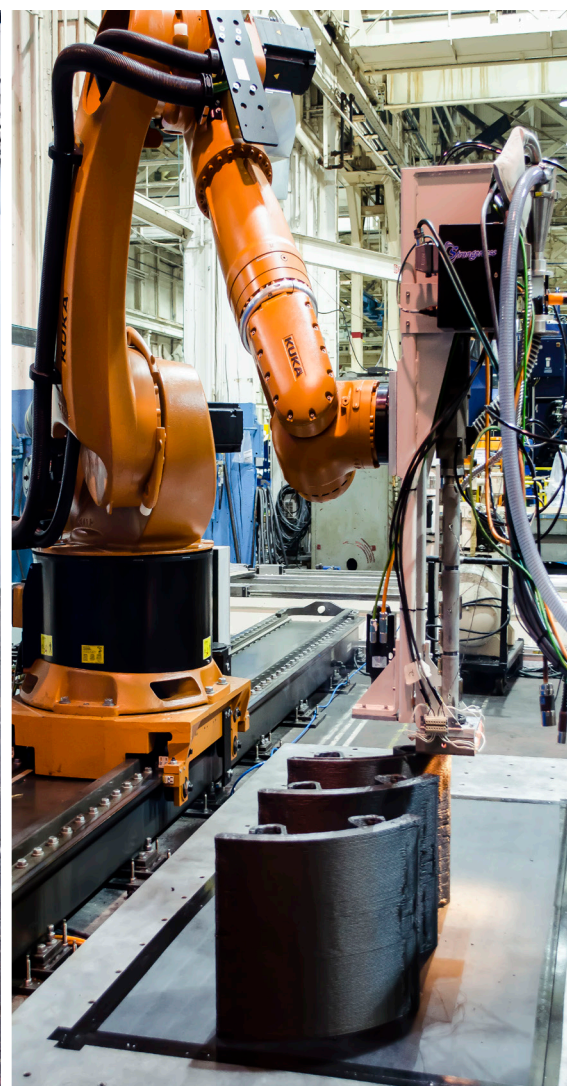
"I was invited to see the first flight test of the Orion spacecraft in December of 2014. It is something I will never forget – it was extremely emotional for me, knowing that part of that craft was made by the young engineers that are working with me," Oldani said.



Left: Aluminum shards fly as an Ingersoll employee mills the Orion PV Tunnel.



Middle: NASA astronaut Rex Walheim, who has logged over 36 days in space, marvels at Ingersoll's craftsmanship.



Right: Ingersoll's robotic printing arm revolutionizes the way large parts are produced, saving time and cutting cost.

Among Ingersoll's partnership with Lockheed Martin and NASA, there are several other new developments on the horizon, such as their Robotic 3D Printer.

"When you think of 3D printing, you think of small things. The things we are making here are very large," Oldani said.

And he wasn't kidding. The printing arm is able to make parts for airplanes, and can print objects the size of a tennis court. Not only does this open up possibilities for new, previously impossible builds, but it is also much more efficient.

"This is bringing a tremendous economic advantage," Oldani said. "We are decreasing the price of the parts by 75 percent, and cutting delivery time by 90 percent."

Over the last 14 years Oldani has brought Ingersoll back to life – and he doesn't expect the company, or manufacturing in general,

to slow down any time soon.

"We have been extremely active. We have machines all over the world. And I think that, finally, the winds are turning," Oldani said. "Politicians are discovering the importance of manufacturing. I come from an area in Northern Italy where manufacturing is the way of living, and I am pleased to see that now it is being brought back into the American economy, because manufacturing is the backbone of our economy. But, I believe that we need to look at changing our education system and promote technical schooling. In Switzerland and Germany, two very developed countries, 75 percent of students go to vocational schools and 25 percent go to a traditional university. In America, those figures are opposite."

For the future manufacturers of Illinois, Oldani has a place for you.

"We need more people on the job. A majority of the people in manufacturing are above 50 years old. So what are we going to do 20 years from now? We need to let them know what manufacturing really is today," Oldani said. "It's not necessary to have assembly lines anymore. There are robots we can substitute in for those positions. What we need is for people to be technicians. Manufacturing is not boring."

And, working at Ingersoll, the limit of possibilities extends far beyond the sky.

"The people in manufacturing love what they do. We are always excited for the next project," Oldani said. "We are always thinking, dreaming, and inspiring." ■

Constellation – Providing tools to create a customized energy strategy for your company

Energy Efficiency Can Be Easy with Constellation

Constellation's Efficiency Made Easy® (EME) program streamlines efficiency improvements for Illinois manufacturers.

In an uncertain economy, you may find you need to assess all your expenses and make the hard decisions that can help your facility ride out the storm. Given some of the recent headlines emerging about the state's fiscal woes, Illinois business leaders from the commercial sector may want to take a closer look at their own energy management strategy.

Energy is one of the top operating costs for most commercial-scale organizations. According to the Energy Information Association (EIA), the commercial sector is responsible for one-fifth of Illinois' total energy consumption. As such, taking greater control of energy expenses may want to be

considered as a primary objective for businesses looking to buffer themselves from the impact of fiscal uncertainty.

IMA and Constellation Provide Relief for Illinois Businesses

Participation in the IMA Energy Program with Constellation, the IMA's endorsed energy supplier, provides members with a number of unique benefits to ease the burden of taking strides towards adopting a more sustainable energy management strategy.

Over 350 organizations have become IMA members throughout the state. Constellation's locally-based, fully-staffed offices provide dedicated customer service

to help you develop customized energy pricing specifically designed for manufacturers.

Illinois manufacturers can also take advantage of Constellation's Efficiency Made Easy (EME) program. This could help budget-sensitive businesses looking to make gains towards greater energy efficiency.

What is Efficiency Made Easy®?

There are a number of reasons why eligible manufacturers might want to seek to adopt a more sustainable energy management strategy today. The dollars you save can be reallocated towards your primary business objectives. You'll be able to initiate sustainability goals that benefit your community and endear you to your customer base. You'll be able to more easily meet compliance standards too.

However, in today's complex and competitive economy, it can be hard to identify the best method for financing these projects.

The EME program takes a comprehensive approach to demand-side management. It gives customers the ability to manage the costs of energy conservation measures in support of organizational, environmental, and regulatory goals.

The program requires no upfront capital, as well as flexible 36- to 60-month contract terms. This allows businesses to preserve capital budget while reducing usage. Your costs will be dispersed throughout your contract terms and will appear as a line item in your power or natural gas bill for easy tracking. If you're currently under contract with another competitive power or gas supplier, you may be able to install energy solutions today and defer EME payments up to 24 months, depending on the term of your current agreement.

Your business will even be able to leverage the latest energy efficiency technology. Constellation Technology Venture's portfolio company product offerings include advanced electric vehicle (EV) charging stations by ChargePoint and state-of-the-art HVAC cycling tech.

Explore Your Energy Options

IMA endorses Constellation for electricity, natural gas, CPower, renewable energy, energy efficiency, onsite generation and CNG Fueling.

Constellation's integrated solutions are designed to help IMA members intelligently buy, manage and use energy. A direct relationship can bring the right solutions together quickly.



Electricity

- Fixed Price Solutions
- Flexible Index Solutions
- Block Solutions
- Peak Load Management
- Minimize Volatile Pricing (MVPe)
- Information to Implementation (i2i)



Natural Gas

- Fixed Price
- Fixed Basis
- Index
- NYMEX Trigger
- Managed Portfolio Services (MPS)
- Minimize Volatile Pricing (MVP)
- Managed Procurement Program (MPP)
- Energy Manager



CPower LR/DR

- Automated Load Control
- Demand Response
- Ancillary Services
- Economic Programs



Renewable Energy

- Solar
- Renewable Energy Certificates (RECs)
- Emission-Free Energy Certificates (EFECs)



Energy Efficiency

- HVAC Infrastructure
- Building Automation & Analytics
- Lighting & Controls
- Water Conservation
- Retro-Commissioning
- Measurement & Verification (M&V) Services
- Efficiency Made Easy



Onsite Generation

- Solar Solutions
- Fuel Cells
- Batteries & Storage
- Back-up/Emergency Generation
- Cogeneration
- District Energy Systems & Operations



CNG Fueling

- Private & Public Access Commercial Stations
- Commercial Contracts

Constellation is the preferred energy provider for IMA members. For more information, visit www.constellation.com/IMA. Or, you may contact Rich Cialabrini at richard.cialabrini@constellation.com or (312) 394-4157.

EME Primary Efficiency Measures

During a review of the EME program, Constellation will take a deep dive into the different elements of your energy consumption, suggesting solutions to improve and optimize all the processes in your facilities.

Lighting Improvements: Lighting is one of the largest energy consuming processes in most commercial facilities. Constellation will offer potential improvements, depending on your needs and wants:

- Occupancy based redesigns to create systems customized to the specific requirements and needs of your personnel
- Direct or indirect systems
- Intelligent lighting controls
- High efficiency re-lamp and re-ballast
- LED Applications
- Conversion from incandescent to energy-efficient fluorescent bulbs
- Parking area lighting upgrades

Water Conservation: While Constellation is an energy supplier, they're still focused on sustainability in all aspects—including water conservation. Constellation's EME program can enable customers to reduce water waste with a number of upgrades:

- Ultra-low flow toilets and urinals
- Low flow faucet aerators
- Leak detection systems

Building Envelope: Not all the energy efficiency improvements you make are undertaken inside your facilities. The exterior of your buildings can play an equally large part. The EME program can help you increase efficiency by conducting improvements to the exterior, including:

- Roof improvements
- Crack repairs and weather-stripping
- Window solar film

HVAC System Upgrades: Whether you're cooling your facilities in the summer or heating them in the winter, HVAC systems require year-round maintenance and monitoring for optimal efficiency. The EME program can help streamline this pro-

cess by retrofitting facilities with emerging solutions, including:

- New air handling systems
- Economizers/HVAC Dampers
- Zone isolation
- High efficiency motors
- Variable speed drives on many systems
- Instantaneous hot water heaters
- Refrigeration upgrades
- Retrofit or continuous commissioning

Renewable Energy Systems: Incorporating renewable systems into your facilities could have a number of benefits. You could gain better control over cost and consumption. You have the added security of a diverse supply and you may improve your brand image. Constellation's EME program can be leveraged to introduce on-site solar energy systems, vertical wind turbines, and solar hot water systems to empower commercial business leaders to achieve their energy efficiency goals.

Energy Procurement and the EME Program

Participants in the EME program can curb their energy costs and take better control over their energy management policy. But in order to achieve the optimal results, it is imperative to have an energy procurement strategy that best suits your needs.

Because Constellation is one of the nation's largest energy suppliers and has been the endorsed energy supplier to the IMA since 1999, they're the ideal supplier for IMA members' efficiency projects. Not only can they help you get the actual work done, but they'll also help you develop a procurement strategy that best matches the needs of your facilities:

- Risk mitigation strategies
- Long-term electric and gas outlooks
- Renewable Energy Credits (RECs)

Many organizations opt to tackle one project at a time. This could be due to budgetary constraints or a lack of a comprehensive vision or simply not knowing where to start. But by conducting an all-encompassing assessment, Constellation

can perform all upgrades at the same time, ensuring interoperability and maximum impact while reducing workplace disruptions.

