

MANUFACTURING MATTERS

FALL 2019

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TOP SAFETY PRODUCTS

A Community Centric Company

By Michael Womack, Marketing Outreach Coordinator, NJMEP

Manufacturing is an interesting industry.

On its surface, it seems like any other industry however once explored a bit deeper, the truly exceptional aspects come to light. Every product, component, food, and beverage we consume is touched by a manufacturer in one way or another. These manufacturers are the lifeblood of the economy in the U.S., abroad, and especially here in New Jersey. The impact manufacturing has is not just isolated to the economy, either. Organizations that manufacture products that keep the world turning can have a massive social impact on their communities as well. This is made clear when looking at Top Safety Products.



Building the first aid empire takes determination and an unfettered will to push forward. Top Safety Products is a Women-Owned Small business headquartered in Branchburg, New Jersey that meticulously assembles quality first aid kits and related first aid and safety products. They have the capability to create a massive variety of first aid kits for the construction industry as well as kits designed to meet a host of other unique applications and specific industry needs. Serving clients for over three decades, they developed the means to serve their customers and create ideal solutions to their unique needs.

Jennifer Johnson leads the team at Top Safety Products. President of the company, her 15 employees are tasked with creating a wide selection of first aid kits, many of which must fall within specific compliance. The work being done on delivering high quality products to their customers is only part of the company's mission. Top Safety Products is working with the community and capable individuals that are often undervalued by society yet elevates their manufacturing company to extraordinary heights.

The company works out of a two-story flex industrial space right off Route 22 where they assemble pocket sized first aid kits all the way up to a heavily stocked cabinet ideal for construction, manufacturing, and industrial sites. Most of their business is taken up by the kits that are required on all construction sites, dictated by OSHA and the ANSI code standards. In 2015 specific guidelines changed and for many businesses to remain in compliance with government regulation, a minimum number of first aid supplies must be on job sites. Top Safety Products is working vigorously to ensure its products help those businesses remain in compliance, however, their work in community development can truly steal the spotlight.

The work being done on delivering high-quality products to their customers is only part of the company's mission. Top Safety Products partnered with an incredible nonprofit, the Midland School also based in Branchburg, which serves children and adults with developmental and intellectual needs. The school has a team of students made up of adults from Midland School's Adult Services and these amazing, capable, and passionate individuals have been working in the Top Safety Products warehouse three days a week since January 2018.

"Our collaboration with Midland School's Adult Services is a huge success! Our three-person Midland Crew continues to build their skills in and out of the warehouse! I would recommend this program to all fellow companies with the ability to partner with Midland," Jennifer Johnson, President of Top Safety Products stated. "We are grateful to Irene Francis, Job Developer for the Midland School/Midland Adult Services for this opportunity," Johnson continued.

The partnership began when Midland School approached Top Safety Products and asked if the company would be interested in supporting their Supported Employment Enclave program. The Midland School was able to structure their Employment Enclave from the work they conducted with Top Safety Products business. Since that beginning, the Midland School has successfully developed more Employment Enclaves which came from working with Top Safety Products. The school even recently honored Top Safety Products as its 2019 Employer of the Year because of their commitment to the program.

In addition to being recognized by the Midland School, Jennifer Johnson is a recipient of the Hall of Fame Award for Changing Lives from the Silberman College of Business at Fairleigh Dickinson University.

Beyond manufacturing standard kits, Top Safety Products has added Bleeding Control Kits, Pet First Aid Kits and designed a fundraising program for any school, team, club, or organization. Their teammate, Rosemarie Kells designed an easy to execute and profitable fundraising program where a local high school recently participated in their fundraiser offering family and auto first aid kits and earned 50% profit for each kit sold.

As a member of NJMEP's Made in New Jersey program NJMEP applauds both Top Safety Products and their partner the Midland School. The partnership led to monumental achievements in helping create a way for a manufacturer to give back to their community and positively impact so many incredible individuals.



Top Safety Products is working vigorously to ensure their products help those businesses remain in compliance, however, their work in community development can truly steal the spotlight.



3 WAYS Manufacturing Companies Can Improve Cash Flow

By Andrew Frazier, MBA, CFA

Cash flow is a challenge for most businesses, especially manufacturing companies because they tend to have more areas to manage. Beyond just sales and cost of sales, there are several other factors that can have a significant impact on their cash flow. This difference is exacerbated during periods of growth since manufacturing companies tend to grow faster and have a longer cash conversion cycle. Fortunately, they have several tools for improving cash flow. The top 3 are:

- Proactive Accounts Management
- Inventory Optimization
- Capital Spending Plan

Accounts Receivable (AR) is selling products and services on credit - effectively an interest-free loan to customers, while Accounts Payable (AP) is purchasing inventory and supplies on credit - effectively an interest-free loan from suppliers. Both an increase in the AR balance or a decrease in the AP balance will cause a corresponding decrease in available cash. Therefore, it is important to actively work to minimize AR and maximize AP without being late on payments. Although manufacturers cannot dictate terms to larger customers, they can offer discounts for early payment and actively collect upon outstanding balances to encourage them to pay faster. On the flip side, requesting credit and negotiating the best terms possible from suppliers helps to finance the cost of inventory rather than drawing upon cash reserves.

I worked with a manufacturing company experiencing cash flow challenges during a slow period and the owner had to loan money to the business. They also used AP to finance some of the short-fall which resulted in overdue bills and threats of being cut off by suppliers. Proactively communicating with suppliers and managing their expectations resulted in temporarily extending credit terms and maintaining access to raw materials. After obtaining financing the company experienced several months of growth which was great (sort of). Growing required increasing inventory and operating expenses that must be paid with cash prior to the cash from additional sales being received so they were *"Making Money But, Running Out of Cash."* They continue to utilize the strategies outlined in this article to proactively manage cash flow.

Most manufacturing companies have a significant amount of cash tied up in inventory. Therefore, it is critical that inventory levels are optimized to ensure enough is available to satisfy customer needs and operate efficiently. This is even more important when the inventory turnover rate is low, there are long production processing times, or there are many different products that are not manufactured on a regular schedule.

One business I helped was profitable and the owner didn't understand why the profits were not reflected in the company's cash balances, especially since they had to pay taxes on them with cash. By reviewing financial statements, we found that the company's inventory levels were growing faster than its sales. Upon further inspection, it was learned that employees were ordering more materials than needed for an order to take advantage of discounts. However, many times they would just order more the next time without checking to see if there was inventory in stock. There were several items he had enough inventory to last 2+ years. All that money was tied up in inventory on hand which could have been used for growing the business, paying taxes, and/or personal enjoyment. My client established new purchasing procedures and an approval process with oversight to avoid this problem in the future. Unfortunately, he still has more than \$500k of his personal cash tied up in excess inventory. Ouch!

Manufacturing companies tend to make significant investments in equipment and other assets without a full understanding of the impact it will have on cash flow. Even when financing the purchase there are ancillary expenses and cash needs that are generally not accounted for in advance. Initially, they may be delivery, installation, permits, inspections, and materials not covered by financing coming out of business cash flow. The purchase may also require additional investment in labor, inventory, and repair parts that will also come out of operating cash flow. Plus, there is a financing cash flow impact both upon purchase and associated with ongoing payments on debt.

One of my clients financed the purchase of a \$200k machine for his business with 85% equipment financing (\$170k) so he only needed to pay \$30k in cash. However, the installation took longer and was much more expensive than expected. Plus, there were significant delays associated with the permitting, obtaining licenses, and utility upgrades that were unexpected. Combining that with rent, staffing, and initial inventory resulted in the entire project costing \$500k so his cash flow hit unexpectedly ended up being \$300k higher than expected. Whoa!

Effective cash flow management and planning are important for all businesses, but even more so because manufacturing companies tend to be capital intensive, require significant amounts of inventory, and they generally invoice customers with terms rather than being paid at the time of sale. As a result, active strategies to minimize AR, maximize AP, optimize inventory, plan for major expenses, and maintain sufficient cash reserves are critical.

Andrew Frazier, MBA, CFA is President and COO of A&J Management and a NJMEP Resource. He also wrote "Running Your Small Business Like A Pro - The More You Know, The Faster You Grow" a guide for helping small business owners create a sustainable enterprise which can run without them.

NJMEP'S EIGHTH ANNUAL MANUFACTURING DAY 2019 AWARDS FINALISTS



Manufacturer of the Year: Start-up

Manufacturer of the Year: Small (50 or less employees)

Manufacturer of the Year: Medium (between 51 and 250 employees)

Manufacturer of the Year: Large (251 employees or more)

Manufacturer of the Year: Innovator of the Year

Manufacturer of the Year: Manufacturing Cares



Manufacturing Day 2019 is Finally Here!

A Time to Show the World the True Face of New Jersey Manufacturing

Manufacturing Day is a national celebration of this vital industry which contributes 11.6% percent of U.S. economic output, according to the Bureau of Economic Analysis. This celebration is held annually on the first Friday in October to help show the reality of the manufacturing industry in the United States. Thousands of companies and educational institutions around the country open their doors to students, parents, teachers, and community leaders.

NJMEP champions Manufacturing Day within the state of New Jersey, bringing together businesses, high schools and colleges, students, and business leaders together to showcase how the industry has truly transformed. This year on October 4th, NJMEP hosts Manufacturing Day 2019 at The Marigold in Somerset, New Jersey. Awards will be presented to manufacturers that demonstrated exceptional progress over the past year. Breakout sessions will be held, focusing on sharing critical industry knowledge and best practices. New Jersey legislators and decision-makers will be in attendance, to give manufacturers the opportunity to share their concerns and comments about doing business in the Garden State.

Along with the award nominations, breakout sessions, keynote speeches, and networking opportunities; manufacturers, NJMEP affiliates, and event sponsors will have booths set up around the venue. These areas offer businesses the chance to learn about innovative technology solutions or services that could help them drive their business forward well into 2020 and beyond. Manufacturing Day 2019 is the perfect chance to help businesses keep their finger on the pulse of the industry.

Manufacturing Day comes around but once a year, however its impact can be felt all year long. From spreading awareness about the current state of manufacturing jobs to offering manufacturers a platform to share their concerns with government and decision-makers, Manufacturing Day provides businesses with the opportunity to celebrate this invaluable industry in a plethora of ways.

The manufacturing industry has come incredibly far over the past few years. Manufacturing Day is the time to highlight this achievement and the incredible strides individual companies throughout New Jersey have made to help the industry progress forward as a whole. For more information on how to get involved with Manufacturing day 2020, visit NJMEP.org or follow NJMEP on Twitter, Facebook, and LinkedIn @NJMEP.

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Manufacturer of the Year: Start-up

Proximate Concepts

The company has filed 5 patents associated with the technology developed by Proximate Concepts and marketed by iNPLANT, LLC

www.inplantfunnel.com

Proximate Concepts, LLC and iNPLANT, LLC, the makers of the iNPLANT funnel, is a startup design and manufacturing company with the primary purpose of bringing a device to market which can dramatically reduce a common complication associated with placement of breast prostheses, both for cosmetic and reconstructive purposes.

The inventor of the device is Paul Rosenberg, MD, a seasoned and Board Certified plastic surgeon in practice for 30 years, who saw a need in the market for a better product than what was previously the only option for reducing this complication risk. He believed that the exorbitant cost of the competitive product unnecessarily reduced the usage of this funnel technology by surgeons. He also saw an opportunity to advance the technology and the "no touch" technique for the placement of breast implants. The company has filed 5 patents associated with the technology developed by Proximate Concepts and marketed by iNPLANT, LLC. No facet of the production is outsourced. Every component is made and assembled in a cleanroom in Fort Lee, NJ, designed and built by a team headed by Dr. Rosenberg. Keeping design and production, as well as material sourcing local, affords not only Proximate Concepts and iNPLANT but also the State of New Jersey, advantages over outsourcing to other states and other countries, despite the less costly labor force which is so attractive to other companies.

Initially the company began by sourcing materials from wherever they could, in order to create a product that worked. After developing the product, they searched for local vendors and built relationships to help with sourcing materials. This strategy allowed the company to cut costs while further engineering improvements drove the price for the product even. Streamlining efforts which came from a Cost of Goods analysis handled by their administration team all were done in the name of lowering the price of the final product. Proximate Concepts, LLC. worked to bring in engineering students and offer internships and encouraged these students to speak freely in search of new ways to further streamlining and improve their processes, from manufacturing to product shipping. The company continues looking for new ways to improve and streamline their entire operation.



Manufacturer of the Year: Start-up



Modern Materiel

Modern Materiel have committed themselves to being able to work within the laws and provide accurate information to their customers which no out of state competitors have interest in.

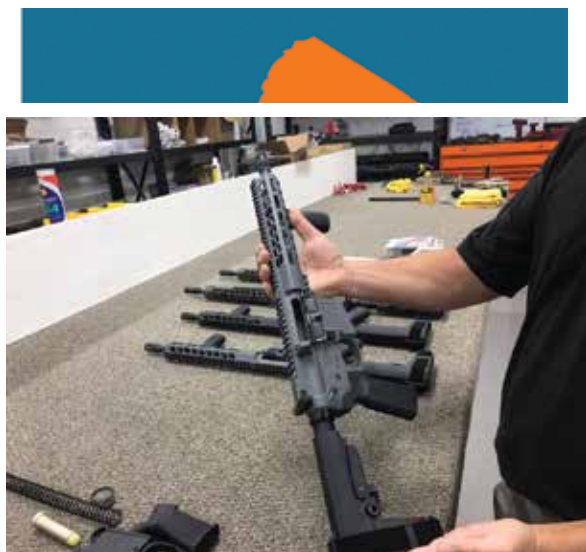
www.modernmateriel.com

Modern Material is one of two (potentially three) rifle manufacturers in the state of New Jersey. The two primary competitive advantages they have are their workforce living and working within the State of New Jersey and their ability to know and understand the rules and regulations of NJ gun laws. They have committed themselves to providing accurate information to their customers which no out of state competitors have interest in.

With a strong commitment to the law enforcement community, they want to ensure Modern Material has all the services and provides the support New Jersey police will need. By having their facility located in the middle of the state, they can reach every municipality within an hour and a half. Furthermore, management ensures that every part for their rifles are always in stock so replacements can be driven directly to a department as soon as possible. To continue their support of the law enforcement community, they implemented a “No Rifle Down” policy. Any time a service rifle is tied up or taken out of duty and put away in evidence, they will send the department a replacement rifle at no charge.

Beyond their gun sales, Modern Material focuses on offering police departments additional solutions to keep them operating at peak performance. The manufacturer will work with a department to make sure they have all the gear that goes along with the gun, optics, slings, sling mounts, or even vehicle mounts.

The shop has continued to evolve over time, and at a rapid pace. They chose their current facility with the intention of growing into the space and this has proven extremely beneficial to keeping the workspace and inventory organized and manageable. As the company grows, there has been a focus on making more of the parts they use when strategically appropriate. Inventory management / workspace management is key to their success and their ability to grow. Employees take pride in their working environment and are responsible for keeping the shop clean. There is a defined space for every operation, manufacturing and assembly. Through strong relationships they have been able to maintain a high level of quality which has generated new customers. Quality and relationships are key.



Manufacturer of the Year: Start-up



Suuchi Inc.