EME, In Practice

B.L. Downey Company is a manufacturer based in Illinois. The organization was experiencing tremendous energy waste through inefficiencies in their custom-coating processes. In addition, the company was also in dire need of lighting upgrades. However, it lacked the upfront capital necessary to make these vital improvements.

Working with Constellation, B.L. Downey implemented EME, allowing it to make approximately \$1 million in upgrades with no upfront capital investment. Because the company already purchased energy from Constellation, their costs were simply built into their existing energy contract.

After changing out the manual ovens and exhaust blowers for an automated system, B.L. Downey was able to curtail temperature variations and wasted energy from its coating processes. This, in addition to their lighting system upgrade, resulted in a 10 percent reduction in electric usage—approximately 500,000 kW per year. In addition, B.L. Downey was able to reduce its natural gas usage by 360,000 therms.

The company was able to claim a win for environmental efforts as well—the improvements made at their facilities resulted in 4 million fewer pounds of carbon dioxide entering the atmosphere. This is equivalent to taking 382 cars off the road for a year.

The IMA and Constellation—Powering and Empowering Illinois

Thanks to the endorsed relationship between the IMA and Constellation, Illinois commercial business leaders are in a unique position to take greater control of their facilities, scaling back consumption and waste. The EME program is designed to help you clear the biggest challenges preventing your organization from making infrastructure investments today. ■

Contact Us Today!

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Chicago and Cook County Sick Leave Ordinances

Both the Chicago and Cook County Sick Leave Ordinances went into effect on July 1, 2017. Cook County's final interpretative rules were submitted on May 25, 2017 and Chicago's were finalized at the midnight hour on June 28, 2017. The language of the ordinances are largely identical, however, concerning differences exist based on the interpretative rules adopted by the City and the County. Below is a summary of the requirements under the ordinances and the various issues that may arise for employers located in Cook County and/or Chicago.

Covered Employees and Eligible Employees

Under both ordinances, a "Covered Employee" is one that works at least two hours in any two-week period while physically present within the geographic boundaries of the City or County. In order to be "eligible" to use sick leave, a Covered Employee must work at least 80 hours for the employer within any 120-day period. It is important to note that whether or not an employee is covered and/or eligible to accrue and/or use sick leave benefits is not determined by full-time, part-time, or any other type of internally-defined employment status. Coverage and eligibility are solely determined by the location of the work and the amount of hours worked within the prescribed periods. In other words, just because an employee is part-time or seasonal does not mean that they are not entitled to sick leave benefits under the ordinances.

Accrual of Sick Leave

Both ordinances dictate that a covered employee must accrue one hour of sick leave for every 40 hours worked, up to 40 hours of sick leave per year unless the employer sets a higher limit. While the Cook County Ordinance applies to employers located within its geographic boundaries, the county is a home-rule jurisdiction and local municipalities may choose to opt out of the ordinance requirements. As of the effective date of the county ordinance, over 100 municipalities within Cook County had already opted out of its requirements. Even if employers are located in a municipality that opted out, however, there may still be circumstances that may require an employer to provide sick leave benefits. For example, if an employee works away from the employer's main office for more than two hours in any 2-week period in a municipal-

ity that did not opt out, then that employee becomes a Covered Employee for purposes of the ordinance. Thus, employees in those circumstances would accrue sick leave time for all hours worked in the municipality that chose to not opt out of the ordinance.

Carryover

Each ordinance has carryover requirements, which are, perhaps, the most significant and crucial differences between the two. Both ordinances state that employers must allow employees to carry over up to half of any unused sick leave, up to 20 hours per year. Chicago's ordinance goes on to state that if an employer is subject to the FMLA, it must allow its employees to carryover an additional 40 hours per year to be used only on FMLA eligible purposes. This means that the Chicago ordinance dictates that employers subject to the FMLA must allow employees to carryover a total of 60 hours to the following year.

Cook County's ordinance, on the other hand, creates the possibility for additional confusion with respect to carryover. If an employee has unused leave at the end of the year, the employee must first carry over half of the remaining hours as "Ordinance-Restricted Earned Sick Leave," which can be used on any of the purposes outlined in the ordinance. The other half of the remaining hours can be carried over as "FMLA-Restricted Earned Sick Leave" and can only be used if the employee qualifies for FMLA leave the following year.

Alternative Method: Immediate Grant

The various methods for calculation, accrual, and carryover of sick leave under the ordinances will create a significant administrative burden for all employers in Cook County and/or Chicago, especially those with employees that travel through various municipalities within Cook County. One way employers can ease the administrative burden of carryover and other requirements of the ordinances is to provide one lump sum of sick leave at the beginning of each year, otherwise known as the "immediate grant" method.

In Cook County, an employer is in compliance with the ordinance if it provides 40 hours of Ordinance-Restricted Earned Sick Leave for the first year of employment, and then for each subsequent year of employment, it must provide 60 hours of Ordinance-Restricted Earned Sick Leave and 40 hours of

FMLA-Restricted Earned Sick Leave. This would be a total of 40 hours of sick leave the first year and 100 hours of sick leave every year thereafter.

In Chicago, however, an employer must grant 40 hours of sick leave time the first year and only 60 hours each subsequent year. If the employer allows the employees to use the sick leave for any purpose, then it will not have to track carryover or any other parameter even if the employer is subject to the FMLA.

Exclusions

Both ordinances explicitly exclude employees that are covered by a collective bargaining agreement ("CBA") entered into before the effective date of the ordinances. Employees that are covered by a CBA entered into after the effective date of the ordinances are entitled to sick leave unless the CBA waives the right in "clear and unambiguous" terms. Both ordinances also exclude certain employees subject to the Railroad Unemployment Insurance Act.

In addition to the above exclusions, the rules to the Chicago ordinance detail various other exclusions, including employees that work for employers with less than four total employees and individuals employed as outside salesmen. These exclusions are unclear as written and have created some confusion for employers. The exclusions are found under a section of the rules labeled as "Article 2—Minimum Wage Rules," since the sick leave provisions are part of the Minimum Wage Ordinance. The section label indicates that those particular rules may only apply to the minimum wage provisions of the ordinance, and not the sick leave provisions; however, based on the sequence of changes to the rules throughout the drafting process, there is a strong argument that those exclusions also apply to the sick leave provisions.

The Cook County and Chicago Sick Leave Ordinances, while short in length, provide complicated legislative schemes that will make it difficult for employers to easily comply with their requirements. The purpose of each ordinance is clearly established and places the burden on employers to provide more leave than is required to ensure compliance with the ordinances. Employers should be vigilant in updating current policies and creating new policies when necessary to avoid the pitfalls of setting precedent in this new area of local law. ■

Succession Planning: Protect Your Business

Focused on the day-to-day needs and competitive pressures of their businesses, many owners of small to mid-sized manufacturing companies do not prioritize succession planning. Still, these companies are oftentimes effectively the owners' retirement plans, their children's inheritances, and their lasting legacies in the community. Owners cannot start planning too early if they hope to maximize returns from their businesses and account for the many potential complexities of business sales or transitions.

It's important for business owners to clarify their long-term goals and consider the various options available when it comes to succession planning. Those who do this will position themselves for a more stable transition to the next stage of their lives and careers and also ensure the long-term viability of the companies they've spent many years building.

Ask the Right Questions

The first step is for an owner to identify long-term business and professional goals. That starts with asking the right questions. For example, do you have ambitions to expand the business into new regions or product lines? Do you want family members to take over leadership of the business after you retire? At what point do you plan to scale back involvement in the business or remove yourself entirely from management of the business? The answers to these questions will help a business owner chart a course for the strategic direction of the company and begin to outline a succession plan.

Business owners with years to go before retirement may struggle to answer some of these questions. However, they owe it to themselves, their families, and their employees to consider the long-term future of their companies, which is usually closely tied to their personal objectives and plans.

Maximize the Value of Your Business

No matter if an owner sells to a third party, passes the business down to the next generation, or partners with an outside investor, maximizing the value of the business is crucial. An owner can start by gaining a thorough understanding of the company's financials and the current value of the business with an independent third-party audit.

From there, an owner can identify ways to grow the value of the company. This can include development of new products and efforts to enhance sales strategies. It can also include strategic acquisitions, which can allow a company to penetrate new geographies and tap rich bases of talent.

When the time comes to transition the business, it's important to be able to demonstrate a consistent track record of success. This can help smooth the way for new management to take over or make the company a more attractive option for potential buyers or strategic investors.

Take Action, When the Time Comes

One of our clients had built a successful manufacturing company with a nationwide footprint and more than 300 employees. He had deftly navigated the business through market ups and downs, and, now in his 80s, he sought to lay the groundwork for the business' next era.

He wanted to exit his business on his terms. He cared deeply about ensuring his management team could own a piece of the company and that his employees would be treated well after he left. So, we helped him find an outside investor team that was willing to maintain the company's culture and employee benefits while also providing the management team a meaningful stake in the company alongside the new owners.

An investor can offer the dual benefits of a cash infusion into the business as well as management expertise to help the company improve competitiveness and grow. Seeking a strategic investment can be an option for a business owner who wants to grow and scale the company and continue to play a role in the organization for several years

before exiting.

An owner can also seek to transition the company to family members or business protégés, or sell to a third party. Planning is crucial no matter which route an owner chooses because a business transition can impact the organization's tax position as well as important industry designations.

In some areas of manufacturing—for example, aerospace—a company needs professional designations to ensure it can work with the federal government and key suppliers to the government. During any sale to a third party, the business owner needs to make sure the deal is structured in a way that allows the company to retain all relevant designations and avoid gaps in business.

Further, an owner needs to ensure that a business transition doesn't set the company back from a tax perspective. When selling a business to a third party, it's often beneficial to change the entity structure of the company from a C corporation to an S corporation or LLC. But it takes time to reap the full tax benefits of this move, so advance planning is a must.

A Wise Long-Term Strategy for Manufacturers

Manufacturing business owners pour a significant amount of time and money into their businesses. Therefore, it's important that they begin to chart a course for the long-term future of their organizations even as they deal with the daily demands of running operations. Taking the right steps on the path to succession planning will allow business owners to secure meaningful financial returns and bolster their legacies by positioning their companies for long-term profitability. ■



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Now Hiring: The Midwest's Job Outlook

Chicago built its commercial heft and position as a business hub on a diverse economy—with manufacturing at the top of the list. Like the rest of the nation, manufacturers in Chicago and across Wisconsin, Indiana, and Michigan have been slow to recover from the recession and the sector's employment high water mark in 2000.

But that doesn't mean the region's manufacturers are sitting still; they are reinventing themselves by leveraging technology and advanced manufacturing techniques. And that's hardly the only innovation-driven growth sector—technology and health-care are now bringing jobs and adding muscle to the economy in Chicago and the Midwest.

Manufacturing by the Numbers

The nation's statistics for the industry are telling—20 years ago 17.2 million workers were employed in manufacturing. By late last year, that number had dropped to 12.3 million. Industry Week painted a stark picture from a different perspective: “In the first decade of this century, America lost 56,190 factories—15 per day.”

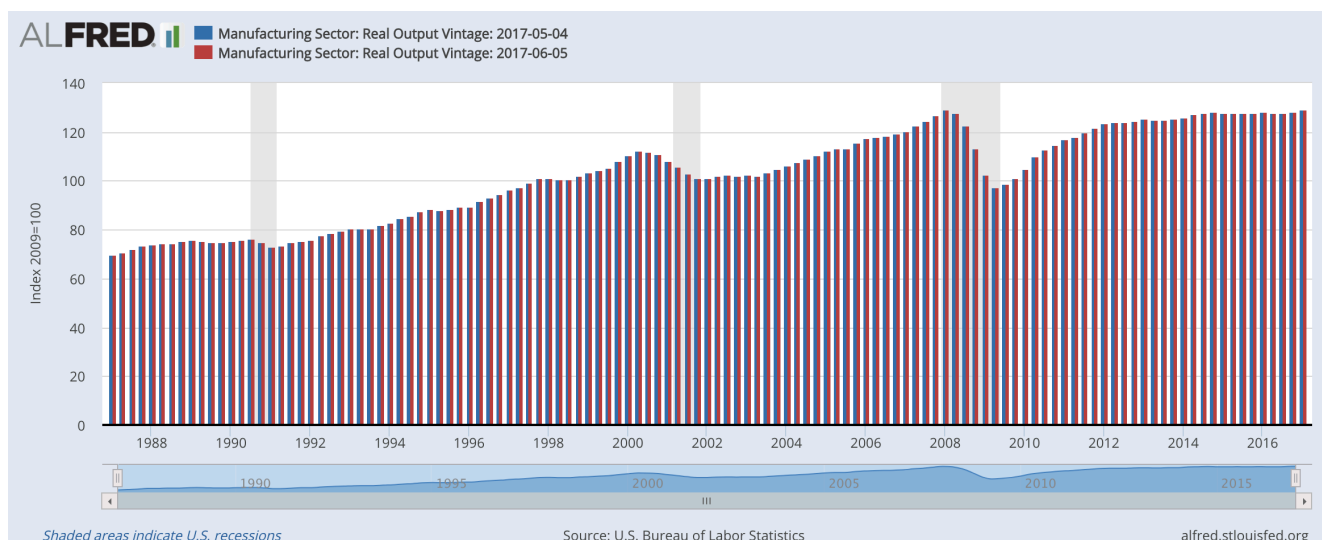
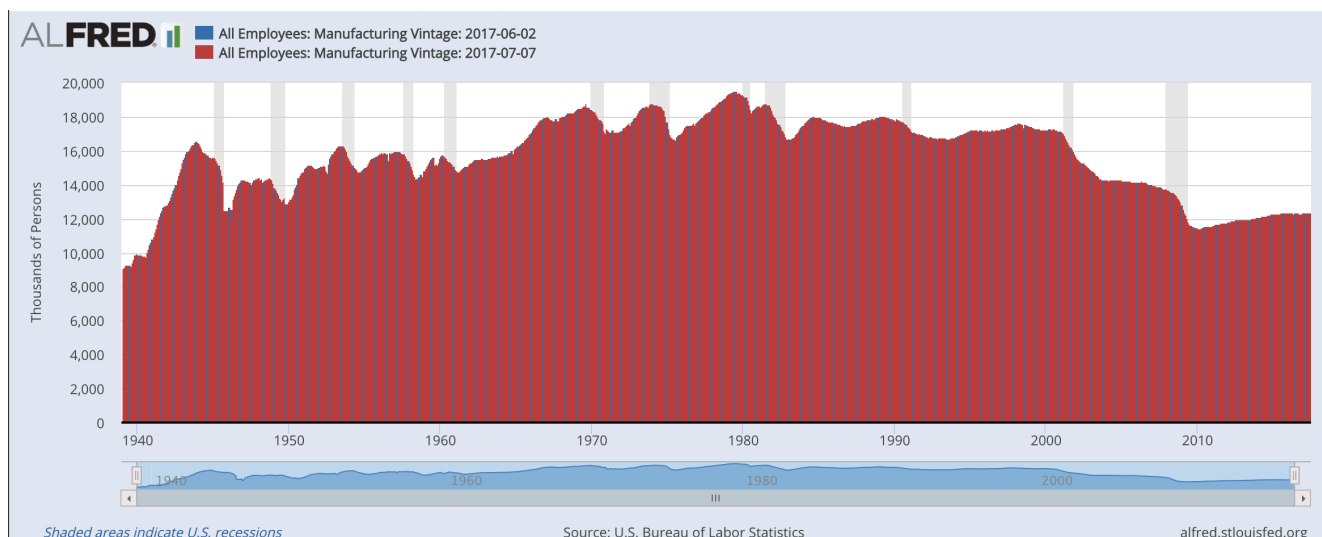
Across the Midwest, manufacturing employment numbers now paint the industry as a diminishing contributor to the region's employment numbers.

While there have been claims that U.S. manufacturing has migrated overseas, a study conducted by Indiana's Ball State University shows that 13 percent of manufacturing jobs lost have been to global

trade, the rest to enhanced productivity because of automation. World Trade Organization Director-General Roberto Azevedo agrees: “As much as 90% of U.S. manufacturing jobs recently lost were due to new technologies, innovation or improvements in efficiency.”

Manufacturing Output is Up, But Employment is Down

Manufacturers are doing more with less, thanks to technology. As advanced manufacturing helps companies build efficiencies into the design, processes and management of their operations, two things are happening: fewer workers are needed, and those working on the factory floor are leveraging new skills as they become managers of technology.



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The Midwest Leadership in Advanced Manufacturing

Chicago, Indiana, Wisconsin and Michigan have strong—and shared—leadership roles in advanced manufacturing. In each corner of the region, various partnerships are investing in and developing the technologies with the potential to be the drivers of next generation manufacturing jobs—and the economy.

One example is the Digital Manufacturing and Design Innovation Institute (DMDII) on Chicago's Goose Island. This is a partnership among universities, nonprofits and research labs to make manufactured products better, faster, and more cost-competitive. Fortune called DMDII "part-incubator, part-research center...a proving ground for experimenting with and testing new digital technologies that could potentially reduce the time and costs of current manufacturing processes across a number of industries."

DMDII manufacturing collaborations span the Midwest. A new partnership with Milwaukee-based Manpower® has been created "...to define and map the roles and skills required by organizations on the forefront of advanced digital manufacturing."

In Indiana, another DMDII team initiative with Purdue Manufacturing Extension Partnership and Illinois Manufacturing Excellence Center is the recipient of a \$1.2 million award for advanced manufacturing innovation, education and collaboration.

Also fostering connections among Chicago manufacturers, researchers, and "the city's entrepreneurial community of makers and technologists, not to mention investors..." is mHUB. Its state-of-the-art 63,000 square-foot facility—in the middle of the River West "Tech Triangle"—offers 10 unique fabrication centers and resources for product design and rapid prototyping, including a 3D printing lab, electronics labs, a metal shop, and a micro factory for onsite low-volume production runs. In addition, there are workshops and mentors to help, "...turn new product ideas into scalable businesses."

Michigan organizations aimed at developing advanced manufacturing capabilities are also hard at work. Advance Michigan, including partner cities Detroit, Flint, Pontiac, Lansing, and Ann Arbor and their surrounding communities, invests in creating job opportunities through advanced manufacturing. Along with other initiatives, Advance Michigan will be one of 12 nationally-designated communities that will have access to \$1.2 billion in federal funding to support the growth of manufacturing jobs.

Beyond Manufacturing, Where Will Job Growth Come From?

The Bureau of Labor Statistics, in its outlook for U.S. employment, projected that total employment will increase by 20.5 million jobs between 2010 and 2020. This points to good news for the Midwest: among the likely top performing industries—technology and healthcare—the region is well represented and positioned for growth.

According to a recent study by the Brookings Institution, Chicago added 10,000 technology jobs between 2013 and 2015. This places it among top 10 cities for an increase in tech jobs—ahead of Boston and Seattle. Milwaukee, Detroit and South Bend also have made their mark; they are on the list compiled by tech.com as "Ten Most Unexpected Cities for Tech Innovation." The website's former editor-in-chief Dan Blacharski said, "With the emergence of cheap, reliable, and available cloud-based infrastructure and services, the tech industry is moving towards the industrial Midwest."

Healthcare is also a bright spot for the Midwest's economy and job seekers. In Michigan, healthcare has taken over as the state's largest employment sector, with major cities in other Midwestern states—Chicago, Milwaukee, and Indianapolis—showing a similar trend. Healthcare providers and systems dominate the lists of the largest employers in each city, and the American Hospital Association lists hospitals in all four states, amongst others, on their Centers of Innovation list.

A Healthy Chicago Economy Helps the Midwest

Chicago's health is important to the entire region. Federal Reserve Bank of Chicago data presented at the annual Financial Forecast Forum at Northern Illinois University shows the city of Chicago produced more than 72 percent of the state's GDP in 2015. According to data compiled by World Business Chicago, the city's economy has expanded by an

estimated 7,234 jobs year-over-year, an improvement of 0.6 percent since January 2016. In addition to the strength of the technology and healthcare sectors, growth is driven by absolute gains in Financial Activities (+4,072 jobs), Retail Trade (+2,441) and Construction (+2,187).

These numbers begin to tell the story that Chicago is not a one-industry town; World Business Chicago called the city "the most diversified economy in the U.S." with no single industry accounting for more than 14 percent of the workforce. That diversification helps support a strong and stable Midwestern economy, even during downturns in certain sectors.

Midwest Employment Numbers Tell a Positive Story

Growth spurts and strengthening employment numbers are cropping up across the Midwest. Wisconsin saw a healthy first quarter, with 18,000 private sector jobs added in the first two months of the year; by the end of the first quarter, the unemployment rate was the lowest since April 2000. Indiana mirrored Chicago with upticks in construction and financial services. And in Michigan, the two-year recovery in light vehicle sales is supporting a rising GDP and lowering of unemployment numbers.

Looking Forward

Manufacturing in Chicago and across the Midwest is experiencing a tectonic shift as it refits itself to the digital age and leverages new productivity strategies. But manufacturing is not alone. Growth is being spurred by technology in the industries that make the Midwest one of the most vital economic sectors of the country. Manufacturers and decision-makers in the region's other industries are considering the investment required to harness the power of new technologies. As companies plan for the future, it is wise to work with advisors who can help balance the challenges and the opportunities, and to make sound business decisions. ■



North American Lighting Invests in the Future

If you want your problems solved, sometimes you have to become part of the solution. For North American Lighting (NAL), an automotive lighting manufacturer with several locations in Illinois, teaming up with the Illinois Advanced Apprenticeship Consortium (IAAC) has found an answer to their issues by bridging the skills gap through the Industry Consortium for Advanced Technical Training (ICATT).