Suuchi employs American seamstresses, boosting economic growth in the manufacturing industry. They believe true “know-how” comes from all walks of life.

www.suuchi.com

Suuchi Inc, is a diverse supplier certified, woman owned, women operated custom concept. We are customizing fanatics that are here to serve a world that only wants custom.

Suuchi Inc has developed an automated, vertically integrated supply chain that uses technology and self-owned manufacturing to deliver affordable custom products within 5 days of receiving an order. Our process enables our own Suuchi brand. And importantly, we are proud, one stop shop enablers for some of the most visionary brands and corporate in the United States.

Our company is a champion of diversity and empowerment. We employ American seamstresses, boosting economic growth in our manufacturing industry. Guided by technology and nimble manufacturing, we are companies full stack answer from sourcing, printing, design, cutting, production & web technology. Our process delivers for both standard and custom products including:

Men, Women & Kids Apparel, Pets, Home Accessories, Uniforms & More!

Women-owned and mostly women operated, Suuchi Inc. is the Made in America manufacturing and technology platform for today's brands.

Founded in late-2015 with a vision of bringing both technology and transparency to the forefront of manufacturing, Suuchi Inc., provides a complete end-to-end solution for their clients. From design to sourcing to shipping, our in-house team of experts provide your brand with the utmost care and diligence.

Suuchi Inc's proprietary software, The Suuchi Grid connects your brand with our shop floor allowing for full design manufacturing transparency at your fingertips. The platform is also your communication hub with the team to ensure no more lost emails and unnecessary delays in your product development or production.

Our team of experienced seamstresses, designers, and project managers are our company's pride. We believe true “know-how” comes from all walks of life. With our 27 different nationalities and a team of over 150 employees, Suuchi Inc. embraces the diversity our team brings to the company.



SUUCHI





Manufacturer of the Year: Start-up

Saltopia

Recently Saltopia implemented new automation technology to streamline bottle filling and labeling. They started in farmers markets to receiving national exposure.

www.saltopiasalts.com

The story behind Saltopia is why the company is committed to manufacturing the best possible product while treating their employees like family. "When I started this company my life was a complete mess," stated Kimarie. I had two small children: a newborn baby boy, Myles and a two-year-old son, Maddox. At the time of Myles' birth Maddox had been diagnosed with a severe degenerative eye condition, in which he was going to lose his vision in one, if not both of his eyes. We lived in the car for the first three months of Myles newborn life. Driving from children's hospitals to hospitals all to see specialists that perhaps would give Maddox an alternative diagnosis." She continues, "Maddox had surgery after we committed to his condition and screened about 17 doctors in the tristate area. He's now a normal seven year old. I don't share these significant details to add high drama, I share the details of this story because it's the human condition to seek "normalcy" - to add balance when the shift hits the fan in life! For me, this is how Saltopia got started." However, before the surgery, because of the high chance Maddox would lose his vision forever, Kimarie and her husband Michael wanted their child to see Santa Clause in case the worse came to be. The family was invited to a Christmas party but because of all the expenses involved with Maddox's medical condition, they had no money to purchase a party gift. So Kimarie decided she would make the host some of the salts she's been making for years. Maddox got to see Santa and the party winded down. A few days later, she received a call from the party host asking where she can buy more of those salts Kimerie brought. After discovering Kimerie made them herself, she was invited to sell some at a farmers market that weekend and she took her up on the offer. She sold out that weekend and this sparked a new business which is now doing over 3 million in sales in their new 11,000 square foot facility. Saltopia may have grown substantially but their goal has remained unchanged, to make sure customers always have a clean and healthy meal.

Recently Saltopia implemented new automation technology to streamline bottle filling and labeling. They started in farmers markets to receiving national exposure through QVC and their eCommerce platforms. The eCommerce technology they utilize handles the backend sales and ordering. Billing and accounting is cross checked on the platform and all handled nearly autonomously. There are no C level people to handle these unique businesses units so they turned to technology.



SALTOPIA
INFUSED SEA SALTS



Manufacturer of the Year: Small (50 employees or less)

Premier Compaction Systems

PCS is a multifaceted family operated company who works tirelessly to spread passion for sustainability in the surrounding community. PCS is more than just a business, it is a way of life.

www.pcs-green.com.com

Premier Compaction Systems (PCS) designs and implements waste management programs using the most efficient equipment. Their product provides a total recycling solution and eliminates the need for additional equipment and labor while saving valuable interior space. Providing the right equipment encourages tenants to recycle and leaves the building with the ability to provide a more pleasing sidewalk appearance.

PCS manufactures, installs, and services a wide range of waste handling equipment. This on its own is a perfect example of how much we have evolved from traditional waste management solutions. We have recently incorporated other machines from various manufacturers to our product line, we do not currently have the manpower to develop new models but that does not mean that our customers shouldn't have access to the equipment that matches their needs.

Our upper management staff at PCS is very involved on a day-to-day basis with lower level employees. Premier, being a family of companies, is also very family oriented in office. We are always looking for ways to further educate our employees. We have previously signed up some of our technicians to attend the NJMEP Industrial Hydraulics – Hands-on-Training.

PCS has always been detail-oriented, we take pride in how diligent our company works to assure a smooth turnaround for all our products and equipment. We have great relationships with our vendors, we always follow up and check our customer satisfaction, as well as conduct monthly meetings to speak as a united company on any improvements that can be made.

To conclude, it is an honor to be considered for Manufacturer of the Year. We hope you can learn more about our company online at www.pcs-green.com to see the extent of how far our work goes in the waste management industry. The owner of our company, Robert Frustaci, was very ecstatic to be a finalist for the 2016 Manufacturing awards and I know it will be a great achievement to receive any sort of recognition this year.



Manufacturer of the Year: Small (50 employees or less)



eMachineShop

At eMachineShop, we look at everything through the lens of “Process Improvement.” Asking questions such as “Is there another machine that can do this faster or more cost-effectively?”

www.emachineshop.com

eMachineShop pioneered virtual manufacturing in 2003 when we released free CAD software with built-in costing and ordering functionality. Widely recognized as the world’s first online machine shop, eMachineShop gives customers access to a full-service CNC manufacturing facility from the comfort of their home and office.

Our software-focused business model helps differentiate us from and keeps us one step ahead of the competition. eMachineShop CAD enables users to create and purchase parts without ever leaving the software. Customers download our free CAD software, design their parts, use the built-in manufacturability checking tool, click for a price, and order. We offer video tutorials and a software help guide so that both beginners and experienced CAD users can quickly get comfortable using eMachineShop.

Recently, we have been expanding efforts to culture STEAM programs throughout New Jersey and the world, and have had the pleasure of working on creative youth education projects with organizations including NJ Maker’s Day, the Ramapo College Sculpture Department, The Hudson School in Hoboken, and an all-girls F1 in Schools team from Singapore.

Our company motto is “Process Improvement”; we work hard to streamline both internal processes and improve the capabilities of our CAD software to make designing and ordering custom parts as fast and easy as technology will allow. At eMachineShop, we look at everything through the lens of “Process Improvement.” Asking questions such as “Is there another machine that can do this faster or more cost-effectively?” and, “Is there a feature we can add to our CAD software to make it easier for beginners, or more powerful for experienced engineers?” Among other methods, we rely heavily on listening to our customers, cross-departmental collaboration, and technology to improve our internal operations, manufacturing quality, and the accessibility of our software.

eMachineShop follows the latest trends in CNC machining to ensure that our customers have access to the manufacturing industry’s latest technology. We’ve recently invested in improving and expanding our machining services with equipment purchases and upgrades ranging from CNC mills and lathes to 3D printers and laser marking equipment. When new machining technology comes to market, our team is quick to research and test whether it can improve our service offering, speed, quality, and pricing.



Manufacturer of the Year: Small (50 employees or less)



Novembal

Our recruitment guides are based on inclusiveness, and all our plants including Edison’s, focus on providing a safe and stable working environment condition for its employees

www.novembal.com/en

Novembal consists of diverse nationalities and is committed to the personal and professional development of all its employees. Our recruitment guides are based on inclusiveness, and all our plants including Edison’s, focus on providing a safe and stable working environment condition for its employees. Novembal immerses their employees in the World Class Manufacturing (WCM) field of Continuous Improvement; driving our employees to procure Manufacturing’s HIGHEST certification-The Japan Institute of Plant Maintenance (JIPM) Award. Our ambition is to apply for this coveted award in 2020. We also encourage all of our employees to strive for excellence in their positions by learning new and challenging skills and processes.

- Each employee is a valuable asset to Novembal, and their contribution to the company is what sets us apart from other comparable facilities.
- Novembal’s objective is to put Edison’s name at the top, by demonstrating to our customers at both the national and international levels, the quality of local manufacturing capabilities. The Edison location, strengthens our presence on the East Coast, and we recognize it as a key strategic location for the development of our business due to its proximity to our main customers facilities for the distribution and delivery of our products.
- Overall, Novembal produces billions of caps per year. The next time you drink from a PET bottle, we are proud that it was more than likely to be capped with a Novembal closure, possibly produced in Edison.
- Novembal is committed to an environmentally sound and sustainable business. We have a long-term view on the overall life cycle of our products and work to reduce CO2 emissions through:
 - Decreasing plastic material consumption – lightening of our products and waste reduction;
 - Decreasing energy consumption by using the most efficient injection processes.
 - Optimizing packaging and transport.
- In addition, the plant is certified ISO 9001, ISO 14001, FSSC 22000, OSHAS 18001



NOVEMBAL

Manufacturer of the Year: Small (50 employees or less)



Roben

The company has been in the same family for three generations and have been able to triumph over adversity by working together. This past year has been the most profitable in the companies history.

www.robentmfg.com

Roben Manufacturing is the ultimate comeback story. The company has been in the same family for three generations and have been able to triumph over adversity by working together. This past year has been the most profitable in the companies history. In November 2017, they were nearly ready to close their doors - now they are thriving. In 2015, there were no controls in place and once key leadership stepped down, business began to plummet. The son of the latest owner worked together with his father to get the company moving back in the right direction. Together they worked to locate inefficient and ineffective leadership and address the severe issues that were caused by these individuals. Now the company is thriving and once again the owner is able to take a few steps back from the company, moving toward retirement, as his son keeps a close and careful eye on the company.

There is a focus on four specific areas of their business. Operation & production management, accounting and finance, supply chain development, and sales & marketing are being completely revamped. Roben Manufacturing is looking toward the future, working to create scalable processes to create an environment that will allow the business to grow. It is an extraordinarily tedious process but management sees it as absolutely necessary. As a result of these efforts, the company experienced the best, most profitable year in the company's history. They have been able to rebuild supplier relationships, by being completely transparent with their partners during their hard times. By doing this, they avoided any litigations with their suppliers. The company has more than doubled sales this year with a third less people.

New technology plays a critical role in Roben Manufacturing continuous improvement plans. A new time tracking system has been implemented to replace the old-school punch card. The completely revamped accounting system is connected with this new time tracking system, which utilizes facial recognition technology to avoid "buddy punching". This new punch-in system is run off of new tablets, found throughout the facility. In order to clock in, employees need to input their tasks they plan to accomplish for the day. To clock out, employees input the tasks that were accomplished. All of these systems link directly to their payroll system to cut down manual processes and the company has seen a dramatic improvement.



Manufacturer of the Year: Medium (between 51 and 250)



Asbury Carbons

25% of the business is employee owned, the rest is owned by the original family. Being an employee owned company gives the workforce a vested interest its performance.

www.asbury.com

Asbury Carbons has been in existence for over 125 years. The 4th generation is now leading the company as they continue to drive Asbury Carbons forward. Asbury provides engineering solutions for customers that are transforming the world. 25% of the business is employee owned, the rest is owned by the original family. Being an employee owned company gives the workforce a vested interest in the performance of the company.

Currently, the company is working on becoming data-driven. They're working to better capture data and use this information to inform budgeting and forecasting. Implementing predictive analytics allows them to run the business more efficiently and effectively. From raw materials to cash flow, data is going to be playing an intriguing role in decision making. Along with data, planning is incredibly important to leadership. They have just completed their 3rd year in their 5-year strategic plan. There is a continued effort to keep their people engaged and working toward this plan. The 5-year strategic plan wasn't just created and forgotten, it is often referred to, referenced, and updated as the company moves forward.

Core values revolve around employees and their customers. Health & safety – they value health, safety and the well being of all people they engage with both inside and outside their organization; People are key – they value and support an inclusive, engaged, diverse network of people inside and outside of their organization, capable of fulfilling Asbury's mission; Integrity – they are objective, ethical, honest and candid; Customer Focused – they strive to anticipate the needs of their customers; Excellence – they aspire for world class performance and continuous improvement in all that they do.

There is a focus on putting people into positions that enable them to succeed and give employees the opportunity to learn. They want their people to be successful and creative. Leadership takes a bottom up approach and does not use a command / control structure. Input is taken from the shop floor and implemented upwards throughout the organization. Management and leadership also put a large effort into clearly stating the goals of the company to all those that work with Asbury Carbons.



Manufacturer of the Year: Medium (between 51 and 250)



Puratos

Puratos invest in their local area and recently allotted \$10 million dollars in an innovation hub located right across the street from their manufacturing facility.

www.puratos.com

Puratos has been in South New Jersey for more than 30 years. The brand may not be recognizable because of the B2B nature of the business but it is considered a “hidden secret” in the food sector. Over these 30 years the company has experienced tremendous growth in both revenue and its workforce. They invest in their local area and recently allotted \$10 million dollars in an innovation hub located right across the street from their manufacturing facility. All innovation centers and distribution centers are located near their South Jersey facility. They want to create a sense of being on a campus, rather than working in an industrial park. They tout having one of the most state-of-the-art manufacturing sites in the United States for their sector. Puratos prides itself on its employee benefits and its union’s competitive compensation. They turn to NJMEP for training and work tremendously hard at creating a team culture to keep morale high. Team building events are commonplace at Puratos.

A majority of Puratos operation relies on human/machine interface. The entire facility is extremely high-tech. Employees are trained on human/machine interface in order to properly work the machinery. Line workers are using computers on the shop floor to keep track of the manufacturing process as well as for updating and referring to the ERP system which keeps track of their raw materials in and finished goods out. A TMS is also used to track their transportation of finished goods. A quality management system has been implemented to keep quality testing in house and they recently invested \$1 million into this quality testing operation.

All of these operations and continuous improvement efforts resulted in a 96% compliance rating in their recent SQF audit and 0 for non-conformances. There is complete buy-in from employees on all technology and the workforce enjoys the clean working environment Puratos has cultivated. They eliminated the manual labor needed from their manufacturing processes which received positive feedback from employees.

Leadership prioritizes recognizing employees and celebrating their achievements. They are approaching 1230 days without a lost time incident. They use company picnics and giveaways with a heavy focus on recognition so employees know that their work is appreciated. Simple gestures like an Ice Truck that is free of charge to employees was provided during the most recent heat wave, and offering employees products that were baked in their test quality lab instead of throwing them away is common practice.



Manufacturer of the Year: Medium (between 51 and 250)



Compass Wire Cloth

Workers state that it feels much more like a family rather than a group of co-workers. 42% of employees have been with the company for 10 years or more.

www.compasswire.com

After a recently conducted stay interview with their employees the company found that most employees feel engaged. Workers made mention that this is due to the friendly atmosphere and stated it feels much more like a family rather than a group of co-workers. 42% of their employees have been with the company for 10 years or more. Compass Wire is a Lean manufacturing company and is ISO 9001:2015 certified. This has helped them in meeting 98% of all purchase order requirements.