The IAAC is the umbrella organization for ICATT, and is a collaboration between the Illinois Manufacturers' Association Education Foundation, the German-American Chamber of Commerce of the Midwest, the Greater Peoria Center of Excellence for Secure Software and William Rainey Harper College, and is projected to create upwards of 600 new apprenticeship positions in Illinois.

Devin Martin from Rend Lake College and Hudson Garrison from Olney Central College are two of the five apprentices at NAL, and recently completed the first year of their education and apprenticeship through ICATT.

The program lasts five years—students

go to class three days a week and work two during the school year, spending their summers working full-time. After finishing their three-year education, the apprentices spend another two years working full-time at the plant.

Both Devin and Hudson attribute their education to this program, as they would not have been able to go to college without the funding.

"I'd always wanted to go to school, but I was a little strapped for cash. But [NAL] offered to pay, so I signed up," said Devin.

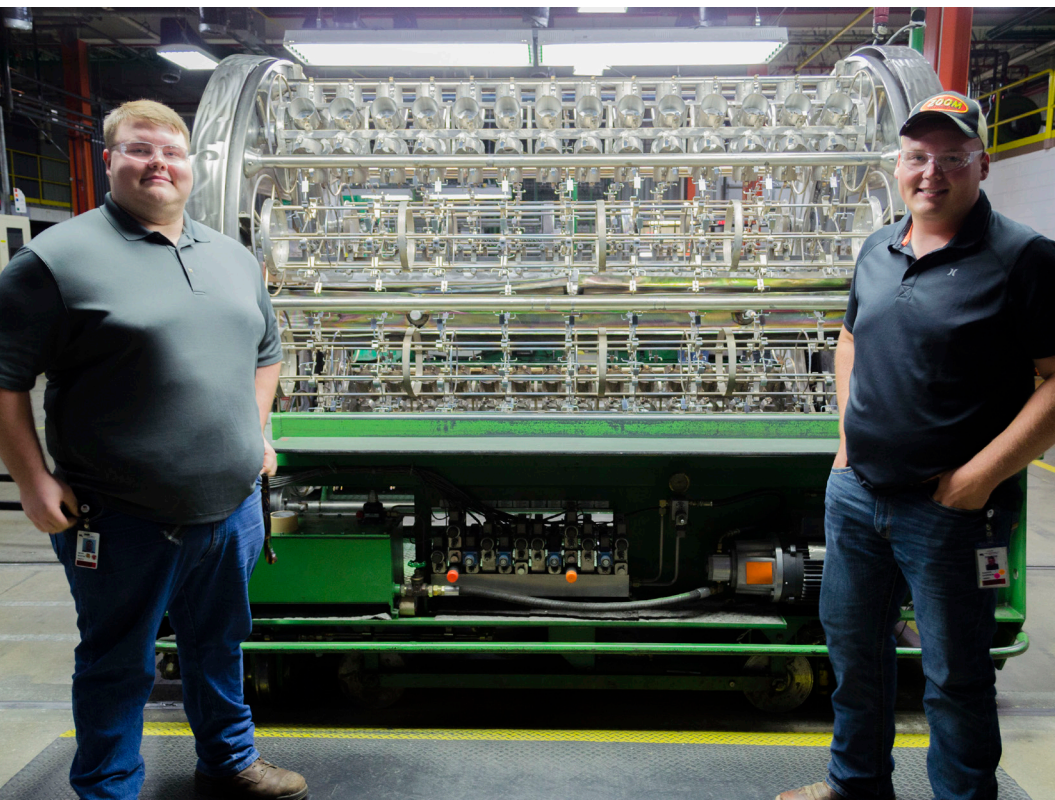
"I was going to school for welding, and I was paying for it myself," said Hudson. "I heard about this program and decided to check it out. They said they'd help me with school – it was a hard offer to turn down."

While the apprentices have the benefit of a fully-funded education, they also get the opportunity to put the skills they learn in the classroom to use on real-life, highly technical work at the plant.

"They laid out everything really nice – everything I learned in my first year I could relate to my work. It really helps to go to class, learn the material, get it all on paper, and

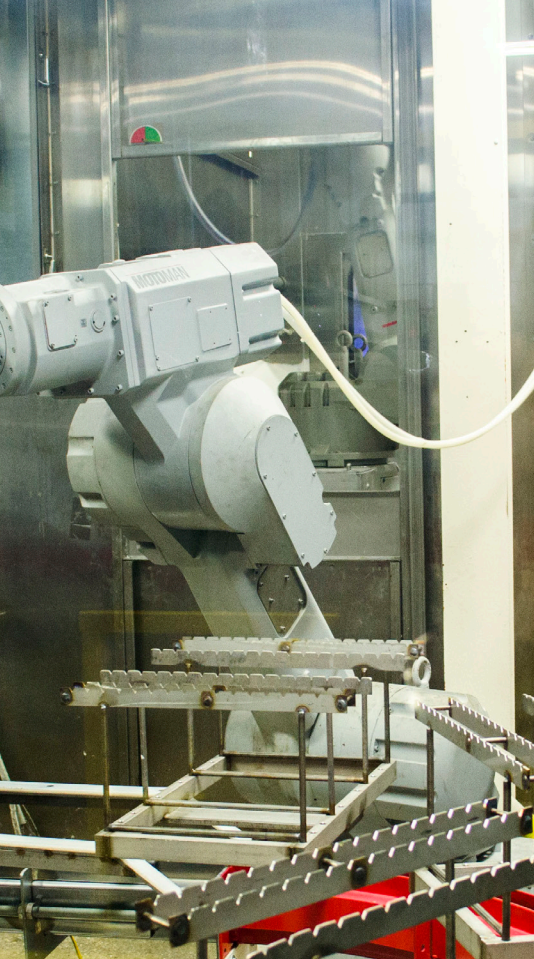


Some work at NAL requires the use of robotic eye and steady hand of an experienced technician.



After finishing their first year of classes, Devin (left) and Hudson (right) are spending the summer working and honing in their newly-learned skills.





otics, but much of it requires the skilled technician.



Hudson and Devin compare headlamps before and after being metalized.

then go to work and be working on the same thing we talked about in class,” said Devin.

2016 was the first year North American Lighting took part in ICATT, and it’s already clear that the partnership has been mutually beneficial for both the apprentices and NAL.

“From our standpoint, we need technicians and we need those skilled positions, so this program gives us that” said Jim Jamrozek, Training and Development Manager at NAL.

“It’s nice to be able to control your own destiny because you’re growing your own employees,” said Corporate Trainer Robert Woolum. “By bringing them in fresh out of high school and giving them the tools that they need to be able to be successful, it makes your company successful in return. They’re eager. These guys want to learn, they want to pay attention, and they want to go out there and do a good job.”

And their eagerness shows.

“We’ve done a lot of machining so far,” said Hudson. “I love it. Next semester, I think we’re going to start blueprinting, which I’m really excited about.”

“I’ve talked to my friends about it,” said Devin, “and I already have a few of them who have expressed interest in this program and plan to sign up.”

The team at NAL doesn’t just keep the business alive and well, but strives to make it thrive. Part of that includes appealing to and engaging with the younger generations, and part of that comes from understanding Illinois.

“We do plant tours for local school systems, and we use subject matter experts to talk about what we do and how we do it, and give these folks the opportunity to see behind our walls,” said Manager Jeff Clements. “One of my goals over the years has been to break the stigma of the old, dirty manufacturing plant. That’s not what NAL is about.”

“Another part of it is understanding millennials,” Jeff continued. They are hungry for knowledge about stability and opportunities to grow. So we have to implement that into our interviewing and training programs.”

“I think companies, especially in Illinois, are going to have to invest directly into the high schools to help create the interest in manufacturing, and to help fund,” said Corporate Human Resources General Manager Chad Thompson. “Just like we have companies that will support athletic programs and make donations, we are going to have to do the same with the trades.”

And so far, it has paid off for NAL and the apprentices. The future is looking stable for all, and will eventually come full-circle. When the apprentices reach their third and final year of schooling, they’ll be able to help train and teach the incoming first-year apprentices everything they’ve learned. After that, it’s up to them. But it seems like they have no plans to leave NAL any time soon.

“I’ve met everyone from the operators to the Assistant General Manager, and everyone is nice around here. The factory really is a community,” said Devin. “I plan to stay with NAL, and move up into an engineering role.”

“I’d like to stay as well, and move into engineering,” said Hudson. “It’s a very nice place to work. It’s clean, and it’s not super hot all of the time. They treat their employees well, and you’re always going to have a job. Who’s not going to like that?”

If you have questions about IAAC or apprenticeships and how to participate, please contact Jim Nelson at jnelson@ima-net.org or (800) 875-4462 ext. 4211. If you are interested in learning more about joining the team at North American Lighting, please visit their career page at nal.com or call the recruiting department at (217) 465-6600. ■

The Internet of Things – A Team Effort

The Internet of Things (IoT) is transforming how we live and work, as well as our expectations of what technology can do for us. Today, the power of IoT technologies offer centralized and integrated control, anywhere/any device accessibility, real-time actionable production data, and consolidated analytics. With devices that are seemingly as benign as the office thermostat to critical, high pressure fluid regulators, IoT technology is becoming a growing reality.

Yesterday's Approach Will Not Ensure Tomorrow's Returns

Lifecycle management planning often fails to extend beyond production implementation. Although IoT technologies do not begin delivering returns until they have been placed into production, the lifecycle management plan tends to become sparse in detail.

- Support contracts lapse or companies believe it is more cost effective to bring support in house: eventually support becomes the responsibility of an already overburdened IT department, lacking the necessary training and experience.

- Product software updates are overlooked for a range of reasons: insufficient time available, limited resources, update incompatibility with existing systems, etc. Failure to install product updates in a timely manner creates several risks:

1. Unpatched software vulnerabilities create a compounding security risk.
2. Unrealized improvements by not taking advantage of product efficiency updates that could potentially further Return on Investment.
3. Limited vendor support availability from running outdated software.
4. Significantly outdated systems may require additional investment to bring up-to-date.
5. Solution components are connected to the network without consideration for the risks any other network-connected computer would be given.

Today's Approach

Technology is merely a means and mechanism. Technology does not drive change, leadership drives change. C-suite leadership is critical to driving organizational change, communicating strategy and vision, and overcoming potential resistance. Though production departments are often the sponsors of the technology, system selection, evaluation, planning, and implementation, ongoing

management is an orchestrated effort across all departments of the company. Key players include:

- **Human Resources:** to advise on updated job descriptions, assist with training development, talent acquisition and organizational change management.

- **Information Technology:** to provide technical guidance, network design, data integration, network security, and disaster recovery.

- **Finance/Accounting:** to provide project financial analysis, assist with data integration requirements, advise in changes to production cost reporting, oversee compliance requirements, and develop ongoing metrics.

A firm understanding of how new processes, increased technology footprint, and potential system failures could affect your business allows you to better safeguard against failures and be prepared in the event a failure does occur. Business continuity, network security, and lifecycle management planning are key facets of a comprehensive risk management plan.

- **Business Continuity:** Manufacturing automation systems introduce additional moving parts to the production process. System or network failure can create a work stoppage, leading to lost revenue and efficiency. Plans and procedures must be in place to minimize and effects in the event of a failure.

- **Network Security:** Securing network-connected devices from unauthorized user access or virus attack is the best means to ensure reliable operation. Network segmentation/isolation, encryption, user access control, and device hardening are all protective measures.

Additional preventative steps:

1. Preventative equipment maintenance plan and replacement end of life system components.
2. Device configuration and maintenance to ensure removal of default manufacturer configuration and to maintain current firmware and application release
3. Conduct an annual security assessment

- **Lifecycle Management:** Initial planning

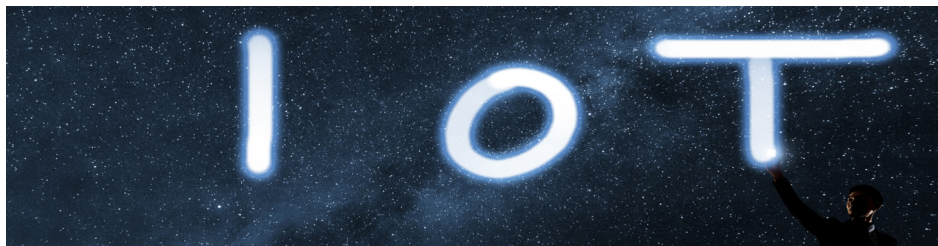
should include vendor viability, solution refresh rates, and support availability. However, the lifecycle plan must also detail the processes and procedures for maintaining the security and performance of the systems and to ensure a continued return of investment. Key ongoing lifecycle management components:

1. Support – Automation systems rarely care for themselves. Maintaining active manufacturer or vendor support contracts with appropriate service level agreements ensures experienced technical expertise is available when the need arises. Additionally, clearly-defined internal roles and responsibilities are necessary concerning issue reporting, user access, network security, and configuration change requests to maintain continuity and optimal performance.

2. Update compatibility review & testing – Real-time process, control, and costing data is integral to managing and measuring efficiency, quality, and profitability, especially when the data is integrated with a company's primary management and decision-making systems. Clear guidelines for reviewing system and device firmware and application updates must be developed detailing plans to address changes to database schema, system integration APIs, or operational analytics or algorithms. A seemingly minor update that inadvertently resets a default unit of measure could have a costly affect.

3. Feature enhancement implementation - In addition to bug and security fixes, product updates may also include performance enhancements and additional product features, extending or increasing return on the original investment.

Today's manufacturing automation technologies, by harnessing the power of the Internet of Things, are transforming the production environment. To fully realize the benefits today's technology offers requires companies to transform how they implement and manage in the new technology paradigm. A collaborative risk management approach brings together the organization to deliver the best results. ■



The Four Pillars of a High-Performing Workforce

How do you create a competitive edge through your most vital asset – your employees? In today's fierce marketplace, workforce is the most challenging business asset to foster for growth. It requires a strong recruiting process to attract the right employees and a formal onboarding process to retain the good ones, but the culture of the organization and structure for staff development will define the success of your company's workforce.

Many organizations succeed by creating a workforce improvement strategy that focuses on the needs of their people in tandem with the objectives of the company and the systems required to execute the strategy. How do you correlate the success of your workforce with the success of the organization? The four pillars of a high performing workforce will help you inspire success:

1. Create a culture that intentionally drives an engaged workforce.

- Reduce costs related to hiring and staff retention. In a highly competitive talent market, leaders must focus on generating an engaged workforce that will increase innovation and improve bottom-line performance.
- Understand the benefit of utilizing employee feedback and a review of the current workplace culture to foster new improvements. The voice of employees is critical for leadership to reveal problem areas and know what is working well.
- Identify the level of engagement within your team. The more engaged, the more likely they are to be more motivated, committed, and focused than those who are disengaged.
- Implement a team-centric model. Leading companies have a culture that strays away from a traditional model and instead emphasizes a more sustainable model that incites collaboration and transparency among team members.

2. Be consistent and persistent with recruiting and onboarding.

- Recognize the skill and talent shortage. Recruitment is a top concern for many

organizations because they are not prepared for newer generations entering the workforce and are unaware of helpful, available resources.

- Acclimate new team members appropriately. Fifty-four percent of employees who go through an onboarding process feel they are more engaged within the company. In order to effectively onboard, create a system for new employees to become acquainted with the workplace, position, and overall culture of the company. An organized process should begin as soon as the new hire accepts the job offer.

- Set standards for your onboarding expectations. On average, new hires have 90 days to prove themselves. In order to obtain the knowledge, skills, abilities, and behaviors that are expected and required to perform specific roles, make new hires feel welcome and prepared.

3. Cultivate emerging leaders through training and career pathing.

- Inspire a new generation of advanced leaders. Seventy percent of organizations fall short in developing executive teams focused on objectives outside of reduced cost. When creativity is absent at the top level, employees are less likely to be invested in innovation and focus solely on productivity goals.
- Place emphasis on innovative action. Eighty-eight percent of the workforce believes building an organization of the future is critical, but it takes more than talk; it requires action. Leadership personnel need to adapt to transformational elements and organizational technologies and set an example for commitment and success at the top.
- Create efficiency in your HR function. From 2016-2017, organizations have been stagnant in providing developmental programs for employees. A major contributor is the lack of productivity within human resources. Without an effective HR foundation, organizations cannot emphasize growth and transformation amongst the workforce.
- Address technologies well-suited for your success. New digital organizational models continue to surface in the mar-

ketplace and organizations will require leadership to instill enthusiasm for innovation and identify factors of success for the new trend(s).

4. Establish recognition and reward-based performance management.

- Streamline your process for employee advancement. Ninety-one percent of companies that have properly implemented an effective performance management system have realized process efficiency for promoting individual employees. The systems facilitate enhanced performance reviews and create a structure for employee recognition.
- Keep performance management systems updated to foster effective processes. When performance management systems are reviewed and enhanced continually, 90 percent of organizations see a direct improvement with the level of employee engagement. As shifts in work expectations occur, so should the methods for how employees are recognized and rated on their performance.
- Provide employees with continuous feedback. Empowering individual employees to achieve their goals is crucial, but by providing ongoing guidance on job performance you will create a system for surpassing the expectation. Incorporate mini goals or milestones to encourage employees through continuous achievement and reward.
- Ask the workforce for continuous feedback. Employee-driven improvements are proven to be significantly more effective for increasing team development and collaboration, as well as enhancing the performance of the individual.

When you instill confidence in your people and systems to foster success, you create an organizational culture that works across departments to increase efficiency and reduce costs. Through this focus on productivity you ultimately also enhance the growth and innovation objectives for the organization and set your company apart as a true leader in the industry and as an employer of choice. ■

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In other words, once a patent has been issued, is the resulting patent a “public right,” such that its validity can be resolved by a government agency, like the PTAB? Or is the patent a “private property right,” whereby any validity challenge must be addressed by an Article III court and is subject to the right to trial by jury provided by the U.S. Constitution? On June 12, 2017, the Supreme Court granted certiorari to provide an answer to this particular question.

Should the Supreme Court find IPR proceedings unconstitutional, such a decision would take away from the public, namely accused infringers, a cost-effective and relatively quick option for challenging issued patents. It may also bring into question the constitutionality of the other reviews created by the AIA and even ex parte reexamination proceedings. Further, it is unclear what effect such a decision would have on all the patents that have been invalidated to date using these AIA reviews.

New USPTO Rules For Declarations Of Use

Companies that own federal trademark registrations should be aware that the U.S. Trademark Office recently revised the rules directed to declarations of use, resulting in a higher level of scrutiny to be applied in reviewing and approving these declarations. The rule change was motivated by the results of a pilot program that showed

that “[i]n 51% of the 500 registrations selected for the pilot, the trademark owners failed to supply additional verified proof of use on specific goods /services for which use was initially claimed.” The expectation is that these new revisions will “promote the accuracy and integrity of the trademark register.”

By way of background, the U.S.

Trademark Office periodically requires the trademark registrant to submit evidence that a trademark is in fact being used in interstate commerce. Specifically, between the fifth and sixth years after registration, the Office requires that a Declaration of Use be filed, stating that the trademark is being used in commerce. The Declaration should be accompanied by a fee and a specimen of use, which is an example showing how the mark is being used, such as a label or an instruction manual. In addition, between the ninth and tenth years after registration, and every 10 years after that time, the Registrant must again file a Declaration of Use, a specimen, and a fee. If a Declaration of Use is not filed at either instance, then the registration will be canceled.

In the past, if a registration identified a list of goods or services in a class, the registrant was only required to submit a specimen of use for one of the listed goods. For example, if the registration listed “stor-

age boxes, tool boxes, strong boxes, small parts boxes, ladder racks, storage racks, storage trays, storage cabinets, drawer storage units, shelving units and transfer tanks for combustible and non-combustible liquids” in class 12, the registrant only had to submit evidence that the mark was in use with one of the listed items such as “storage boxes.”

That is no longer the case. The U.S. Trademark Office may now require additional proof of use for each listed good or service. The proof may take the form of additional information, exhibits, affidavits or declarations, and specimens of use. The Trademark Office will issue an Office Action requesting the additional information, to which the registrant will typically have six months from the issue date of the action to respond.

In view of the new rules, trademark registrants should take extra care when submitting Declarations of Use to ensure that the mark is being used for all the items listed in the description of goods and services. A best practice would be to collect specimens of use for each item listed in the description of goods and services. By doing so ahead of time, the registrant will be prepared to provide the Trademark Office with the any additional evidence, should it be requested. ■

Shedding Light on Working Capital Management Challenges and Best Practices

Working capital – the measurement of current assets against current liabilities – is a critical gauge of business health. For senior executives, the constant challenge is to manage for today's obligations while making sure to invest in tomorrow's growth.

Put another way: Negative working capital can create a cash flow crisis, but too much means that a company's cash isn't working hard enough.

To help manufacturing and distribution leaders better manage these issues, Crowe Horwath LLP released its Working Capital Study, a collection of thoughts from 153 manufacturing and distribution executives. The findings reveal best practices and benchmark performances for working capital management, including lean-thinking operations and financial improvements to drive profitability and direct the business at optimum levels of working capital.

The study also explored minimizing working capital while maintaining or improving quality and service to customers. This delicate balance requires cross-functional collaboration, with the following functions proving particularly important:

- Operations: Minimizing process waste, lowering inventories
- Supply Management: Improving forecasting and fulfillment with customers and suppliers
- Finance and Legal: Securing favorable procurement and sales terms
- Senior Executives: Analyzing and communicating the importance of working capital management

Working Capital Strategies and Effectiveness

Most executives surveyed said they understand the importance of optimizing working capital, with 32 percent rating it "extremely important" to their company's success over the next two years and an additional 50 percent rating it "very important." Eighty-eight percent of executives surveyed also said improved working capital management will boost their company's profit margin.