Turnaround time can be anywhere between 2 or 3 days where their competition can only promise a 2-3 weeks. This is able to be achieved because turnaround time has been made a priority. Many of their customers come to Compass Wire because they were unsatisfied with a competitor and when Compass Wire is able to turnaround their order in 2-3 days, they capture this client and begin a strong relationship.

Their fabrication shop is made up of individuals with many years of experience. These fabricators can convert a sketch or blueprint into reality and only need a relatively short amount of time.

A new ERP system has just been implemented. This new system is able to track efficiency and waste in ways that were never before possible. New machines have been added to the production process. Specifically, a heat bar is now used and it was found that it is able to cut production time down by 75% for some products. This has more than doubled their capacity. The new equipment has made them faster and more efficient. A third shift has been added, further increasing their capacity.

An employee engagement survey is conducted every 2 or 3 years. The work is labor intensive so they want to make sure all employees are being engaged. Their philosophy is “Pay for Performance and Train, Train, Train.” Both the shop and office employees undergo training each year. Between all 70 employees, 68 hours of training must take place each month. Cross-training is also a critical aspect of this training focus.

Management believes in sharing the wealth. There are quarterly performance bonuses, profit sharing opportunities, a Christmas bonus, and Christmas in July bonus. Goals are set by management and these trickle down to every level of the workforce. As these goals are handed down, they are turned into tactical plans so everyone has a plan and knows what they must do in order to achieve these goals. A 5 year plan has been developed and they work with outside consultants to ensure this plan is aligned for future years.





Manufacturer of the Year: Medium (between 51 and 250)

TAKARA

Over the past two years TBUSA has invested heavily into their employees and manufacturing processes to ensure a stable and high achieving workforce.

www.takarabelmont.com

Takara Belmont is committed to their people, quality, and the customer. Over the past two years TBUSA has invested heavily into their employees and manufacturing processes to ensure a stable and high achieving workforce. They have taken advantage of NJMEP grant programs and successfully achieved their ISO9001 certifications with zero findings upon certification. They are constantly working to improve their daily processes and procedures in order to deliver a quality product every time. Their unique customer base and obsession with quality allowed them to become an industry leader.

For the first time TBUSA will support Takara Belmont Japan as they build infrastructure here in the US. The new infrastructure will be focused on bolstering the company’s quality programs and quality department. With the training grants and ISO certification, TBUSA is expected to continue to expand this program and department in the US and source locally.

There is a constant search for improvements throughout the process. The company is split between its beauty division, that manufactures high-quality salon chairs, and its medical division, that manufactures dentist chairs. Each division takes the same approach to quality and each make use of a unique process. However, the custom nature of their work, and culture of employee individuality creates an environment where improvements must come from within. TBUSA used NJMEP for lean resources, inner office and customer service resources, but still encouraged employees to use the processes that makes the best sense to them. This unique approach to continuous improvement and operational processes has both improved and helped streamline their facility and manufacturing process. The customer service department, administrative office, and manufacturing process have all experienced gradual changes with the goal of improving everyone’s day-to-day work while still maintaining quality and delivering an exceptional product reliability.

Much of the process improvements are “old-school”. An in-depth onboarding and training process as well as employee customized tools work to keep manufacturing knowledge alive and make the manual input more efficient and effective. The introduction of a bar coding system, computer interfaces, and project time tracking offer their craftspeople the ability to more accurately time procedures and estimate lead times as well as shipping dates. TBUSA encourages employees to take their time on their work, since the manufacturing process requires a great deal of skill.



Manufacturer of the Year: Medium/Manufacturing Cares

Broadway Industries

With over a dozen awarded patents and over twenty other patent pending applications, Broadway continues to invest heavily in research & development activities.

www.broadwayind.com

Broadway Industries, an award-winning innovator, makes protective packaging for the moving & storage, home improvement, healthcare, food service, grocery and textile industries. The company, a recipient of over twenty industry awards, recently won two more (Best Manufacturer and Best New Product) at the June 2019 Healthcare Distribution Alliance’s annual conference. The company’s past awards also include ones for Supply Chain Quality, Customer Service, and Trade Rep of the Year.

Broadway prides itself on continuous product innovation. With over a dozen awarded patents (including two more this past Spring) and over twenty other patent pending applications, the company continues to invest heavily in research & development activities.

Broadway supplies pharmacy bags to national and regional drug wholesalers that service over 90% of the 22,000 independent pharmacies in the U.S. Available in branded or private label options, printed paper and plastic bags from Broadway do more than carry and protect product—they also help Broadway clients promote their brand image and convey important additional messaging. Broadway’s patent pending, award-winning pharmacy bag marketing program promotes awareness of different disease states. The company donates a portion of these “awareness” bag sales towards research to find a cure for different diseases. Since the start of the program, Broadway Industries has donated tens of thousands of dollars to charities that help fight breast cancer, diabetes, heart disease and skin cancer. With marketing programs like these, custom designs, patented rack systems and eco-friendly options, the Broadway team continuously delivers innovative new products to the healthcare industry that helps set the company’s customers apart from their competition.

Since Broadway also supplies branded and private label packing solutions to help its customers move, organize, store and protect. The company’s mattress bags, packing paper and stretch wrap can be found at major national moving & storage facilities and at hardware & home improvement centers. With patented and patent-pending products, including many eco-friendly options, the Broadway team continuously introduces new packing and storage solutions that helps set the company’s products apart from its competitors.

Broadway’s focus on high quality manufacturing standards, along with the strategic partnerships it forges with its customers helps its customers to continue to hold onto a leadership position in their industries. The Broadway Industries team is dedicated to serving with integrity and responsiveness, so its customers can succeed and grow.



Manufacturer of the Year: Medium (between 51 and 250)



Saint Gobain

Saint Gobain's global manager works with entities around the world to help diversify suppliers for raw materials and avoid new tariffs.

www.saint-gobain.com/en

Saint Gobain is taking best practices from theory to reality. By reevaluating their approach to management, implementing revolutionary technologies, and investing in their workforce, they have positioned themselves as an industry leader. Employees can self-regulate but are still held accountable by using the company's PCS system. The company takes best practices seriously and actively works to improve their facility from the ground up as well as from the top down.

Saint Gobain developed their own continuous improvement system to help reduce the amount of paperwork usually involved with a continuous improvement initiative and instead, allows the entire company to get hands-on to increase efficiency and productivity. With their PCS system they capture losses, safety issues and quality issues. It can monitor equipment and provides leadership with a complete 360 degree view of the business each day.

There's a circular approach to management at Saint Gobain. Leadership listens to the individuals on the shop floor and takes what they have to say about the company to heart. With their PCS system, employees can essentially manage themselves while still being held accountable. Instead of using outside contractors for painting, landscaping, and other odd jobs, Saint Gobain first asks its employees if anyone wants to take on these responsibilities to make some extra income. This makes their employees happy, improves morale, while also creating more pride in their facility. Employees will go out of their way to ensure a freshly painted wall doesn't get damaged or the landscaping stays well maintained. Saint Gobain is also a large proponent of the 5S's as well.

Investing in the workforce is a top priority for Saint Gobain. Currently there are 5 Saint Gobain employees participating in NJMEP's Registered Apprenticeship program. These employees are part of the Industrial Manufacturing Production Technician class to expand their skills and give them the education to advance their careers within Saint Gobain. The company has reevaluated hiring standards as well. They are willing to take kids right out of high school and invest in training for their area of work. The training takes about 90 days to complete and from this, Saint Gobain is now fully staffed and has seen a massive improvement in onboarding speed.



Manufacturer of the Year: Large (251 employees or more)



Thorlabs

Thorlabs has a thriving comprehensive ecosystem (i.e., design, manufacturing, assembly, sales, and support) capable of responding rapidly to our customers' needs.

www.thorlabs.com

Since its inception 30 years ago, manufacturing has played a critical role in Thorlabs' culture and business model. As a result, Thorlabs has a thriving comprehensive ecosystem (i.e., design, manufacturing, assembly, sales, and support) capable of responding rapidly to our customers' needs. Within that global ecosystem, New Jersey is home to six of Thorlabs' manufacturing business units, which together produce over half of all Thorlabs' products and services.

The growth and development of manufacturing in NJ is something that Thorlabs has excelled at year in and year out for its entire existence. Each year, millions of dollars are spent growing Thorlabs' infrastructure here in NJ. For instance, in the preceding 12 months, Thorlabs' machine shop has accepted delivery of 10 new machines, bringing our total CNC capabilities up to 55 spindles. Over the last few years, the optics business unit has doubled its CNC optics fabrication capacity, and presently, our fiber business unit is in the process of expanding its manufacturing footprint in order to accommodate the rapid growth of its markets. In addition, in the past 10 years, Thorlabs has purchased two separate companies (in Canada and Arizona) and relocated those manufacturing resources to NJ. Thorlabs provides workforce training internally. A recent investment into a learning management system and effort toward putting the training modules online has proved to be extremely helpful. These training modules are available to all employees, with the ability for both managers and employees to track progress throughout each step of the training.

In addition to training their own workforce, Thorlabs is also working closely with SCCC (Sussex County Community College) to support their machine tool operation. Thorlabs' machinists became adjunct professors. Along with support from SCCC, students of the community college are invited to Thorlabs' facility to get hands-on training with state-of-the-art machine tools. Students of the program are often hired as interns during their second semester, and some have gone on to work for Thorlabs full time. Presently, SCCC is in the processes of jumpstarting an optics manufacturing curriculum as well, and Thorlabs is assisting in the creation of the curriculum along with providing adjunct professors.

Thorlabs has been using an ERP system, Microsoft Dynamics, since 2003 to keep its supply chain and manufacturing processes coordinated. Production, planning, purchasing, manufacturing, sales, customer service, inventory, among others are all monitored and tracked through the ERP system. Each business unit is responsible for purchasing, planning, and production through finished goods inventory, which allows for customization of our processes while continuing to use a central ERP platform.



Manufacturer of the Year: Large (251 employees or more)



Phillips

Phillips practices lean manufacturing, are currently designing the layout of their facility, and continue purchasing state-of-the-art technology to increase production with the same amount of people.

www.phillipsmedicraft.com

In 1967, a young machinist saw his boss throw out an old Hardinge to curb. He asked if he could have it, thinking he could make a few extra bucks to support his wife and two young kids at the time. He did that and more. Francis Phillips boss gave him all the small jobs he didn't want. Francis took every single one, and using his refurbished Hardinge; he quickly gained a reputation for pristinely high-quality work, innovative ideas and delivering on-time.

With support from his wife Jeanne and her family, they were able to purchase a small building in Bergenfield, NJ. Francis learned to focus his efforts on bridging the gap between engineering ideas and manufacturing. His wife Jeanne, his first employee, worked side by side him to manage the manufacturing schedule and hands-on feeding material to their machines to keep production flowing. There small business took off, literally. Fran was asked to create parts for a NASA subcontractor who was unable to complete the work themselves. He manufactured six sets of parts; each used on individual LEMs that were sent to the moon and remain there today. This is one of Fran's proudest manufacturing moments.

Over the next 10 years and several locations later, his children Patti, John and Mike were assigned full time positions alongside their parents. Each worked their way up the ranks bringing their specialized skills to the business. Today, their eldest Patti is PPMs Controller, John is President of the Implant and Instrumentation business, and their youngest Michael is President of the Delivery Systems business.

Thirty years and more than 289 employees later Phillips Precision Medicraft is today a leading OEM manufacturer and maintains three large manufacturing locations in Elmwood Park, NJ.

2019 marks 50 years in manufacturing for the world's largest OEM partners, and only one thing has never changed. Their commitment to bridging the gap between engineering ideas and manufacturing to produce the highest quality products and improving the health, wellbeing, and mobility of people the world over.

Phillips is committed to improving their operations for both management and their employees. The current owner is incredibly supportive of their staff and is willing to invest in the latest production technology to allow their workforce to perform their job as efficiently and accurately as possible. They practice lean manufacturing, and are currently redesigning the layout of their facility and continue purchasing state-of-the-art technology to increase production with the same amount of people.



Manufacturer of the Year: Large (251 employees or more)



CompoSecure

Composecure can mix specialized materials at scale which competitors cannot, having the ability to fill orders of 1000 to a million.

www.composecure.com

Composecure manufacturers premium payment metal cards like Visa and American Express credit cards. They have positioned themselves as a leader in the sector, becoming the largest metal card manufacturer in the world. They stand out from the competition by focusing on premium metal payment cards whereas their competitors primarily focus on the standard's plastic payment cards. Servicing the world's top banks, all their manufacturing facilities are in New Jersey but ship product globally. Materials science and research & development is a large part of what makes Composecure unique. They hold the IP on products they manufacture and bring together professionals and engineers from the traditional card manufacturing sector as well as engineers and R&D specialists from other industries. Encouraging collaboration, having perspectives from both people inside and outside of the industry has proven extremely beneficial. Composecure can mix specialized materials at scale which competitors cannot, having the ability to fill orders of 1000 to a million. This company is also a one-stop-shop for customers, providing clients with access to world-class R&D, customized graphics, production, and creative services, all in one place.

Composecure makes it a priority to keep an eye on the competition and stay one step ahead. They are expanding but instead of purchasing more manufacturing facilities, they are hard at work improving efficiencies and processes to increase production and make more effective use of the space at their current facilities. Nearly none of Composecure's machinery is used right out of the box. Instead, they make modifications to improve their equipment's efficiency and capabilities. Working vigorously to leverage efficiency to increase throughput and use lean manufacturing strategies to cut down on waste. They are never content with lean as it stands and believe in the ideology that there are always new ways to improve. A Six Sigma Black Belt and a Six Sigma Yellow belt are on staff and the company relies on these employee's expertise to help with continuous improvement.

Becoming ISO 9001 and PCI certified, has also helped tremendously in maintaining accurate documentation and expanding their client base. All of Composecure's efforts toward how they run the business is centered around the idea of offering customers the best quality product, highest quality service, and creating an environment that encourages continuous improvement.



Manufacturer of the Year: Large (251 employees or more)



Bruker OST LLC

Bruker wants to become better than their competitors by embracing lean six sigma and pushing that culture down the line

www.bruker.com

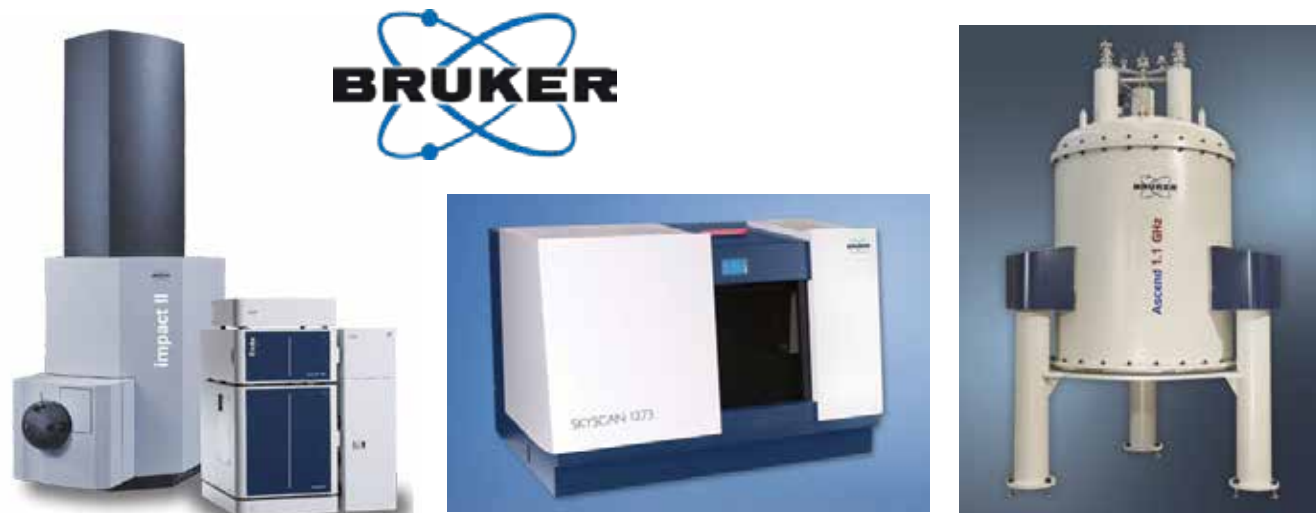
Bruker OST LLC. is working vigorously to give their business a competitive edge over their competition. They manufacture wire used to create the magnets in MRI machines. This wire is as thin as a human hair and designed to not conduct heat, requiring an extremely accurate quality control process. To ensure production runs as smooth as possible, Bruker practices 6S Lean with the 6th 'S' standing for safety. Additionally, the company invests in their workforce. Currently, Bruker is participating in the NJMEP Pro-Action Education Network™ Registered Apprenticeship program as well as reaching out to neighboring schools to help promote manufacturing as a career path. All these attributes combine to create a business that is looking internally to uncover inefficiencies and address them as they are identified. Furthermore, they are looking forward, tackling the skills gap before it puts any additional pressure on their business by up-skilling their incumbents through an apprenticeship program while at the same time breaking down the negative stigma associated with manufacturing by reaching out to schools and high-school students.

Bruker wants to become better than their competitors by embracing lean six sigma and pushing that culture down the line – joining the NJMEP Registered Apprentice program – working with high schools / community colleges – looking internally to continue developing talents.

To continuously improve they practice 6S Lean with the 6th 'S' standing for safety. Manufacturing the wire that is used in the magnets found in MRI machines requires precision and exemplary quality control. Bruker is also participating in the NJMEP's registered apprenticeship program to up-skill their workforce, working to create an even more efficient and effective manufacturing operation.

Bruker embraces every aspect of Lean manufacturing. There is a focus on agile project management to cut down on bottle necks and keep production moving forward. Management also believes strongly in workforce training to give their employees the skills and knowledge they need to succeed in their current role as well as grow professionally.

Bruker pays a considerable amount of attention to workforce development. Not only are they supporting their current employees through NJMEP's registered apprenticeship program they are also reaching out to neighboring schools to help promote manufacturing as a career path. This shows that they are not only reacting to the current skills gap but looking toward the future by creating a talent pool that will be waiting to join up with Bruker once they graduate high school.



Manufacturer of the Year: Large (251 employees or more)



All American Poly

All American Poly is actively seeking to diversify its workforce as they search for new perspectives both on the shop floor as well as in management.

www.allamericanpoly.com

The privately held All American Poly employs over 250 in their New Jersey plant. They have facilities in GA and Arkansas but ensure their company stays connected through an internal newsletter. The company is a strong practitioner of continuous improvement in nearly all layers of the business. From operations to workforce development, they are able and willing to explore ways to improve. On the operations side, they take their internal audits extremely seriously. They conduct their own SWOT analysis and actively work on ways to turn their identified weaknesses into strengths. Management has begun to look at succession planning to avoid any serious disruptions down the line. All American Poly also sees the value in connecting with their employees and learning from them about pain points the company is experiencing. They put a lot of weight into what their employees have to say and pay attention to the information coming from the shop floor. On top of all these areas, workforce development plays a major role throughout All American Poly. They invest in their workforce to cultivate the right skills while encouraging professional growth. Additionally, All American Poly takes workforce diversity extremely seriously. Right now, they are actively seeking to diversify their workforce as they search for new perspectives both on the shop floor as well as in management.

They take their internal audits seriously, focusing on their strengths and weaknesses. They explore ways to take these weaknesses and turn them into strengths. All American Poly isn't satisfied with standing still. Instead, they continuously push to improve their processes.

Beginning to seriously look at succession planning. All American Poly is constantly looking toward the future so when current management departs, the company will have a plan to move forward. They understand the value of their employees and how their livelihood depends on All American Poly's success. Leadership is creating a plan to ensure all their employees can continue to depend on the company, even after management retires. All American Poly believes in their employees and pays attention to what they have to say. Employees value the culture and relayed to NJMEP it's a wonderful work environment.

They believe in training their employees and investing in them. All American Poly takes the time to train their employees, cultivating the right skills and encourages professional growth. Diversity is also a major focus of All American Poly. They are actively seeking to diversify their workforce to bring new perspectives to the shop floor as well as in management.



Manufacturer of the Year: Innovator of the Year



Catbridge Machinery

Catbridge's highly qualified engineers combine decades of experience in the converting machine industry with the latest computer-assisted design and manufacturing technologies.

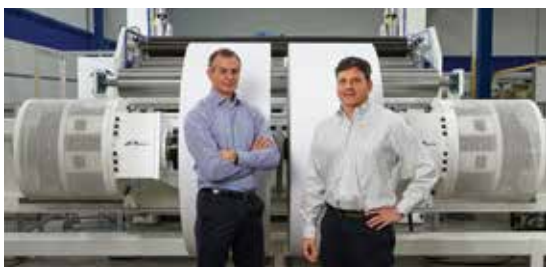
www.catbridge.com

Catbridge Machinery has been serving the web converting industry for 25 years and has brought precision engineering and expert machine building to a new level. Using an innovative, customer-centric approach to design and engineering, Catbridge emerged as the leader in state-of-the-art web converting solutions. What makes Catbridge different is their commitment to customized solutions to meet the customer's needs. Unlike many of its competitors, Catbridge Machinery conceptualizes, engineers, builds, programs, calibrates and tunes every piece of equipment they sell, with customer input playing a role throughout.

Catbridge's highly qualified engineers combine decades of experience in the converting machine industry with the latest computer-assisted design and manufacturing technologies to create the best converting machine design solution for its customers. President, Michael Pappas and Vice President, William Christman, bring an unmatched passion and decades of experience to the web converting industry. Catbridge Machinery's greatest strength is the ability to create unique products and applications.

Catbridge has coupled the technological advancements from the microprocessor and computer industries for use in industrial applications. Much of the technology was originally automotive, but Catbridge took the same technology and applied it in their equipment. The technology became much more readily available and much more cost-effective. Technology is the thing that has always thrilled Michael and William. When a new product or technology becomes available, Catbridge engineers immediately find ways to incorporate new capabilities to improve speed, capacity and throughput. The goal for Catbridge is to get the best out of the technology for their customers as well as continue to hone their own internal operations.

Having nearly doubled in size over the past five years, Catbridge continues to create an environment where everyone can do their best to be innovative, efficient, productive and meet the customers' needs. As the company grows, so too has its facility. Catbridge recently expanded to an 80,000 square foot facility where it designs, builds and assembles their machinery. Catbridge also maintained a consistent year-over-year growth in customer base and overall sales. All of this growth has meant implementing new layers of management, a clear chain of command, and an organizational chart so that roles are defined and employees are empowered to make their own decisions, set goals for themselves and their team members, and identify when those goals have been met.



Manufacturer of the Year: Innovator of the Year

Westlock Controls

For years Westlock has maintained an accident-free work environment, and been the recipient of the New Jersey Governor's Award for Safety for the past 8 consecutive years.

www.westlockcontrols.com

For more than 30 years, Westlock Controls has been the global leader in providing innovative solutions for networking, monitoring, and controlling of process valves. We literally invented the industry with the introduction of the Switchbox. Over the years our products have evolved from simple valve monitoring solutions to systems that control process valves, provide feedback, perform diagnostics, etc. Our product portfolio includes solutions for various network protocols and products with wireless capabilities.

Westlock Controls distinguishes itself not only with the innovative products that we supply but also with the quality and reliability of our products, our level of Customer Service, and how we develop and protect our people.

For years we have maintained an accident-free work environment, and have been a recipient of the New Jersey Governor's Award for Safety for the past 8 consecutive years. Our site has been OSHA VPP Certified since 2010! We have even mentored other companies in obtaining their own OSHA VPP Certifications!

Westlock's On-time Delivery has been 99% or better for the past quarter, and above 95% for at least 3 years! Our rejected parts per million (PPM) level stands at less than 500, and the majority of our leadership team—General Manager, Plant Manager, Engineering Manager, Safety Manager, Customer Service Manager, Purchasing Manager, Quality Supervisor, Production and Value Stream Leader—were promoted through the ranks!

Westlock uses the Key Performance Indicators of Safety, Quality, Delivery, Cost and Cash (SQDCC) to measure our effectiveness and continue to grow every day. We plan to continue our legacy in New Jersey by providing exceptional service, quality products, reliability, and a place that our employees are proud to come to work every day.

At Westlock Controls, we believe that Managers win or lose at the Gemba—the place where value is created, where we meet or exceed the expectations of our customers: the Production floor. For this reason we are very production-centric, which means we take seriously what happens there, and engage our entire team in identifying and eliminating waste.

Every day our management team, including functional leaders and value stream personnel, come together to review the Gemba, a process we call "Gemba Walk." But for us this is more than just a walk. It is about putting our fingers on the pulse of the entire business and establishing priorities to address problems daily. Are we winning or losing? Are we delivering customer value? In addition to running the business, are we also improving it? We focus on SQDCC at all levels, began by introducing Continuous Improvement in Production then expanded into Receiving, Shipping, Customer Service, and Engineering.



Manufacturer of the Year: Innovator of the Year



iNTECH

This small manufacturer is constantly innovating in order to give their customers newly engineered components that cut down on maintenance and down time.

www.intechpower.com

Intech Power Core Inc. specializes in the design and manufacturing of non-lubricated, light weight machine components like gears and rollers. To achieve their desired results, they manufacture these products out of Intech Power-Core™ and other engineered plastics. Intech is on the cutting edge of innovation as they continue to push the boundaries of material science, engineering, and design. They recently began exploring self-lubricating coatings to allow components to withstand high forces and temperatures with the aim of producing machine components that run maintenance free at higher speeds, leading to a reduction in downtime. This small manufacturer is constantly innovating in order to give their customers newly engineered components that cut down on maintenance and down time.

Intech is constantly looking for new ways to improve mechanical components using plastics. Thermoplastic polymers and engineered polymers like Power-Core™ are developed and manufactured by Intech Power-Core. The company's small size allows them to work alongside their clients in order to become an extension of their clients in-house engineering team. Intech Power Core makes it a point to offer the best engineered part first, and then will work with the client to see if they can create the ideal part within their budget. They work to give customers a competitive advantage by developing the best possible components and over the long-term, most of their components end up saving the customer money.

Management sees the North Jersey manufacturing industry as a community all working toward the same goal, offering customers the best products possible. When working with a client to meet their needs, whether that's a replacement part or a newly engineered machine components and if the job requires additional machining or engineering input, they first turn to other North Jersey manufacturers for assistance. Intech is focused on innovation and collaboration. Collaboration cannot happen inside a vacuum so there is a considerable amount of effort put into collaborating with local manufacturers and the clients.

Intech enrolled in the ISO program with NJMEP. Besides the added advantage of being able to bid on contracts that require ISO compliance, it has also helped with record keeping, creating a much more transparent supply chain. They are located near the port of Elizabeth for easy global exporting. Intech utilizes a strong pool of local vendors to source raw materials. ISO documentation, inventory tracking and production scheduling software along with a heavily utilized ERP system gives them the ability to maintain a strong handle on their complex global supply chain.



Manufacturer of the Year: Manufacturing Cares



Calandra's

Calandra's hire local, donate to the Fairfield Fighter Fireworks event, Caldwell Fair, and focus on local charities

www.calandrasbakery.com

Calandra's has been family owned and operated since 1962. They opened up their first location in Newark after the original owner immigrated from Italy. Since their inception, Calandra's grew from one bakery to three bakeries and even expanded to the hospitality field. There are 700 employees that make Calandra's bread by hand. The manufacturing process is the people. Only 4 ingredients go into the product with no added preservatives to maintain quality. The company is committed to their local community and their origins. At the Newark location, over 50% of employees are Newark residents. Their bread can be found in all local supermarkets and giving back to their community is a pillar of the company. They hire local, donate to the Fairfield Fighter Fireworks event, Caldwell Fair, and focus on local charities.

Operations are constantly evolving. Retention is incredible at Calandra's. Some employees have been working with the company for 5, 10, or 15 years. These experienced employees train all new hires individually to keep the process consistent and quality high. Recently, Calandra's went through a 3rd party certification process to standardize their recipes and cleaning process. Before the 3rd party certification, these processes were largely maintained through legacy knowledge. With this new certification, everything is now logged, organized, and standardized through documentation. In the 60's they were just making bread, but now they've expanded to supplying cakes and pastries for weddings. This was able to be achieved due to their continued drive to expand and became sustainable thanks to their work standardizing each unique process. The Caldwell facility is the only facility currently 3rd party certified, and they are now looking to get their Newark facility 3rd party certified, too.

Calandra's recently expanded to include a marketing team. Through this, they created new partnerships to become the official bakery of multiple NJ sports teams. Along with these partnerships, the marketing team has been able to greatly expand the social media presence of Calandra's which had a large impact on the bakeries brand presence on a national level.

Employees, management, and owners are truly friends and family. An example was given; the owners had a personal family 4th of July party and half the party ended up being Calandra employees. Calandra's held a holiday party and over 300 employees attended. At least twice a year, ownership hosts a party specifically for employees but personal family parties end up turning into Calandra employee parties.



Manufacturer of the Year: Manufacturing Cares



Absolute Green

Absolute Green does more than manufacture, they do community outreach, host breakfasts and educational seminars, work with the universities, non-for-profits and local towns.

www.myabsolutegreen.com

Absolute Green started as a result of chemical sensitivities. Our commitment to 100% natural products is unwavering. We employ students, military, handicapped as well as work with the Rutgers Business and Entrepreneurial School employing interns to learn and jumpstart their careers. Everyone pitches in to get orders out, there are no chiefs when a big run is happening. Absolute Green does more than manufacture, we do community outreach, hosting breakfasts and educational seminars, working with the University, non-for-profits and local towns.

Absolute Green was created based upon a very strong Sustainability stance. We don't waiver from what's natural and the best for our planet, people and pets. We just passed our Green Seal Audit for Whole Food and we are also PETA endorsed for CRUELTY FREE & VEGAN.

Absolute Green began mixing in the kitchen sink. Today we are in Whole Foods, TJMaxx, Marshalls, Home Goods, other nationwide retailers and a significant online presence with Amazon and our own e commerce site. (2 other big chains are coming onboard Fall 2019) We are in Distribution with UNFI (nationwide) and ship out the rest ourselves. All products shipped to NJ residents get a label on the box saying "MADE IN JERSEY!" We are proud to work and live here.