Despite these views, more than half of

companies have not implemented a working capital strategy.

About two-thirds of executives said they agree that bringing a meaningful approach to managing certain activities affects their working capital management. Drilling down further, 68 percent said that raw materials inventory management has a measured impact on working capital management within their companies.

Companies generally balance incoming cash flow from customers with cash going out to suppliers at about the same rate.

This cycle accentuates the need to make the best of fluctuations in inventory requirements.

But a high percentage of executives said they don't recognize the impact of these activities – and some said they see no impact within their companies. Others said they don't see the connection between daily activities in their companies and working capital. This indicates that executives may understand the general relationship between operations and finance while lacking access to specific metrics to track the impact of production decisions on the bottom line.

Address Working Capital Challenges

Issues beyond a company's control can increase the need for working capital. Executives cited economic factors, unreliable customer-demand forecasts, and industry-related factors as top difficulties. But other challenges within executive control, directly or indirectly, provide opportunities:

- Supply chain lead times: Vendors can deliver supplies on a just-in-time basis or assume ownership in strategic areas (and the working capital burden of inventory) until production begins.

- Inaccurate sales, inventory, and operations planning (SIOP): Shorter product life cycles and increased demand volatility challenge manufacturers. Yet SIOP at many companies is not updated frequently – meaning that sales plans, production schedules, inventory volumes, research and development project pipelines, and customer lead times often are out of date.

- Delinquent receivables: Lax invoicing and receivables policies create cash flow problems, but improved management reduces the strain on working capital.

Improve Inventory Levels, Improve Sales

The faster a company can turn over its inventory, the faster it frees up cash for other purposes. But two-thirds of companies said they turn their inventory monthly, at best, and 14 percent said they have three turns or fewer in a year.

Companies frequently fail to implement the following four best practices, even though doing so could vastly improve an organization's working capital management:

- **Formalize collaboration with suppliers:** Just 15 percent of respondents said they do this on a frequent basis, and 23 percent said they do it infrequently.
- **Build timely and detailed dashboards of working capital performance:** Just 12 percent said they do this frequently, while 28 percent said they do it infrequently.
- **Create business analytics of working capital factors:** Only 12 percent said they do this frequently, and 23 percent said they do it infrequently.
- **Formally collaborate with customers:** Ten percent said they do this frequently, and 29 percent said they do it infrequently.

What's more, a majority of respondents said 25 percent of their company's total inventory is more than 180 days old, which poses a major risk: The longer inventory sits, the more likely the goods will become obsolete. Not surprisingly, almost two-thirds of respondents said their companies hold obsolete inventory or inventory write-

offs worth 1 percent or more of annual sales. Much of this is the result of unsolved problems, such as poor scheduling, production, and supplier management.

Manage the Cash-to-Cash Cycle

Companies generally balance incoming cash flow from customers with cash going out to suppliers at about the same rate. This cycle accentuates the need to make the best of fluctuations in inventory requirements.

Many executives said that they hold advantages in contract terms with both customers (accounts receivable) and suppliers (accounts payable). But companies could still improve their terms and cash positions, evidenced by the majority of respondents who said they have an average of 16 percent of accounts receivable more than 180 days old.

Manage and Monitor Capital Expenditures

Most executives surveyed said they invested more than 2 percent of sales in capital equipment over the past 12 months and plan to do so again in the next 12 months. About a third of respondents said they invested 6 percent or more of sales in capital equipment. Capital expenditures represent a sizable component of working capital for industrial organizations, yet most respondents said their companies earn a return of 20 percent or less on invested capital.

During the Great Recession, many companies shelved capital expenditure plans – and even as the economy rebounded, capital expenditure hesitation remained. Younger manufacturing executives may be purchasing long-term assets for the first time, and even seasoned executives may be rusty in evaluating capital expenditures. This is reflected in the limited effort expended by most companies in managing and monitoring capital expenditures.

Collaborate With Supply Chain Partners to Minimize Working Capital

Manufacturers typically work with many customers and suppliers and have an opportunity to optimize working capital by focusing on their core supply chain relationships. A majority of respondents said that 37 percent of suppliers provide 80 percent of purchased materials and components and that 45 percent of customers account for 80 percent of product sales.

Yet only a small percentage of companies take full advantage of opportunities to better manage incoming and outgoing inventories. Collaboration with supply chain partners via shared forecasts (customers) and production schedules (suppliers) improves inventory management. Enhanced

collaboration also can generate other benefits, such as improved capabilities (including knowledge, best practices, and intellectual-property sharing) and capacity (facility and resource sharing).

A critical success factor in satisfying customers is delivery performance, and half of respondents said their companies deliver to their customers in two weeks or less (from receipt of order to delivery).

Executives also must extend best practices and analyses upstream through the supply chain. Improved supplier performance (speed, cost, and delivery) has a

direct impact on working capital. Vendors can improve only if they are monitored and evaluated based on performance criteria by the companies that hire them.

Improved working capital management requires executive time and attention, creation of a detailed strategy, and vigorous implementation of best practices in operations and across the supply chain. The data and ability to optimize working capital are available in every company and only require senior leadership's commitment to begin a journey toward improved financial health. ■



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Ace Sign Co. Celebrates One Year of Membership



Ace Sign Company in Springfield, Illinois has been growing, expanding, and innovating since Franklin G. Horn and his wife Alvina started the business with nothing more than a pickup truck and a small garage as a storefront 77 years ago.

"My grandfather wanted to be the first in the phonebook," said Dennis Bringuet, President of Ace Sign Co. "That's how he came up with 'Ace.'" And when you're in the sign-making industry, being seen is everything.

Running the business is a family affair. Franklin and Alvina's daughter Louise and her husband Joe Bringuet took over the business, and they brought their two children JoEllen and Dennis in at a young age. Currently, JoEllen's son Cory Boatman and Dennis's two sons, Scott and Todd Bringuet, work at Ace Sign Co. just as their parents, grandparents, and great-grandparents did before them.

Over the years and the generations, much has changed at Ace Sign Co. But while there have been several location changes and updating of practices and techniques, the family has always been in the business.

"I used to paint water tanks, grain elevators, and beer walls. Everything was done by hand," said Joe. "I was just a little cub then, and I did a lot of the grunt work. There was a lot of scraping old paint off, down to the brick in most cases, and sometimes the paint was over an eighth of an inch thick!"

"I started working at the business in the summers," said Dennis. "When it came time to go to college, I didn't see the need. I already had a skill and a job to go into."

Now, much of the work Joe and Dennis com-

pleted in their youth has been taken over by computers, which Joe aptly calls "confusers."

"They came in and put a console on my desk with the monitor and keyboard," said Joe, "and I said, 'Can I watch the Cardinals game on this?' They said, 'Not yet, no,' and I said, 'Then get it out of here!'"

"This is why we are so fortunate to have a good team of folks that understand technology better than my dad and I do," said Dennis.

Despite their slight fight against it, both Dennis and Joe understand the benefits that advanced technologies provide for their business.

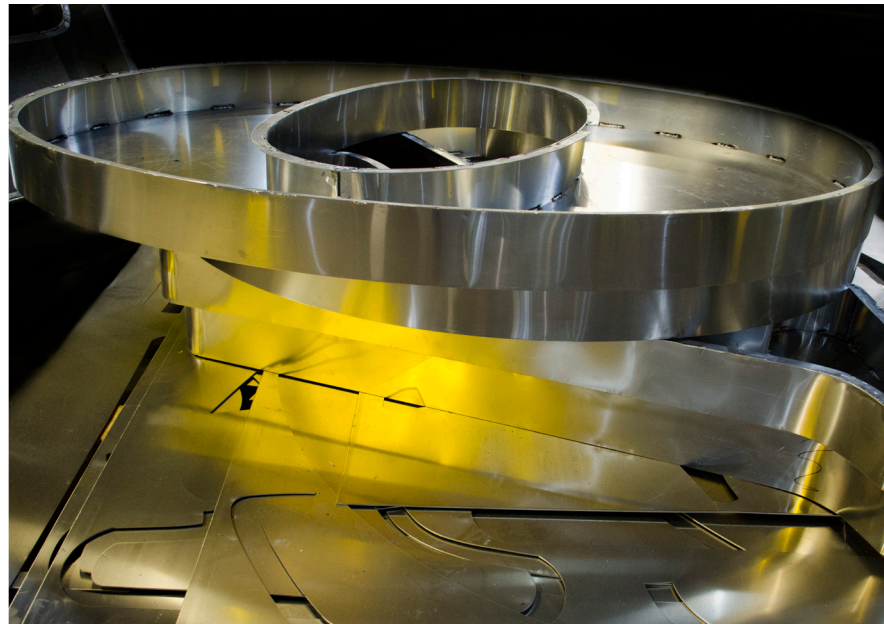
"Almost nothing is done by hand anymore," said Joe. "The technology is so good nowadays, we can build a theatre marquis right here and hire another sign company to install it knowing that everything will fit perfectly even though we never visited the site. It's remarkable what you can do."

But the family hasn't forgotten about their traditions, and keep a sign museum to remember where they've been and how far they've come.

"Neon is something that isn't used in signs anymore," said Dennis. "But my father has a great knowledge of the product. Most of the signs in our museum he has personally restored. It's a nice little history of the Springfield area right here in our own building."

While keeping its history well-preserved, Ace Sign Co. is making huge strides into the future.

"We are installing a laser cutter that will be an upgrade from our existing CNC cutting equipment. It cuts a very clean, crisp edge that won't require as much clean-up time and will make everything much faster," said Dennis.





Left to right: Dennis Bringuet, Todd Bringuet, Joe Bringuet, Cory Boatman, JoEllen Higgins and Scott Bringuet.

“We are also creating, in-house, the Ace University,” Dennis continued, “which is an electronic conversion of knowledge that we will use as a training tool for our employees. We find it challenging to find folks that are trained in some of the skills we need, so this will be a great tool for us.”

With all of these new developments, there are also some setbacks, which Dennis attributes to doing business in Illinois.

“The state of Illinois has more than double the amount of regulations that our neighboring states have,” Dennis remarked. “Regulations and restrictions are good, to a point, but I don’t think that just because we have twice the regulations, the EPA is twice as good. I don’t think our healthcare is twice as good, or OSHA restrictions twice as safe. So, while they are meant for good, sometimes you need to look at what the impact of those regulations will be.”

Regardless, the Ace Sign Co. family intends to keep their business in the family and in the state.