We add technology as needed. Our manufacturing is about 98% closed loop with very little waste. LOCAL sourcing and sustainable practices in place. All of our ingredients have proof of origin - natural plant based ingredients and our plastic bottles can be recycled. We just passed a Green Seal Audit in good standing. Some examples of our Green mindset are: cloth hand towels, biodegradable packing peanuts made from starch, water cooler over single use plastics, box reuse and recycling whatever we can.

WE are LOCAL and Made in New Jersey. Every box that goes out to a NJ resident gets one of these stickers. We feel our customers should know we are proud to live, work and manufacture here. They should be proud of that too!

Inventory management is on spreadsheets. We know 80% of our vendors, sourcing LOCAL whenever possible.

Our Philanthropic mission is to support real NJ organizations who roll up their sleeves, make <https://healingus.org/> This is a recovery organization for people battling Opioid addiction. Opioid effect all demographics across our state. I'm sure everyone in our group knows the loss of a person to this awful addiction.

Absolute Green started donating to Soul Kitchen in Red Bank over 4 years ago. The restaurant is based upon the premise that no one should be food insecure. Its a "Pay it Forward" situation. If you can afford to pay, leave extra to buy a meal for someone else. If you can't pay, volunteer a shift...



Manufacturer of the Year: Manufacturing Cares

Mariano Press, LLC

Every \$20 spent with us generates 1 meal for a food insecure American with donations to Feeding America.

www.marianopress.com

We're a not-only-for profit commercial printer who manufactures in Somerset NJ, with clients locally and globally. Every \$20 spent with us generates 1 meal for a food insecure American with donations to Feeding America. We have 10 presses on our floor operated by craftsmen with 350+ years of combined printing experience. Our equipment can print the equivalent of 150,000 8.5x11's an hour. We're small enough to know you and big enough to get the job done.

Mariano Press, LLC is dedicated to constantly reviewing its efficiency and improving the quality of the goods and services we provide. We will stay up-to-date with industry standards, and advances in technology and technique when such advancements prove sound. Our customers deserve no less. Mariano Press, LLC will maintain and enhance our reputation in the community, as well as nationwide as a responsible business that works to offset hunger in our country. Through these commitments, we build our futures to benefit our company, our customers, ourselves, our employees, our children, and our children's children for generations to come.

Our vision is to show the world a better way to do business. We hope that this framework is copied by others and that we create ripple effects of positive change throughout the world.

We have current presses which are highly efficient and have quick change over and make-ready we have 2 million dollars worth of equipment on our floor. We continually improve with corrective actions when a job is late, goes bad, or fails our internal inspection. We're working towards becoming ISO 9001 certified, before that we had a similar system that is called System Busters which is like a light version of ISO.

We believe that our employees' input is critical to come up with the best solution since they have to actually do the work day to day, what sounds good on paper may not work in real life. In our industry there always seems to be time to redo a client imposed rushed project that is deemed unsatisfactory product, so let's just do it right the first time taking the necessary steps to ensure quality. As a general company philosophy we believe in doing the job right the first time is more important than doing a questionable rushed job.



AND THE WINNERS ARE...

Manufacturer of the Year: Start-up

Suuchi, Inc.

Manufacturer of the Year: Small

eMachine Shop

Manufacturer of the Year: Medium

Puratos

Manufacturer of the Year: Large

Thorlabs, Inc.

Innovator of the Year

Westlock Controls

Manufacturing Cares

Broadway Industries



How Can Businesses Increase Sales and Become More Sustainable?



Ben Dominguez
Innovation & Growth
Specialist, NJMEP

New Jersey small and mid-sized manufacturers are navigating an increasingly competitive business landscape. Every business unit is facing challenge after challenge, while constantly pushing forward to bring in more business. When it comes to small to mid-sized manufacturing operations, leadership is often wearing many hats. Planning, innovating, marketing, the digital transformation, there are countless business objectives to manage. Handling all these separate business goals can quickly become overwhelming. Maintaining a successful manufacturing operation today often requires leveraging the right resources and partners.

To address these challenges, NJMEP created the Business Growth Suite of services. The Suite provides manufacturers with valuable resources, expertise, and cost-effective strategies to help them grow.

Understanding Market and Competition

Having a clear and current understanding of the market and competition is critical to maintaining competitive advantages, marketing effectively, and increasing sales. Nearly every business leader knows this to be true. However, monitoring the market and keeping a close eye on the competition is much easier said than done. Achieving this can be a second full-time job. Small and mid-size manufacturers are already responsible for multiple roles within an organization and adding another task to the to-do list will prove to be unmanageable.

Research is just one of the many services offered through the NJMEP Business Growth Suite.

Development of Sales Channels

Businesses often need to consider new strategies in order to grow. One strategy is to leverage a new sales channel. From identifying potential new distributors to eCommerce, businesses have a number of options. Finding the processes that will work the best and weighing the effort and cost to implement a new channel is a challenge. Whether a company is in a state of profitability and growth, or a business is struggling to keep its head above water, the development of new sales channels can make a significant impact. To perpetuate growth or to regain lost market share, businesses could develop a new sales channel to move their business forward.

NJMEP's Business Growth Suite team will become an extension of a manufacturer's business development team. Collaborating with NJMEP provides the company with a cost-effective way to expand their team without needing to enlarge its workforce and increase overhead.

Embracing Industry 4.0

The manufacturing industry is riding the wave of the fourth industrial revolution. Manufacturers are embracing new technologies

to produce more, produce faster and do more with less. Big Data & Analytics are being used in decision making, processes flow and are tracked through robust ERP systems, machinery, and entire facility floors are being automated with robotics, sensors, 3D Printing, etc. With smart factory cyber-physical systems communicating and cooperating with humans in real time over the Internet

of Things, the focus on Cybersecurity becomes even more important. Technology has not only changed the way factories operate but it's also changed the way client's buy. Many manufacturers are redesigning their websites, incorporating Search Engine Optimization in order to be found, and building eCommerce sites.

NJMEP's Business Growth Suite has the expertise and resources to help manufacturers navigate the emergence of new technology.

Growth Planning / Succession Planning

Many business owners are so busy working in their business that they fail to work on their business or their future vision. Planning often takes a back seat to the everyday fires that need to be put out. Growth and Succession planning are often afterthoughts. Sometimes businesses miss the opportunity to plan or planning is only

Continued on page 31



GFSI as a Business Growth Opportunity for Manufacturers

By Juliana Canale, Food Industry Safety, Compliance & Regulatory Solutions Specialist at NJMEP-Food Vertical Team, Cornell Food Science Alumna & CNJIFT Secretary
Professional Certifications: HACCP, Seafood HACCP, LI PCQI, LI FSV, SQF, & ServSafe Certified

Global Food Safety Initiative, (GFSI) is a food and beverage widely accepted acronym for food safety standards. Examples of recognized certification programs for GFSI that are common are FSSC2220, SQF, BRC etc.¹ For those who aren't familiar, the term below offers some background information:

The GFSI brings together key actors of the food industry to collaboratively drive continuous improvement in food safety management systems around the world. With a vision of *Safe food for consumers everywhere*, food industry leaders created GFSI in 2000 to find collaborative solutions to collective concerns, notably to reduce food safety risks, audit duplication and costs while building trust throughout the supply chain. The GFSI community works on a volunteer basis and is composed of the world's leading food safety experts from retail, manufacturing, and food service companies, as well as international organizations, governments, academia and service providers to the global food industry. GFSI is powered by The Consumer Goods Forum (CGF), a global industry network working to support *Better Lives Through Better Business*.²

The GFSI Mission and Objectives are the following:

GFSI Mission

Provide continuous improvement in food safety management systems to ensure confidence in the delivery of safe food to consumers worldwide.

GFSI Objectives

1. Reduce food safety risks by delivering equivalence and convergence between effective food safety management systems
2. Manage cost in the global food system by eliminating redundancy and improving operational efficiency
3. Develop competencies and capacity building in food safety to create consistent and effective global food systems
4. Provide a unique international stakeholder platform for collaboration, knowledge exchange and networking³

GFSI isn't only an important tool to leverage from a food safety perspective but it is also critical for business growth for a manufacturing company. In the mission statement there is a reference to "continuous improvement" which is a strong backbone of business growth and operations efficiency in any space but particularly for food and beverage manufacturing where every minute matters in a production factory.

GFSI also references "building trust through the supply chain". This is where a business growth opportunity also is present since the supply chain is essential and all aspects of strengthening a supply chain are beneficial for growing a business. Adhering to a GFSI code will allow your manufacturing supply chain to be more effective and credible by adhering to an international standard that validates the food safety of the food and/or beverage manufacturer.

It is now also becoming "the standard" to do business with medium- larger scale companies since you are comparing "apples to apples" when looking at different vendors. Having everyone speak the same language is more efficient and effective to manage within a company's network.

Business growth is key to survive in this new era of manufacturing and GFSI is a great tool to leverage that will provide business growth opportunities in addition to keeping food and beverage food safety management systems effective.

If you want to improve your current business practices around GFSI code adherence and audit preparation, please contact NJMEP Food Vertical Team by using the contact info below. 🍷

Food Vertical Team:

Juliana Canale, jcanale@njmep.org • Food Industry Safety, Compliance & Regulatory Solutions Specialist

Michael Marchetti, mmarchetti@njmep.org • Food Sales Lead



1. <https://www.mygfsi.com/certification/recognised-certification-programmes.html> 2. <https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-preventive-controls-animal-food>
3. <https://www.mygfsi.com/about-us/about-gfsi/what-is-gfsi.html>

NJMEP Awarded Grant to Offer Food Training to the MEP National Network

The New Jersey Manufacturing Extension Program (NJMEP) was named the recipient of a grant worth \$992,050 by the U.S. Department of Commerce National Institute of Standards and Technology (NIST) Hollings Manufacturing Extension Partnership (MEP). The grant will allow NJMEP to assist the MEP National Network in creating a platform for MEP Centers nationwide to deliver services in Quality, Safety and Efficiency, along with other core MEP products and services (e.g., cybersecurity, supply chain) to food manufacturing companies throughout the USA and Puerto Rico.

NJMEP is recognized as a MEP 'Center of Excellence' in Food Safety Training and is ranked among the top performing centers in the country. NJMEP will work with the MEP National Network to build regional hubs in five (5) regions in which MEP Center leaders have expressed interest and coordinate growth in food manufacturing products/services. NJMEP will help develop a set of minimum technical and operational specifications for these MEP Centers to earn recognition as a Quality, Safe, Efficient (QSE) Food Industry Network Hub. NJMEP and the MEP Nation Network will also work with national food manufacturers and their supply chains to deliver much needed services and training.

The five (5) regional hubs will offer support to other regional MEP centers where they can receive sales support, have access to tools and resources including assessments, training materials and implementation resources and serve as a regional training center for needed food safety training. Training will include online curriculum created by NJMEP and offered through County College of Morris (CCM), as well as MEP's traditional in-plant services.

The establishment of a Comprehensive Food Industry Program within the MEP National Network will increase the technical capabilities and capacity of MEP Centers to deliver more projects

to food manufacturers, and to more effectively serve global and national companies that operate supply chains across multiple states.

"We are excited to expand our work nationally with other MEP Centers and appreciate that NIST MEP has seen the great importance of engagements with food manufacturers on a national scale," said John W. Kennedy, CEO of NJMEP. "Our services address manufacturing

priorities through the creation and use of tools and resources that provide food manufacturing leaders with a clear roadmap and actions," adds Kennedy.

The training will improve the competitiveness of industries in regions served by MEP Centers. "It addresses the Quality, Safety and efficiency needs of food manufacturers; expands MEP Center market share in food manufacturing; and promotes other MEP Center core product and service lines that increase the economic vitality of the food manufacturing supply chain," says Robert Salamone, Director of Vertical Engagements, NJMEP. "These centers will then be ready to effectively engage with food manufacturers within their states," adds Salamone.

NJMEP will also be able to scale the newly USDOL approved Food Production Safety Technician apprenticeship through the Pro-Action Education Network™ to the more than 1,100 food manufacturers throughout New Jersey. This program focuses on food manufacturing, process standards, quality control and food production compliance.

Pro-Action Education Network™ includes US-DOL approved apprenticeship programs (Technical Sales, Industrial Manufacturing Production Technician, Food Production Technician and Cybersecurity), Train-the-Mentor, on the job training, and career advancement training; as well as the Food Training programs that have received national support from National Institute of Standards Technology (NIST-MEP). The National NIST-MEP Network alone provides a 14.4:1 Return on Investment nationally and 15.3:1 in New Jersey. 🍷

NJMEP is recognized as a MEP 'Center of Excellence' in Food Safety Training and is ranked among the top performing centers in the country.



New Cybersecurity Regulations May Impact You

What Businesses Need to Know and the Resources to Help

The National Security Agency (NSA) and the U.S. government as a whole have taken drastic steps to ensure and protect our nation's cybersecurity. A new arm of the NSA is being formed in October of 2019, specifically focused on cybersecurity by unifying its foreign intelligence and cyber defense missions. The Cyber Directorate, responsible for defending against "threats to National Security Systems and the Defense Industrial Base," will have a direct impact on how business is conducted and manufacturers need to keep a close eye on how it develops. Attached to the IoT Cybersecurity Improvement Act of 2019, the National Institute of Standards and Technology (NIST) is tasked with developing a strategy and providing guidance to strengthen IoT security.

Manufacturers across the nation will need to act now to comply with updated cybersecurity standards and regulations. The NIST 800-171 Special Publication is a suite of business solutions which combines Hardware, Software, Security and Response plans and is required for all Department of Defense (DoD) contractors or subcontractors with controlled unclassified information. The U.S. government has previously made the call for businesses, especially those connected to the DoD sector no matter how minute, to improve their cybersecurity efforts. Up until this time, there have been no penalties associated with not complying with new cybersecurity requirements. However, that is about to change.

It is expected that in Q1 of 2020 manufacturers and businesses working within the DoD sector could face extreme penalties for not complying with NIST 800-171 requirements. The DoD sector isn't the only one being impacted as

well. The National Motor Freight Traffic Associated, Inc (NMFTA) announced in July that they will be changing their cybersecurity regulations for medium and heavy-duty electric vehicles. A very common link for all of these cybersecurity initiatives are that contracts may be pulled and fines and penalties applied.

Who Will Be Impacted?

In the state of New Jersey, there are thousands of businesses that work within the DoD sector or those that would feel the impact of the NIST 800-171 cybersecurity requirements. Similarly in the NMFTA announcement electric truck OEMs, charging station vendors, utilities, network aggregators, trade associations, standards bodies, will also face new requirements built on existing, relevant international standards and best practices. As you can see the list of businesses that will feel the pressure of new cybersecurity rules is growing, fast and easily incorporates the entire manufacturing, transportation, distribution, and supply chain industries.

NIST 800-171 requires companies to protect more than technology and should be viewed as a business strategy shift. It requires manufacturers to comply with three specific areas of cyber security as explained in the image above.

The supply chain is such a complex weave of from large to small manufacturers, some



*Ray Martinelli
Cyber and Supply
Chain Specialist,
NJMEP*

business may not immediately assume they would be affected by the NIST 800-171 standards, or perhaps are not DoD suppliers currently. It can be a challenge to know if the updated cybersecurity requirements will impact a business or the associated cost of becoming NIST 800-171 complaint. The only way to know for sure is to reach out to a NIST partner like NJMEP and conduct a thorough review.

NJMEP works directly with NIST, tasked with developing strategies and providing guidance to our nation's manufacturers and logistics companies. The NJMEP cybersecurity vertical team has the expertise and knowledge to assist businesses to identify if they need to begin the process of becoming compliant.

Potential Fallout

These new rules and upcoming penalties for non-compliance can be compared to the ISO 9001:2015 rush that happened in late 2014. Businesses, even those that didn't expect ISO 9001 regulations to impact their operations discovered that they must abide by these rules or risk losing the ability to bid on certain contracts. These enforcements seemingly happened overnight and manufacturers throughout New Jersey were rushing to ensure their business complies with ISO 9001: 2015.

Manufacturers are in a similar situation with the updated cybersecurity regulations. It's critical to act fast knowing that these changes are on the horizon. Unique to cybersecurity, it will require an entire business strategy along with training for individuals in the C-suite to the shop floor. No matter their role, every person within an organization can spark a cyber breach.

Hackers are clever. Even when the technology to protect an organization's critical data is in place, it can only protect known vulnerabilities. The image above is a representation of how hackers exploit unknown vulnerabilities and how firewall patches can only act on those reported to the developer.

Ransomware attacks, silent lurky infectious malware, or the other slew of cyber concerns will directly hinder business growth. It takes a shift in business culture to create a secure and growing organization. However the value far outweighs the effort compared to addressing the damage cy-



It is expected that in Q1 of 2020 manufacturers and businesses working within the DoD sector could face extreme penalties for not complying with the new rules and regulations

ber threats can cause. If the cyber threat infects suppliers, distributors, or customers, the fallout can be immense. The clean up could take years and result in a damaged reputation, compromised intellectual property, and lost customers.

Business Strategy / Training

Cybersecurity, in general, is largely dependent upon awareness. From not clicking that questionable link on the internet to being on the lookout for Phishing attempts that impersonate co-workers, understanding the treats is the first step toward protecting a business from

cybercriminals. However, to truly ensure the cybersecurity of an organization, it takes an all encompassing business strategy and targeted training for every employee. Furthermore, having a plan in place to address and react to cyber threats is critical in order to comply with the updated cybersecurity regulations.

NJMEP is the leading expert on these new rules and regulations and has the capacity and ability to address a New Jersey manufacturer's cybersecurity compliance concerns. Starting at identifying if a business will be impacted by the new regulations through training and reaction plans, NJMEP is available to lend support. Cybersecurity is a critical aspect of business if a manufacturer falls under these new rules.

Whether cybersecurity is on the top of mind or there are other areas a business needs to review and potentially improve, NJMEP has the whole suite Business Growth Services ready to assist. The Business Growth Suite of Services includes cybersecurity training and compliance, succession planning, the development of new sales channels, and a host of other critical services to assist manufacturers thrive in an increasingly competitive environment.

To find out more about these new cybersecurity rules and regulations, contact Ray Martinelli, NJMEP's Cybersecurity and Supply Chain Specialist. For additional information on the Business Growth Suite of Services, reach out to Ben Dominguez, NJMEP's Growth & Innovation Specialist.

Ray Martinelli
Tel. 973-998-9801
Cell 908-400-9535
Email: rmartinelli@njmep.org

Ben Dominguez
Tel. 973-998-9801
Cell 201-317-8641
Email: bdominguez@njmep.org



Spotlight On High Volume Implant Manufacturing

By Cynthia Phillips, Phillips Precision Medcraft

Developing high volume manufacturing strategies requires a manufacturer to look at every aspect of their business. Phillips Precision Medcraft, a manufacturer of implants, instrumentation, and delivery systems, understood this and was determined to do what was necessary to meet the everchanging demands of the orthopedic industry. PPM's mission was clear, invest in technology and training to dramatically increase, speed, and capacity to better serve its OEM customers.

Preparations began by allocating the necessary capital investments, applying LEAN 5S strategies systematically while also evaluating the latest technologies. As expected, the process was time-consuming; however, it uncovered one unexpected yet significant variable. The impact that the right equipment vendor would make to their bottom line.

Spearheading this "revolution" as he likes to call it, is John Phillips, President of PPM's implants and instrumentation division. "I like to say when I started really learning about lean methodologies, it was like getting a new pair of glasses," said John. "All of a sudden all these things we were doing looked different to me and I wanted to jump in and change them right then and there. When you start doing that, it upsets people at first, but over time and when the changes result in measurable improvements, you begin to see a real culture change".

They decided to start with several dedicated manufacturing cells for select products. At the same time, the new vendor [Index Traub], gathered detailed information about the existing product manufacturing process to determine how best to apply the features of their technology. The cycle times they submitted didn't seem possible but were proven accurate. The machine not only increased capacity and managed manufacturing process controls fluidly the new technology also provided some other obvious immediate benefits. Four machines were freed up for other work. The new process reduced three operators to only requiring one. Parts no longer had to move through the shop, sit in a queue, and have multiple setups.

The introduction of palletized machining centers is also a great example of choosing the right new technology and vendor. This time they teamed up with Makino. The combined R & D between

the teams was spot-on once again. Today the new system has reduced setups, is running components on-demand and in some cases is running lights out.

PPM's engineering team also plays a critical role when it comes to high volume manufacturing. Every project begins with the application of PPM's unique form of DFM (design for manufacturability). The DFM process is applied before a product hits the manufacturing floor and often impacts speed-to-market and the cost of running a high volume implant operation.

Over the years, parts have become smaller and more tightly dimensioned; the equipment used in the past is no longer capable of machining today's challenging designs. As an ever-evolving manufacturer, PPM made the most significant capital investments in recent years to ensure continued to grow and expand their capabilities.

2019 marks a notable milestone; the Phillips family celebrates 50 years in manufacturing. Their dedication to bridging the gap between engineering ideas and manufacturing is the cornerstone of who they are. Their commitment to LEAN, 5S continuous improvement methodologies and new technology ensures an ongoing level of excellence that brings long-term success. 🏆

To learn more, visit: PhillipsMedcraft.com
or email: info@PhillipsMedcraft.com.



Maximizing Business Value and Flexibility - Environmental Succession Planning

By Franklin W. Boenning, Esq.

NJMEP has been focused on business succession planning issues over the last few months. Manufacturers are often well aware of routine environmental permitting and regulatory compliance obligations of their manufacturing operations. However, ignoring or delaying the consideration of an environmental investigation or other non-routine compliance issues or obligations triggered by the sale of real property or a business could derail, delay or scuttle a company's plans to timely sell, close or move an operation.

Once an owner has made the decision to sell, it is not the time to find out that a lengthy investigation or, worse yet, remediation project will devalue, delay or throw a transaction into disarray. In New Jersey, the Industrial Site Recovery Act (commonly called ISRA, N.J.S.A. 13:1K and N.J.A.C. 7:26B) often takes owners by surprise. ISRA precludes owners or operators of businesses meeting the definition of an 'industrial establishment' from transferring ownership or operations without a Response Action Outcome (RAO, previously known as a No Further Action letter), a certified remedial action workplan, a remediation agreement with NJDEP, or one of the alternate compliance options set forth in the regulations. An Industrial Establishment that triggers ISRA is required to notify NJDEP, investigate potential areas of environmental concern in its operations, and remediate environmental issues prior to closing, selling or transferring the property or operations.

The definition of an 'industrial establishment' includes operations that fit within categories meeting the definition

of certain NAICS codes, as set forth in Appendix C of New Jersey Administrative Code (NJAC) 7:26B. Once a triggering event occurs, the business must notify NJDEP within five days and hire an LSRP to perform a Preliminary Assessment (PA), a comprehensive review of the property and operations. The goal of the PA is to identify areas or activities that may have had an adverse impact on the environment, termed 'areas of potential environmental concern' or AOCs. If AOCs are identified, then a Site Investigation (SI) may be triggered. If the Site Investigation reveals contamination in the environment, remediation must occur, or a plan put in place, before the transaction may be consummated.

Obviously, if a company waits until a transaction is pending or imminent to conduct these activities, the transaction closing may be delayed or complicated. Often this will cause more than a delay, it could cause the transaction to be cancelled if the buyer has other options or the transaction is time-sensitive.

How do we avoid such a situation? Routine operational audits can be performed to evaluate the facility's potential areas of environmental concern and, if necessary or appropriate, sampling or remediation can be performed well in advance of any planned transaction. Any business that is considering maximizing its value, increasing flexibility of owners' exit strategies, or simply seeking to ensure ongoing regulatory compliance, could benefit from performing such activities. A qualified environmental consultant and/or environmental attorney can provide advice, perform the required inspections and advise on recommended activities. 🏆



Life Science, Medical Device & Biotech Tax Incentives for NJ Innovators

R&D Tax Savers

By Charles R. Goulding and Daniel Audette

With many of the nation's largest firms and a healthy ecosystem of new start up innovation driven by leading universities and industry partnerships, New Jersey is quickly reclaiming its position as a leader in the MedTech and Life Sciences sector. For highly innovative and important companies in these industries, it often takes many years to get products and processes through the required regulatory and standards requirements including FDA and quality standards. The new and expanded R&D tax incentives are particularly helpful for this industry. Often "Science" companies aren't thinking about the eventuality of taxes while spending tremendous sums of money for many years. Companies don't realize they may qualify for cash rebates or even capturing a decade's worth of tax incentives at once.

The New R&D Tax Provisions

As of January 1, 2016 the US R&D tax credit was made much more broadly applicable and particularly helpful for Science companies. Importantly, the existing R&D tax credit was made permanent. Since there is no tax statute of limitations for companies that have never been profitable "Science" companies now know they can indefinitely accumulate large tax benefits during tax loss years. As an example we recently helped a life science company achieve 15 years of tax savings at once in the first year they were allowed to trigger the 15 years of tax benefits. Science companies who understand this opportunity can accumulate the tax credit as an asset on their balance sheet and make themselves more attractive to potential investors during successive funding rounds. Another major change is that the Science R&D tax credits can be used to offset corporate or individual Alternative Minimum Tax (AMT). This change now enables a New Jersey Science company or individual that couldn't previously benefit from the credit, now obtain the tax benefits. It is important to realize that in addition to the federal R&D tax credit New Jersey has its own state R&D tax credit for C-Corporations.

The New \$1,250,000 Cash rebates

As of January 1, 2016 Science start ups have the opportunity to obtain up to \$1,250,000 in payroll tax cash rebates. To be eligible the company must have less than \$5,000,000 in sales. We have two "Science" clients that have already obtained \$750,000 cash each for the first 3 years of this program. The 5-year maximum cash rebate time period commences in the company's first taxable year when a sale occurs. This means that many existing "Science" companies that have not had their first sale remain eligible for these payroll tax cash rebates. For these tax planning purposes, a company might not want to process a nominal sale in their beginning years - a donation might be a better strategy.

Historically, New Jersey was the Titan of large campus corporate science research centers. The new science business model is smaller, much more focused on innovation and often with strong University affiliations.

Artificial intelligence (AI) and machine learning is being used to analyze the treasure trove of pharmaceutical patents from the previous big research center model to create new models and resulting new Science start-ups. New Jersey is the ideal mar-



ket for the new science model since it already has a vast pool of well-educated science professionals and strong supporting University and state sponsorship of science projects. NJMEP is emphasizing science and has thrown its weight behind the MedAccred quality program for medical devices. For example, we published articles on how MedAccred can integrate 3D printing

into its Standards. We have also analyzed how MedAccred's plastic injection molding certification may utilize 3D printing next. Manufacturing Matters previously wrote about this topic, and then we chimed in on MedAccred's certification and how it provides the framework for Micro Medical Components.

New Jersey is at the forefront of driving the national MedAccred program with founding companies including NJ's own Johnson and Johnson and Stryker. MedAccred requires a strong medical device component supply chain and New Jersey's over 10,000 manufacturers have the resources to do this. New Jersey also has the opportunity to optimize utilization of the new science business model by understanding how the enhanced R&D tax credit applies to New Jersey "Science" companies

The Research & Development Tax Credit

Enacted in 1981, the now permanent Federal Research and Development (R&D) Tax Credit allows a credit that typically ranges from 5%-8% of eligible spending for new and improved products and processes. Qualified research must meet the following four criteria:

- Must be technological in nature
- Must be a component of the taxpayer's business
- Must represent R&D in the experimental sense and generally includes all such costs related to the development or improvement of a product or process
- Must eliminate uncertainty through a process of experimentation that considers one or more alternatives

Eligible costs include US employee wages, cost of supplies consumed in the R&D process, cost of pre-production testing, US contract research expenses, and certain costs associated with developing a patent.

On December 18, 2015, President Obama signed the PATH Act, making the R&D Tax Credit permanent. Beginning in 2016, the R&D credit can be used to offset Alternative Minimum tax for companies with revenue below \$50MM and, startup businesses can obtain up to \$250,000 per year in payroll tax cash rebates.

For information on R&D Tax Credits go to www.njmep.org or call 973-998-9801.

Charles R. Goulding, Attorney, CPA, is the President of R&D Tax Savers, an interdisciplinary tax and engineering firm that specializes in R&D Tax Credits.

Daniel Audette, PE, CEM is a Senior Engineer with R&D Tax Savers.

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NJMEP Pro-Action Education Network™

New Jersey Workforce Development Program for Manufacturing, Supply Chain and STEM Firms

By Michael Womack, Marketing Outreach Coordinator, NJMEP

NJMEP developed a statewide, scalable platform to address the workforce challenges facing manufacturing, supply chain companies, and STEM Firms across New Jersey.



The Pro-Action Education Network is made up of five unique programs, each designed to tackle specific areas of the Skills Gap. Programs include...

- **Pre-Apprenticeship & Foundational Credentials** - MSSC, SME/ToolingU - NJMEP helps manufacturers find and assess potential new hires to help on-board employees in the shortest period of time that would normally require additional training. This program is suitable for both incumbents and new hires.
- **Open Enrollment 'Career Advancement' Training** - NJMEP provides in-class, hands-on training to incumbents to upskill the workforce. Employees can obtain industry-recognized credentials and industry knowledge that directly apply to their job or the next position within an organization.
- **Assessment & On-the-Job Training (OJT)** - NJMEP delivers assessments to help businesses select the best candidate for the job. Additionally, the option is available for employers to receive additional support if they require assistance to plan On-the-Job training for new hires.
- **Apprenticeships** - The ultimate option to build a team ready for the next levels of employment. Combining Foundational Learning with OJT and Community College, Apprenticeships are key to building an organization ready for the future.
- **Train-the-Mentor** - Taking an organization's leadership team to the next level. Designed to support and assist senior level employees expand on the skills and techniques necessary to continue passing down legacy knowledge while becoming stronger mentors.

NJMEP collaborates with Community Partners, CTE schools, Vocational/Technical Schools, Community Colleges, and over 25 Career Centers to pool resources and expertise to create multiple career pathways and training opportunities for students, dislocated workers, as well as current employees.



The Skills Gap continues to hold manufacturing, supply chain, and STEM sectors back from meeting its true potential. Without having access to the talent these businesses require to produce their products or provide their services, they will continue to lose market share to global competition.

Manufacturers, STEM Firms, and Supply Chain companies have all expressed that their biggest challenge is finding qualified workers to join their ranks. Along with finding new talent, upskilling the current workforce is time consuming and difficult to manage. These concerns are not isolated to New Jersey. This is a challenge facing industrial sectors nationwide and around the globe. However New Jersey companies do have a way to get them one step ahead of the global competition. Manufacturers, Supply Chain companies as well as STEM firms can turn to the NJMEP Pro-Action Education Network™ with their workforce development needs in order to find solutions.