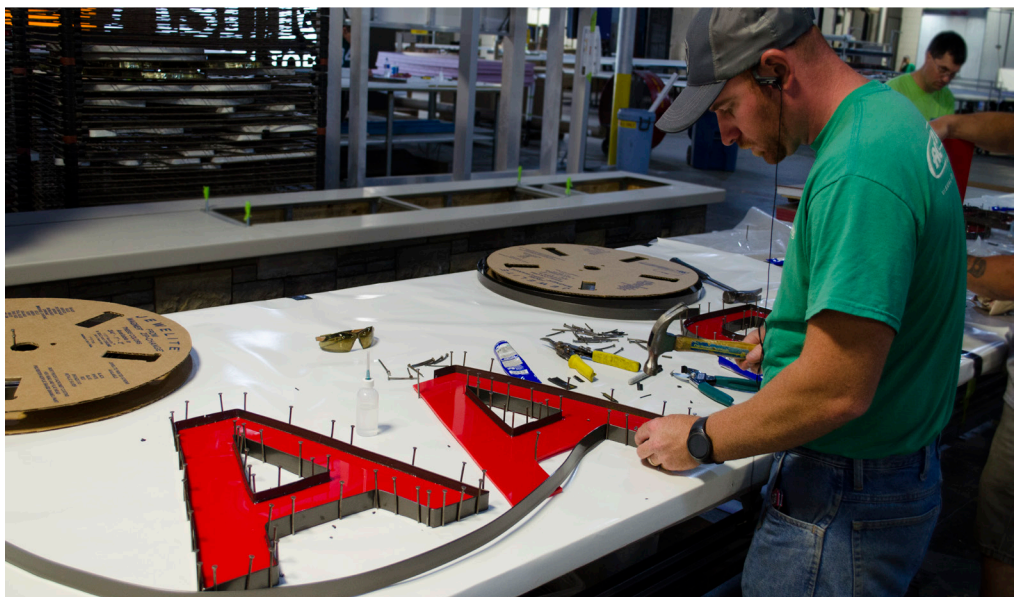
Though the techniques and processes may have changed, the foundation of their craft remains the same.

“Being in a custom design business, we are re-creating the wheel every time, to some degree,” Dennis said. “There’s still a lot of art – it’s not exactly a science. There are a lot of tricks to the trade that we have learned over the years, and we are always still learning.”

Please join the IMA in congratulating Ace Sign Co. on a year of membership, and 77 years of business in Springfield. ■



Since every project is unique, employees must constantly use their creativity and ingenuity to get the job done.



Identifying, Protecting, and Enforcing Trade Secrets After the DTSA

Illinois manufacturing and industrial process businesses depend on the protection of valuable intellectual property (IP) for their success; it also differentiates them from competitors in the market. The two most valuable types of IP are patents and trade secrets. They can be viewed as flip sides of the same coin. Patentees are awarded a 20-year government-sanctioned monopoly, or right to exclude infringers, in return for sharing with the public a new solution to a technological problem. Patents are very public and can be sold, licensed, and asserted in litigation.

Trade secrets, on the other hand, can also be a technological solution but more often cover any type of information from which the owner derives value by its being kept secret. By nature, trade secrets are the antithesis of public patents. Trade secrets last as long as they can be kept secret, but what happens when all the hard work, dedication, and investment is undone by a single rogue employee, or a single instance of disclosure of valuable, confidential company information? Trade secret protection received a potent shot in the arm a year ago with passage of the federal Defend Trade Secrets Act (DTSA). Illinois manufacturers who rely on confidential, proprietary information for retaining and growing market share are beneficiaries of the DTSA and need to be concerned with three issues: identification, protection, and enforcement of trade secrets.

DTSA

The DTSA is probably one of the most important developments in IP law in the last decade. Prior to 2016, trade secrets were protected by only state statutory versions of the Uniform Trade Secrets Act (UTSA). Illinois adopted such legislation, the Illinois Trade Secrets Act (ITSA), which was modeled on the UTSA. Trade secret theft cases also implicated state common law breach of contract or breach of fiduciary duty claims. Because such cases implicated multistate business activity and complex technology, both in terms of sources of proof and subject matter, many victims of trade secret theft viewed federal

courts a preferable forum. To get such claims into federal court required diversity of citizenship.

In 2016, Congress passed the DTSA. The DTSA created a national, uniform scheme for protecting trade secrets which included creation of a federal civil cause of action for misappropriation of trade secrets. Ironically codified in the U.S. criminal code as a supplement to the Economic Espionage Act, the DTSA was passed largely in recognition of the fact that with the increased digitization of critical data and increased global trade, company information is highly susceptible to the devastating effects of theft.

The DTSA is also non-preemptive, meaning a party can still raise claims under state statutes, such as UTSA statutes, and state common law, such as breach of confidentiality agreements. Thus, in Illinois, a trade secret theft claim can be brought in federal court under the DTSA, and claims under the ITSA and applicable state common law may be joined in the same case. After only one year, the DTSA has already become the primary tool for legal protection of trade secrets.

Identifying Trade Secrets

Trade secrets by definition are information, such as technical or non-technical data, formulas, patterns, compilations, programs, devices, methods, techniques, and processes. However, the DTSA expands on this definition in greater detail and extends the term to all forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, and codes. Trade secrets can be tangible or intangible, and stored or memorialized in any manner.

However, the mere existence of such information does not give rise to full trade secret status. To qualify as a "trade secret" within the meaning of the DTSA, the information must relate to a product of service used in interstate or foreign commerce. In addition, economic value has to be independently derived from the secrecy of the information (as opposed to the inherent

value of the particular information itself). Finally, and most importantly, to qualify as a trade secret under the DTSA, the owner must make objectively reasonable efforts to protect the secrecy of the information.

Protecting Trade Secrets

A manufacturing business that relies on the secrecy of certain valuable information should protect its trade secret information, usually in electronic documents on servers and SharePoint sites, internally and externally. Internally, the first step is to identify, segregate, and restrict access to a trade secret. A good rule of thumb is that only those with a need to know should have access to valuable trade secrets. Examples of objectively reasonable restrictions include physical facility security measures; confidentiality agreements for employees with access; periodic training topics, such as what information is considered a trade secret and what are procedures for access; warnings and acknowledgments of trade secret status and employee responsibility prior to entering restricted drives and data storage sites; two-factor authentication; disabling write authority on laptop USB ports; disabling the ability to email contents of trade secret files; and periodic auditing of employees' use of trade secret files.

Externally, many manufacturing and industrial businesses (such as OEMs) are engaged in receiving confidential information from customers as to customers' particular product designs and needs, and completed projects are capable of exposing a manufacturer's secret information to a customer. A third-party design engineering firm may also be working with a customer to contract projects to a manufacturer. In these instances, care must be taken to limit the dissemination of secret information, including design solution activity, manufacturing processes, and pricing strategies. When exposing such third parties to trade secret information, confidentiality agreements should always be used.

IT administrators should be an integral part of protecting trade secrets and finding evidence of theft of trade secrets.



Most trade secrets exit or enter a business enterprise in electronic files. IT administrators play a critical role in the protection element of trade secret rights from internal and external threats. Moreover, it is not enough for upper management to set policies and restrictions without then taking steps to verify compliance. For example, auditing trade secret protection practices can pay for itself many times over, because prevention remains the best way to stop wrongdoers from misappropriating company secrets and undoing lengthy and costly investment in trade secrets.

Enforcement of Trade Secret Rights

The most frequent source of trade secret problems is, in a word, employees. Outgoing employees can take trade secrets with them to new employment with competitors; incoming employees can bring a former employer's secrets. The typical case involves a trusted high-level executive who had access to R&D data, customer lists, pricing and discounting strategies, departing to either join a competitor or start a competing business. The young but quickly-developing body of DTSA law,

not surprisingly, demonstrates these same themes.

In one matter, a Washington corporation, Earthbound, sued three key employees who had left for Missouri corporation MiTek, where Earthbound had previously shared significant company information with MiTek subject to a non-disclosure agreement while exploring a possible company sale to MiTek. In another case, Henry Schein, Inc. sued a former employee for having taken confidential customer sales information that could be used to compete with the company. In both cases, federal district courts compelled the return of trade secret information.

Injunctions compelling the return of trade secrets and requiring the forensic examination of a suspected thief's computer devices are available when other traditional remedies, such as damages, are inadequate. Once the secrets are taken, disclosed, or exploited, irreparable harm can result. In such situations, money damages are either difficult to determine or inadequate. Therefore, a temporary restraining order (TRO) or Preliminary Injunction (PI) is often the most valuable remedy that a federal court may issue a manufacturing company. In

Earthbound, for example, the court granted broad injunctive relief, including requiring the defendant to immediately deliver external devices to a neutral third-party forensic investigator, and to deliver login and password credentials to cloud accounts so that the plaintiff could determine the extent of misappropriation. Courts have issued analogous injunctive relief under the ITSA, and a plaintiff may be awarded both monetary damages and injunctive relief so long as the plaintiff does not recover twice for the same wrongful conduct by the defendant.

In addition to injunctive relief, both the DTSA and the ITSA provide not only for damages, but also for attorneys' fees in the case of willful or malicious misappropriation of trade secrets. Generally speaking, the fact pattern set forth above will amount to malicious misappropriation, such that the company should be able to recoup its attorneys' fees. For manufacturing companies, it is imperative to contact outside counsel with specialized experience in handling trade secret cases immediately when facts lead to the suspicion of trade secret theft either as the victim or the unwanted beneficiary. ■

CSL Behring Kankakee Site Honored as “Employer of the Year”



CSL Behring’s Kankakee facility recently was recognized as “Employer of the Year” by the American Legion Department of Illinois. The award was in recognition of distinguished cooperation with the American Legion Economic Commission in the promotion of a program for training, counseling and employment of U.S. military veterans. Accepting the award on behalf of CSL Behring was Don Konemann II, Director and BT Site Head, who is also a U.S. Navy veteran.

Don said, “At CSL Behring, we are driven by our promise of saving lives. Our mission is much the same as veterans who respond in extraordinary ways to protect our nation. We are truly honored to accept this award.”

About 12 percent of the workforce at Kankakee site is made up of veterans. The facility has an Annual Salute to Service Ceremony, where it recognizes and honors employees who have served in the U.S. military. Plaques and photos of employee veterans are prominently displayed on the site’s Salute to Service wall.

The award was presented at the 99th Annual Department of Illinois Convention in Springfield, Illinois on July 14, 2017.

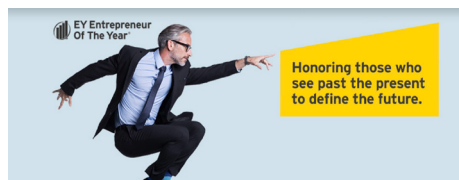
North American Lighting Receives Young Adult Employer Champion: Pathways to Apprenticeship



The National Fund for Workforce Solutions recognized North American Lighting as a 2017 Young Adult (YA) Employer Champion: Pathways to Apprenticeship

recipient. The award is given to businesses that show leadership through connecting youth to apprenticeship opportunities. North American Lighting was invited to attend the National Fund’s Leadership Convening, which was held June 15-16, 2017 in Philadelphia, PA. The Convening is intended to advance the national conversation on key issues relating to jobs and workforce development, and includes 150 business leaders and 150 funders, workers, and workforce development practitioners.