NJMEP collaborates with Community Partners, CTE schools, Vocational/Technical Schools, Community Colleges, and over 25 Career Centers to pool resources and expertise to create multiple career pathways and training opportunities for students, dislocated workers, as well as current employees. These pathways include providing underskilled individuals with access to training and the credentials they need to make them a prime candidate for businesses in a variety of industrial sectors; A pipeline of new talent is being developed where these individuals are assessed to determine their competency and ability to contribute to an organization; And additional industry-relevant education and training that applies directly to an employees day to day work. Employers have the option to take part in the Pro-Action Education Network™ by either sponsoring a current employee to enroll in multiple career advancement training options or use the NJMEP Pro-Action Education Network™ to locate and source new hires.

Now is the ideal time to inquire about the individual programs within the Pro-Action Education Network™. After February 2020, select funding support will no longer be available.

Register for the NJMEP Apprenticeship program before February 2020 and take advantage of the benefits listed below:

- Related Technical Instruction (RTI) requires no employer investment
- Participants will be able to immediately apply the classroom instruction to the workplace as employers are having

quicker ROI than what was originally expected

- Quicker turnaround means employers will increase productivity and close the skills gap in a shorter amount of time
- Receive fully assessed candidates for employment and use them to assist with succession planning

The Skills Gap continues to hold manufacturing, supply chain, and STEM sectors back from meeting its true potential. Without having access to the talent these businesses require to produce their products or provide their services, they will continue to lose market share to global competition. It's time to act in order to build a bridge that allows New Jersey manufacturers to thrive this year, the next, and well into the future.

Contact NJMEP at info@NJMEP.org to learn more about the Pro-Action Education Network™ and discuss which program best suits your particular workforce development needs. 🌈

Become a Made In NJ Affiliate

www.njmep.org/made-in-new-jersey/join-the-made-in-new-jersey-program/



How to Enroll an Employee in the NJMEP Registered Apprenticeship Program

Step by Step Guide

Approved by the United States Department of Labor, NJMEP is offering an Industrial Manufacturing Production Technician (IMPT) Registered Apprenticeship Program. This program focuses on the four MSSC Certification Modules: Safety; Quality Practices & Measurement; Manufacturing Process & Production; Maintenance Awareness and Green Production. After working through each module, individuals will then demonstrate their understanding passing a written exam in order to progress through to the next step in the program.

The MSSC Credentials awarded for successful completion are industry recognized and the skills employees develop will directly carry over to their responsibilities on the shop floor and throughout the organization. To get started, follow these three steps.

Step 1: Request Appendix A - Work Process Schedule and Related Instruction Outline - Industrial Manufacturing Production Technician

To receive the document in its entirety, contact Patricia Moran, NJMEP Director of Apprenticeship by email at PMoran@NJMEP.org or call Tel. 973-998-9801 Cell 908-642-0122.

Understanding the curriculum is essential in order for employers to feel confident their employees will receive relevant education that directly applies to their work. The Appendix A - Work Process Schedule and Related Instruction Outline - Industrial Manufacturing Production Technician document includes a complete outline of the course curriculum for the IMPT Registered Apprenticeship Program. The course schedule will also be offered to clearly express the commitment from the employees' end. A brief description of the curriculum found in Appendix A can be reviewed, below.

Appendix A - Work Process Schedule and Related Instruction Outline - Industrial Manufacturing Production Technician Brief Overview

- Demonstration of good safety practices and related technical instruction (100 hours)
- Proper operation of production equipment (1000 hours)
- Producing quality products and quality assurance checks (500 hours)
- Interpreting technical documents and information (200 hours)
- Measuring and work inspections using mechanical tools and testing equipment (200 hours)
- Demonstration of knowledge of routine equipment maintenance (100 hours)
- Demonstration of knowledge of inventory and material processes (100 hours)
- Demonstration of knowledge of trends and the current state of business (100 hours)

- Demonstration of continuous improvement strategies (100 hours)
- Production equipment set-up (200 hours)
- Customizable local options - employers establish additional training in the form of competences (136 hours)

Step 2: Letter of Intent

After reviewing *Appendix A - Work Process Schedule and Related Instruction Outline - Industrial Manufacturing Production Technician* and deciding that this program will be of value to an organization, a Letter of Intent is required to secure a spot in an upcoming IMPT Registered Apprenticeship Cohort. This document confirms the intent of an employer to commit at least one employee to the NJMEP IMPT Registered Apprenticeship Program. Employers will have options for which Cohort they would like to join. New Cohorts are beginning to open up throughout New Jersey so companies can choose the closest option to their place of business.

To request a Letter of Intent template, contact Patricia Moran, NJMEP Director of Apprenticeships at PMoran@NJMEP.org or call Tel. 973-998-9801 / Cell 908-642-0122. Once the Letter of Intent is completed and signed, the NJMEP Pro-Action Education Network™ team will be able to secure the required spot in an upcoming Cohort.

Step 3: NJMEP and Employer Collaboration

To create a seamless enrollment process, the NJMEP Pro-Action Education Network™ team will work with the employers to handle the required paperwork and documentation. A Registered Apprenticeship program can become an overwhelming challenge for an employer to manage without the right support. NJMEP has a team of professionals that are dedicated to helping an organization move through the process smoothly.

After the Letter of Intent is received, the NJMEP Pro-Action Education Network™ team walks employers through every step of the enrollment process. Companies are never left in the dark and are updated at every milestone. There are deliverables and compliances that must be met in order to maintain a productive Apprenticeship Program and NJMEP is responsible for keeping the employer within these guidelines so they receive all the benefits that come along with a USDOL Registered Apprenticeship program.

In three easy steps any New Jersey manufacturer can begin upskilling its workforce to help their business grow and expand. The NJMEP IMPT Registered Apprenticeship Program is part of the Pro-Action Education Network™. For more information on this critical workforce development initiative available to New Jersey manufacturers, logistics companies, and STEM firms, turn to page 49.

TRAIN THE MENTOR

The Train-the-Mentor Program focuses on training leaders or supervisors within your organization who have mentoring tasks within their existing jobs.

Mentors are an invaluable resource in any industry, especially when it comes to manufacturing, logistics, or technical sales. The knowledge they've accumulated over their career and their ability to pass down this experience to other employees play a vital role in a company's future. It takes more than just having a mentor to reap the benefits of these valuable employees. Having a clear understanding of the role of a mentor, being able to deliver effective feedback, using mentoring as a long-term employee development strategy, problem-solving and conflict resolution skills, effective communication, motivation, and experience with trouble-shooting approaches to encourage employee development is essential.

NJMEP is offering a \$255 scholarship toward Train-the-Mentor



and troubleshooting approaches to enhance employee development

This course could be helpful to you if:

- You are developing a mentoring program in your organization
- You have existing apprentices whose mentors need additional support or guidance
- Your experienced workers need support in implementing the organization's succession plan
- Your organization is thinking of implementing an Apprenticeship Program and your potential mentors need the training to support apprenticeship development and implementation

Train-the-Mentor Program Outcomes

Upon successful completion of this training, participants will be able to...

- Understand the role of the mentor
- Identify and utilize the steps in delivering effective feedback
- Utilize mentoring as a long-term employee development strategy
- Practice improved problem-solving and conflict resolutions skills
- Use effective communication, motivation,

Train-the-Mentor offers value to business leaders in search of a comprehensive course focused on offering training leaders and supervisors a way to improve their mentorship abilities. This four-day course is split up between four months to give the students an opportunity to test what they learn in the real world. Train-the-Mentor is only one workforce development pathway included in NJMEP's Pro-Action Education Network™. There are a variety of options meet a business's specific workforce development needs.

NJMEP's Pro-Action Education Network™ is a statewide, scalable platform developed to provide training and support for students and incumbent workers with the goal of creating a pipeline of qualified workers for industrial sectors across new jersey. There are a variety of different pathways within the Pro-Action Education Network™ to meet specific workforce challenges. To learn more about all the unique pathways the Pro-Action Education Network™ provides, visit the Pro-Action Education Network™ page.

The first 10 people to register get an additional \$20 off enrollment cost!

Cohorts Coming to a Location Near You

The NJMEP Registered Apprenticeship Program Extends Its Reach

The skills gap is a looming threat to businesses across the United States, and around the world. Production skills have all but faded as high schools began pulling shop classes and four year degrees were touted as the only way to make a living.

New Jersey manufacturing and logistics companies are in a position to take advantage of a new program designed to upskill individuals currently employed by a manufacturer. The NJMEP Pro-Action Education Network™ Registered Apprenticeship program is a year and a half program, that mixes on-the-job learning and in-class Related Technical Instruction to deliver relevant industry education that can be directly applied to employees day-to-day roles and responsibilities.

NJMEP along with its Community College partners have worked to bring these Registered Apprenticeship Programs to more locations throughout New Jersey. Currently, there are two Cohorts taking place in Cedar Knolls New Jersey but Essex County Donald M Payne Sr. School of Technology, The Community College of Morris, Passaic County Community College, and Rowan College at Burlington County have agreed to champion the NJMEP Pro-Action Education Network™ Industrial Manufacturing Production Technician (IMPT) Registered Apprenticeship program on their campuses.

Employer Benefits of a Registered Apprenticeship

Employers that are interested in sponsoring standout employees to take part in an IMPT Registered Apprenticeship program will immediately start benefiting from the program, even before successful completion. See what current apprentices enrolled in the program have to say about their time with NJMEP as well as some employers sponsoring their workers.

Jalil

"When I went to Exothermic Molding, I didn't know anything about molding, I just wanted a job. My company continues to push me to become better. Overall this apprenticeship program, to me, has been a success and I think it'll continue to benefit me because I feel like this is the new way. Everybody's path is different. [NJMEP's Apprenticeship Program] offers hands-on training along with classroom training."



Anthony

"I had no prior knowledge of manufacturing in this field until I came to my company, Knickerbocker. I found an interest in production and manufacturing, and the fact that the president of the company is willing to invest in my education here is absolutely fantastic. I get to learn more about the technical aspects of the work such as calibrations, I get to learn certain measurements that apply to dyes and learning how to read pneumatic diagrams."



Annette J. Oswald – Director of Human Resources at Komline-Sanderson Corporation

"We are fortunate to have been included in this program which has afforded us the opportunity to further develop our

employees' skills and our processes.

I would also like to mention how impressed we were with the Inaugural Apprenticeship Signing Day. It was very well planned and also gave us an opportunity to meet some of the people we only speak to on the phone."



Michael Delicio – Sr. Human Resources Manager at Bruker OST LLC

"I've been with Bruker for the last two years. One of the first things I wanted to do was to establish an apprenticeship program within our organization. We were looking for machine operators, we were looking for maintenance mechanics.

Without Patti's help [Patricia Moran, Director of Apprenticeships at NJMEP] it would have never happened."

Beyond the educational benefits, the increased company loyalty, and upskilling employees, the monetary ROI to the companies involved cannot be ignored. Included in the Registered Apprenticeship program is the Related Technical Instruction which is currently no charge to the employer. This is a \$10,000 value that the GAINS grant is able to cover until February 2020.

The IMPT Registered Apprenticeship Program is partially customizable. Employers can explain to NJMEP what kind of skills they would like their apprentices to develop, beyond the normal scope of the program. Up to 25% of the curriculum can be modified and specialized in order to further ensure that employers are receiving an upskilled employee that can immediately contribute to their employer.

Find a Cohort Near You

Partnering with Essex County Donald M Payne Sr. School of Technology to host an IMPT Registered Apprenticeship program on their campus was a monumental milestone in regard to workplace development in the state of New Jersey. The college is providing the space to hold the Registered Apprenticeship classes and their facility support at no cost. NJMEP is able to greatly expand the accessibility of the program to New Jersey businesses by passing on these savings.

In addition to Essex County Donald M Payne Sr. School of Technology, IMPT Registered Apprenticeship program, three other Community Colleges throughout New Jersey are offering a spot for new Cohorts. Each one offer modern facilities and exceptional faculty support to ensure the IMPT Registered Apprenticeship program remains consistent no matter where a company decides to enroll.

New Jersey businesses now have the option to sign up for IMPT Registered Apprenticeships closer to their place of business. The four Community College cohorts are listed below.

Essex County Donald M Payne Sr. School of Technology

Location: North/Central New Jersey
Address: 498-544 W Market St, Newark, NJ 07107
Program: Industrial Manufacturing Production Technician

Rowan College at Burlington County

Location: Southern New Jersey
Address: 1 High St, Mt Holly, NJ 08060
Program: Industrial Manufacturing Production Technician

Moving Forward to Upskill the Workforce

As employees near retirement, all that legacy knowledge is in danger of disappearing. The IMPT Registered Apprenticeship program is a way for manufacturers to connect their stand out employees with a mentor at work, while also giving the apprentices the opportunity to expand their manufacturing production knowledge and skills in the classroom. This is a way to retain critical legacy knowledge and prepare employees to take on the next levels of employment without any major capital investment by the company.

Even more Apprenticeship Cohorts available throughout the state, coming soon. To learn more about upcoming Apprenticeship Cohorts, contact Patricia Moran, NJMEP Director of Apprenticeship by email at PMoran@NJMEP.org or call Tel. 973-998-9801 Cell 908-642-0122.

Patricia Moran, Ph.D.

Director of Apprenticeship Programs
New Jersey Manufacturing Extension Program, Inc.
2 Ridgedale Ave, Suite 305
Cedar Knolls, NJ 07927
Tel. 973-998-9801 Cell 908-642-0122
Fax 973-860-4637
Email: pmoran@njmep.org

Robert J. Lipka

Apprenticeship Field Manager
New Jersey Manufacturing Extension Program, Inc.
2 Ridgedale Ave, Suite 305
Cedar Knolls, NJ 07927
Tel. 973-998-9801
Cell 973-769-3995
Fax 973-860-4637
Email: rlipka@njmep.org

Universal Tool & Manufacturing Co. Apprenticeship - Company Spotlight

Manufacturers throughout New Jersey are beginning to take the next step forward when it comes to workforce development. Businesses are turning to newly developed Registered Apprenticeship Programs available throughout the state to create a more productive and knowledgeable staff while at the same time increasing employee loyalty.

It's a challenge to ensure each employee has the right skills to help move business forward, but a Registered Apprenticeship takes this pressure off of companies. Universal Tool and Manufacturing Co. (UTM) was one of the first companies to take full advantage of the NJMEP Pro-Action Education Network™ Industrial Manufacturing Production Technician Registered Apprenticeship Program and it is a testament to their forward - thinking leadership.

UTM Continues Looking Toward the Future

UTM is located in Springfield, New Jersey and their core business is custom metal stamping and tool and die making as well as the manufacture of decorative hardware. Founded in 1945, UTM remains a family business and is now led by the original owners daughter, Dorothy. This women-owned, ISO 9001:2015 certified manufacturing business continues working on innovative ways to help drive their business forward as a whole. The latest step toward progress began by taking a look within. By giving select stand-out workers the opportunity to expand their skill set, they will improve employee loyalty and at the same time create a more capable workforce.