Donald Welge of Gilster-Mary Lee Corp. Wins ‘Entrepreneur of the Year’ Award



Donald Welge of Gilster-Mary Lee Corp. was recognized June 15 as an EY Entrepreneur of the Year. The winners were selected from a group of 22 finalists in the Midwest. The Central Midwest program includes companies across Kansas and Missouri. This year’s finalists lead companies that generated nearly \$2 billion in combined revenue and employed more than 8,000 in 2016. Gilster-Mary Lee Corp. reported 2016 revenue of \$700 million.

Regional award winners are eligible for consideration for the Entrepreneur of the Year national program. Award winners in several national categories, as well as the Entrepreneur of the Year Overall National Award winner, will be announced at an event in Palm Springs, California, on Nov. 18. Sponsors in the Central Midwest region include PNC, Lathrop & Gage and Common Ground Public Relations.

Harper College Receives Bullock Memorial Endowment, Dedicates CNC Lab



The National Association of Manufacturers (NAM) and the Illinois Manufacturers’ Association (IMA) have awarded a joint \$50,000 endowment to fund Harper College scholarships in memory of manufacturing leader Ron Bullock, former CEO of Bison Gear and a former NAM and IMA board member. The NAM and IMA presented its joint check during a special ceremony with organization leadership and members of the Bullock family, prior to the dedication of Harper College’s state-of-the-art Computer Numerical Control (CNC) lab in Bullock’s memory. The endowment will be designated for students studying advanced manufacturing.

“It’s fitting that Harper College’s CNC lab will carry the name of an industry leader who knew the importance of inspiring manufacturing’s next generation of workers,” Harper College President Dr. Ken Ender said. “This generous endowment is an investment in student success, and it demonstrates our partners’ ongoing commitment to working together to solve the shortage of skilled workers.”

In life, Ron Bullock tirelessly worked to engage the next generation of students in STEM careers. He was a lifelong proponent of American manufacturing, a supporter of the educational system, and was committed to community service. Bullock established a scholarship program to aid college-bound children of Bison employees and led the IMA’s Education Foundation to fund scholarships and training programs for manufacturing careers in Illinois.

“Ron was unique in respect to his interest in education and passion about readjusting the education system in the U.S. to have a more qualified workforce,” said Greg Baise, president of the Illinois Manufacturers’ Association, where Mr. Bullock served as chairman in 2008 and 2009. “He was dedicated to building a prepared pipeline of

workers to lead the manufacturing industry into the future – and this endowment will ensure his legacy for generations to come.”

Wiegel Tool Works, Inc. Announces Strategic Joint Venture Partnership with M.S. Ambrogio S.p.A.



Wiegel Tool Works, Inc. (WTW) and M.S. Ambrogio S.p.A. (MSA) have announced a joint venture partnership to provide the most exceptional metal forming portfolio and expertise available to the global manufacturing market. MSA-Wiegel will operate in North American-based manufacturing locations. MSA-Wiegel's expertise in Bruderer High-speed stamping, Minster Heavy-stamping, and Bihler Multi-slide technologies will prove to be invaluable to current and future partners looking for a single source for best-in-class metal forming solutions.

“With this partnership, Wiegel Tool Works has added not only a new world class manufacturing capability in multi-slide and assembly technology, but we have also expanded our manufacturing presence globally,” Aaron Wiegel, President and CEO of Wiegel Tool Works, Inc. and MSA-Wiegel N.A., commented. “We can now offer all of the manufacturing capabilities we currently offer in North America throughout Europe and South America. This alliance has now propelled WTW from a regional supplier to a global supplier overnight.”

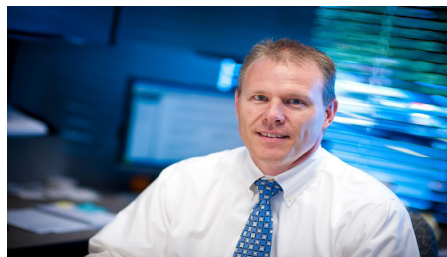
“We are proud and excited to make available to the North America market our decennial know-how and high expertise in stamping and multi-slide technology through the cooperation with a prestigious partner as Wiegel Tool Works,” Mario Sangalli, CEO of M.S. Ambrogio S.p.A., declared. “We believe that the synergy between our companies will further increase the competitiveness of our global offer and this will be well valued by our demanding customers.”

For more than 75 years Wiegel Tool Works, Inc. (WTW) has supplied precision metal stampings using Bruderer high-speed

stamping and Minster heavy stamping technologies coupled with in-line and off-line vision and sensor systems. WTW supplies the automotive, appliance, aerospace, defense, telecom, lighting, and housing/construction industries. WTW's advanced modern technology and high standards for quality assurance allows them to continuously drive improvement in their manufacturing processes to best serve current and future partners.

M.S. Ambrogio S.p.A. (MSA) is a leading European manufacturing provider of Bihler multi-slide and assembly solutions, Bruderer high-speed stampings, and Minster heavy stampings. MSA is one of seven manufacturing operations within the M.S. Ambrogio Group. The company has over 1,100 employees and more than 650 manufacturing machines. MSA produces over 35 million parts a day serving the needs of the automotive, electrical, electronic, and appliance markets across the world. MSA's diversification of markets and technological expertise has been their strategy for continuous growth in the evolving global market.

Sikich LLP Names Jerry Murphy Partner-in-Charge of Manufacturing and Distribution Practice



Professional services firm Sikich LLP recently named Jerry Murphy, CPA, partner-in-charge of its manufacturing and distribution practice. Murphy has more than 25 years of experience working with manufacturing companies on assurance, operations improvement, strategic planning, and mergers and acquisitions.

Sikich's manufacturing and distribution practice provides accounting, technology, supply chain, and advisory and managed services to manufacturers, wholesale distributors, and warehousing and storage companies.

Murphy is a member of the executive board for the Valley Industrial Association, a professional organization providing resources and educational and networking opportunities to manufacturers in Kane, Kendall, DeKalb and western DuPage counties in Illinois. He earned a bachelor's degree in accounting from Eastern Illinois University and was named a certified management accountant by the Institute of Management Accountants.

Jelly Belly Donates Jelly Beans to National Guard – Other Members Called to Donate



IMA member Jelly Belly will be providing jelly beans to the Illinois National Guard for the National Guard Association of Illinois Conference. The National Guard Association of Illinois (NGAI) represents all members and families of the Illinois National Guard, past, present and future on matters that affect the ability of the ILNG to perform missions when needed in support of the nation and the state. Associations representing all 54 states and U.S. territories attend this conference (approximately 5,000 participants and vendors). Puerto Rico provides rum samples to give away. Starbucks provides the Washington state delegation with packets of instant coffee. Tennessee is known to give “moon pies.”

In the past NGAI has failed to establish relationships with Illinois companies who manufacture products that represent our great state. NGAI would like to represent our state with a more substantial set of giveaways that reflect the pride we have in our Soldiers, Airmen, their Families, and the people of Illinois. If companies are willing to donate samples or items they already may use to promote their products, NGAI would be grateful, and the donors will be listed as a sponsor of NGAI at the conference.

The point of contact for any questions is James Smith, 217-306-0645.

New IMA Members

A&R MECHANICAL CONTRACTORS
Urbana, IL

ACC ELECTRONIX, INC.
Normal, IL

ACCURATE PARTS MANUFACTURING CO.
Bensenville, IL

AMERICAN ZINC RECYCLING LLC
Chicago, IL

**BLOOMINGTON NORMAL ECONOMIC
DEVELOPMENT COUNCIL**
Normal, IL

DUBAK ELECTRICAL GROUP LLC
La Grange, IL

E. GROMELL & SONS, INC.
Chicago, IL

G3 MACHINING LLC
Bloomington, IL

GATTO INDUSTRIAL PLATERS, INC.
Chicago, IL

**INTERNATIONAL CONTROL SERVICES,
INC.**
Decatur, IL

JAMAR PACKAGING
West Chicago, IL

JOHNSON PRESS OF AMERICA, INC.
Pontiac, IL

KELLY SYSTEMS, INC.
Chicago, IL

KUUSAKOSKI U.S.
Plainfield, IL

MACON RESOURCES, INC.
Decatur, IL

MAID-O-MIST
Chicago, IL

RMH SANDRIDGE LLC
Morton, IL

ROXUL USA INC.
Chicago, IL

SME, INC.
Minonk, IL

SYNERGY FLAVORS, INC.
Wauconda, IL

TEK PAK, INC.
Batavia, IL

THREE Z PRINTING CO.
Teutopolis, IL

TRINITY STRUCTURAL TOWERS, INC.
Clinton, IL

Calendar of Events

SEPTEMBER 14, 2017: SEPTEMBER BREAKFAST BRIEFING: INTELLECTUAL PROPERTY

September's meeting will focus on Recent Developments in Intellectual Property. Join experts from McDonnell Boehnen Hulbert & Berghoff LLP and your fellow manufacturers for information on this timely topic.

AGENDA

8:00 am – Networking Continental Breakfast

8:30 am – Recent Developments in Intellectual Property: Patent, Trademark & Trade Secret Law, presented by McDonnell Boehnen Hulbert & Berghoff, LLP

10:15 am – Q & A

Thank you to our generous sponsor, McDonnell Boehnen Hulbert & Berghoff, LLP

SEPTEMBER 28, 2017: WIS 360 QUARTERLY GROUP HEALTH PLANS UPDATE WEBINAR

1:00 pm CDT

In this webinar, you'll get the latest developments affecting employer group health plans and cafeteria plans. We'll provide you with practical insights on the most recent

legislative changes, regulatory agency guidance and court decisions impacting the Affordable Care Act, ERISA, COBRA, HIPAA and other federal group health plan mandates. Register at <https://register.gotowebinar.com/register/8565584091641022723>

OCTOBER 10, 2017: INDUSTRY 4.0: IS YOUR WORKFORCE READY?

Maggiano's Banquets

111 W. Grand Avenue
Chicago, IL 60654

11:30 am – Reception

12:00 pm – Luncheon

NAM President Jay Timmons and IMA President Greg Baise will speak on the future of Industry 4.0 in manufacturing.

\$35.00 Member

\$35.00 Member Guest

\$50.00 Non-member

\$750.00 Sponsor

*Seating is limited: register now at <https://www.cityclub-chicago.org/meetings/register-options/1211>

OCTOBER 18, 2017: CONSTELLATION'S 2017 ENERGY MARKET OUTLOOK – WEBINAR FOR ENERGY BUYERS

1:00-2:00 pm CDT

Register at http://energy.constellation.com/october_2017_webinar_registration

NOVEMBER 9, 2017: 3RD ANNUAL IMA TAX CONFERENCE

Join your fellow manufacturers for a Sales & Use Tax Update specific to manufacturing. More details to come this summer.

Topics will include an update to IL Sales & Use Taxes, Tax Credits & Exemptions, Nexus E-commerce and more.

AGENDA

8:30am – Exhibits & Networking Continental Breakfast

9:00am – Sales & Use Tax Update

11:00am – Break

11:15 – Tax Credits & Exemptions

12:15pm – Ask the Panel – Q & A

Thank you to our generous sponsors, Baker Tilly, Crowe Horwath LLP and Kutchins, Robbins, & Diamond, Ltd.

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

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