Over the past decade, finding skilled workers has been a monumental challenge for companies in industrial sectors. Unemployment rates are at a historic low but New Jersey manufacturers and businesses throughout the country are still struggling to find individuals with the right skills that allow them to immediately begin contributing to an organization. As shop classes disappear and the stigma associated with a career in manufacturing lingers on, educational programs that emphasise career pathways within a manufacturing organization while at the same time providing the necessary education and training one needs to become a manufacturing professional are paramount. UTM understood the challenge facing manufacturing

today and took a proactive approach to managing the Skills Gap.


Apprenticeship Successes and The Impact on Business

Recently, UTM was featured in an NJMEP Success Story focused on workforce development. Out of the two employees enrolled in the NJMEP Pro-Action Education Network™ Industrial Manufacturing Production Technician (IMPT) Registered Apprenticeship Program, one was interviewed to see how she has already been able to make use of the education she received throughout the program. Even though the IMPT Registered Apprenticeship Program totals a year and a half, she and her employer were able to immediately apply the education to their organization. It was identified that the first MSSC module that "Jessica" passed could be directly linked back to her work at UTM. The first MSSC module in the NJMEP IMPT Registered Apprenticeship Program is Safety and Jessica is now on the company's safety committee. She has become a key member of this internal committee and can now train employees

and upskill additional members of the UTM team. It only took a month before the skills she is working to develop began to pay off for UTM.

Jessica was asked what she herself would like to gain from this program and her answer reassured UTM that a Registered Apprenticeship is of extraordinary value to both the employer and employee. "I would like to learn the ins and outs of a warehouse and how to run a plant." From the program, UTM identified an employee that wants to contribute even more to their organization since the education she is receiving provides an in-depth overview on how a business operates. This knowledge can go a long way toward cultivating an employee that remains and grows with a company for decades.

Now she is being given the necessary education to continue giving back to the employer that is investing in her.

UTM has proven themselves to be forward thinking. They embarked on the NJMEP Registered Apprenticeship and took part in the first Cohort NJMEP developed. Without any previous case studies to prove the concept, they invested in their employees and achieved a desired result before the program has even concluded. As UTM and the over 15 other employers currently involved in the NJMEP Pro-Action Education Network™ IMPT Registered Apprenticeship Program progresses forward, keep an eye out for even more success stories and Apprenticeship Company Spotlights in future editions of Manufacturing Matters. 



You are Invited to be a Part of the NJMEP "We Made It" Video Series!



This marketing campaign will showcase New Jersey's most successful manufacturing companies!

The initiative honors New Jersey manufacturers and gives them a place to share their incredible journey through video. NJMEP will be showcasing business success stories and offer manufacturers a platform to explain how they benefited from this collaboration.

"We Made It" is designed to feature stand-out manufacturing businesses, their products, and to give the entire state a chance to see their passion and hard work. This is all part, and an extension of the NJMEP Made in New Jersey program! Giving New Jersey manufacturers one more way to tell their story.



Media coverage will include:

- A 1-2 minute video showcasing your facility and the positive impacts your organization has experienced with the help of NJMEP.
- A success story write-up to be included in Manufacturing Cares magazine.
 - A media profile on the "We Made It" video series page.
 - Social media coverage on various platforms.
- A special company highlight at the "Made in New Jersey" showcase at Manufacturing Day 2019!

Don't miss out on this unique, complimentary marketing opportunity!



Please contact Nick Silano and Kia Sanders at NJMEP for details on how you can be a participant in this program.

Phone: (973) 998-9801
Email: nsilano@njmep.org
ksanders@njmep.org

TRENTON TALK



NJEDA - Working To Help New Jersey Manufacturers Succeed

As summer turns to fall and New Jersey's manufacturing community looks ahead to Manufacturing Day on October 4th, NJEDA continues to work towards developing comprehensive programs and initiatives to help New Jersey manufacturers succeed. Over the last three months, NJEDA has made significant headway in furthering two pilot projects that were the result of the year-long *Manufacturing Policy Academy* program, which was co-led by NJEDA and NJMEP.

As part of the "Marketing and Outreach" pilot, which seeks to highlight the benefits of careers in manufacturing to middle and high school students, 15 students from Ocean County participated in a field trip to three local manufacturers. The NJEDA partnered with Ocean County Vocational Technical High School (OCVTS), providing financial and logistical support to OCVTS to help run this successful initial field trip. "The field trip program provides students with information to consider advanced manufacturing as a viable path to a successful career, while helping to build interest among a potential workforce that could serve as the foundation the industry's continued growth," said NJ EDA CEO Tim Sullivan.

Work was also kicked off on the Manufacturing Resource Guide pilot. This partnership between NJEDA and NJMEP will update and add further informational depth to NJMEP's Educational Resource Directory, increasing searchability and ease of access

Over the last three months, NJEDA has made significant headway in furthering two pilot projects that were the result of the year-long *Manufacturing Policy Academy* program, which was co-led by NJEDA and NJMEP.



the sector. For more information on these pilots and other manufacturing sector initiatives, please contact Eric Solomon, NJEDA Project Officer, at esolomon@njeda.com.

to the document with the goal of connecting New Jersey manufacturers to the full range of resources available to help their businesses grow. Recently a multi-stakeholder planning meeting helped set the table for the first round of improvements that will take place in the fall.

Looking ahead, NJEDA and OCVTS plan to host another field trip as part of the Marketing and Outreach pilot and will produce a short video documenting the success of the June trip. This video will also articulate the benefits of a career in manufacturing to a wider audience. Additionally, NJEDA and NJMEP will work to publish an initial update to the Manufacturing Resource Guide, incorporating the first round of updates.

Finally, NJEDA is looking forward to NJMEP's celebration of Manufacturing Day on October 4th, where we plan to highlight the initial successes experienced by the policy academy, share our ongoing sector work and upcoming plans with the manufacturing community, and collect feedback and input from the industry on creating helpful and effective initiatives for the industry.

NJEDA continues to connect with manufacturers and other industry stakeholders to share our sector work and continue to learn about how we can best help

For advertising opportunities in future issues of Manufacturing Matters please contact Michael Womack, mwomack@njmep.org • 973-747-5491

Manufacturing Caucus Plans Fall Sessions

TRENTON – Senator Linda Greenstein, chair of the bipartisan Legislative Manufacturing Caucus, has laid out an ambitious schedule to develop a package of legislation to promote the viability and expansion of the manufacturing sector.

"Manufacturing is a vital engine of New Jersey's economy, with over 11,000 manufacturers producing \$141 billion in annual output," said Senator Greenstein (D-Middlesex/Mercer) "The average firm has about 34 employees, reflecting the fact that modern manufacturing is increasingly technology-driven, requiring both large capital investments and a technical-skilled workforce in order to compete."



Senator Greenstein said the Manufacturing Caucus would hold a public hearing at Rowan University on Friday, October 25, focusing on the state of manufacturing in South Jersey and on the issue of how the new incentive grant programs being developed by the Legislature and the Administration should be tailored to strengthen New Jersey's ability to retain and attract manufacturing.

Senate President Steve Sweeney and members of the Manufacturing Caucus will be speaking at the Innovation/Efficiency Forum in Morristown on Wednesday, October 2, sponsored by the New Jersey Manufacturing Extension Program and other state and regional business organizations.

Manufacturing Caucus members will also participate in a panel at NJMEP's 8th Annual Manufacturing Day in Somerset on Friday, October 4, 2019.

Senator Greenstein said the Manufacturing Caucus also would hold three regional meetings around the state between November and December to hear directly from manufacturers on what the state's legislative priorities should be.

"We want to hear directly from manufacturers at all of these events as we shape our legislative agenda for the upcoming session," Senator Greenstein said.

OCTOBER 8, 2019

DISABILITY & INCLUSION FORUM

Inclusion is the proactive leveraging of diversity by consciously engaging others without bias

About this Event for HR Professionals

Join us for our **Disability & Inclusion Forum 2019** to learn about closing the disability employment gap. October is National Disability Employment Awareness Month. RSVP at: <https://www.eventbrite.com/e/disability-inclusion-forum-for-human-resources-professionals-tickets-72086934963>

Panel:

- **Panel Moderator:** Jeff Green, President - Pinnacle Graphic Communications
- Kathryn Forman - Associate of Porzio, Bromberg & Newman, P.C.
- Jaime Stein - CEC Lead, Unilever North America
- Ken Schlager - Editor, NJ Monthly
- Julie Trien - Editorial Assistant, NJ Monthly

Assistive Technology Demonstration:

Cheryl Casciano, New Jersey Department of Labor and Workforce Development

Myths & Misperceptions Kahoot Quiz

SPONSORED BY:

Understanding the challenges in recruiting and employment and solutions to those challenges

Building talent pipelines for qualified job candidates

Learning about the workplace experiences of employers and employees

Myths, Misperceptions, and Realities

PORZIO, BROMBERG & NEWMAN, P.C.
100 SOUTHGATE PKWY.
MORRISTOWN, NJ 07960
8:30am - 10:30am

The NJMEP Business Assessment is Priceless

Business leaders are problem solvers by trade. No matter what the industry manufacturing, supply chain, STEM, etc, decision-makers face unique challenges that they must overcome to ensure business continuity and sustain growth. Constantly striving to improve and drive business forward is always the ultimate goal. However, sometimes there are areas to improve that are not immediately clear or challenges that seem as though they're embedded in the company that remain without a solution. An outside perspective and additional insight are often-times an absolute necessity.

The complimentary Business Assessments conducted by NJMEP have proven time and time again to be a catalyst for growth for the businesses NJMEP serves. Completely confidential, bound by a Non-Disclosure Agreement, the business assessment process can take as little as two hours to complete. Business leaders speak with an NJMEP professional that has the knowledge and experience to understand the full range of critical business challenges and accurately assess and analyze a business's core operations.

The comprehensive, on-site, business assessments are an evaluation of eight key areas.

- Sales and Business Growth
- Production Efficiency
- Supply Chain Efficiencies
- Business Strategy
- Human Resource and Workforce Development
- Regulatory Compliance Needs and Support
- Quality Systems and Controls

• Financial Management

An unbiased, confidential, and thorough its evaluation and the resulting report on these eight business concentrations can enlighten even the most accomplished and experienced business operations leader. When dealing with the day to day, it can be easy to overlook opportunities to improve and move forward. Recurring challenges turn into a routine and identifying bottle-necks and solutions to these issues may be put on hold, indefinitely. Bringing in a confidential and trusted third-party, with the resources to obtain a complete picture of how a company is operating is priceless.

New Jersey's manufacturers have a resource to rely on when they want to become more effective, efficient, and competitive. The no-cost business assessment is the first step in the strategic hands-on approach to help improve a company's performance. After an assessment is completed by an NJMEP team member, the results are compiled into an executive 360° business summary. The summary contains invaluable information that allows business leaders the insights needed to establish a plan of action. NJMEP has the resources to assist businesses and act on the strategies that have been identified.

Assessments are designed to provide practical and actionable information for those in decision making positions. NJMEP is looking forward to partnering with you and providing a fresh perspective and enabling you to focus on how to move your organization forward. For more information on how to get started with this no-cost business assessment contact NJMEP and take that next step forward today. 📍

How Can Businesses Increase Sales and Become More Sustainable? Continued from page 35

considered when absolutely needed.

Many small to mid-size manufacturers hit a plateau or have trouble managing the growth they are experiencing. Growing sounds like a good problem to have but growing too fast without the proper plan in place can become unmanageable, quickly. Having a strategy and actionable plan to manage growth is vital. Properly navigating growth will give businesses the ability to take advantage of all the opportunities that begin to arise instead of focusing only on filling that next order and keeping pace with demand.

Succession planning can set a business up to continue growing long after the original owner is ready to retire. Thinking about handing a company down is stressful and usually not an exciting discussion. However, leaving a company as an owner with no plan in place could leave employees with no direction. The legacy knowledge an owner holds may be gone forever upon their early departure. This can cost people their livelihood. Employees rely on management to keep the business producing to feed their families and provide for themselves, even after an owner retires.

The Business Growth Suite of Services focuses on maximizing opportunities and minimizing threats to an organization. Having plans in place is critical to not only support short term growth but also ensure long term sustainable success.

Get Started with the NJMEP Business Growth Suite of Services

The NJMEP Business Growth Suite of Services is ideal for any small - mid-sized manufacturer intent on surviving and thriving throughout an onslaught of disruptions. Decision-makers might be too close to their business to fully realize all the opportunities available to them. Limited resources are now not the deciding factor if a manufacturer can move forward into the future and continue to innovate. Partnering with NJMEP allows owners and leaders to continue doing what they do best while NJMEP resources fill the gaps and provide additional assistance. Through collaborative efforts, NJMEP and any manufacturer can take the right steps to address any deficiency or identify additional strategies to increase sales and become a more sustainable business.

NJMEP wants to work with you to find the best solutions for any challenge. To learn about upcoming workshops or to take part in a no-cost business growth assessment, contact Ben Dominguez using the contact information below. 📍

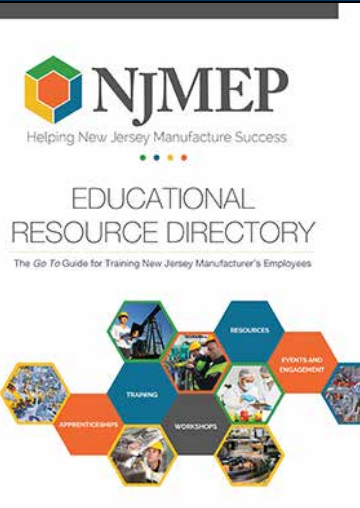
Ben Dominguez, Innovation and Growth Services Specialist
 Email: bdominguez@njmep.org
 Phone: 973-998-9801

NJMEP 2019 CALENDAR OF EVENTS

To see all of our workshops go to <https://www.njmep.org/calendar/>

OCTOBER

- **Blue Print Reading**
October 1 & 2, 2019
- **Foreign Supplier Verification Programs – FSVP**
September 30, 2019 – October 1, 2019
- **Project Management Professional (PMP®) Certification Exam Prep Course**
Oct 1, 15 and 23, 2019, Nov 6 and 12, 2019, Dec 3, 2019
- **Supervisory Skills for New Managers (Spanish)**
October 1 & 2, 2019
- **OE: Ensuring Compliance with Advertising and Promotional Requirements for Drugs and Medical Devices**
Oct 2 and Oct 9, 2019 • Dec 10 and Dec 11, 2019
- **DoD Cybersecurity Requirements: What do Manufacturers Need to Know?**
October 3, 2019
- **2019 Manufacturing Day**
October 4, 2019
- **HACCP (Hazard Analysis and Critical Control Points)**
October 8 & 9, 2019
- **Demystifying Search Marketing – What Every Marketer Needs To Know (South Jersey)**
October 11, 2019
- **Advanced Manufacturing Production Technician Job Opportunities – Pre Screen Testing**
October 14, 2019
- **Instrument Use and Calibration**
October 15 & 16, 2019
- **Pitch Perfect Presentations (South Jersey)**
October 16, 2019
- **Supervisory Skills for New Managers Day One**
October 22 & 23, 2019
- **SQF Practitioner**
October 28 & 29, 2019
- **Metrology GD&T**
October 29 & 30, 2019
- **Six Sigma Green Belt – 6 Day Certification Training (South Jersey)**
October 31, 2019 November 7, 14, and 21, 2019 December 5 and 12, 2019



EDUCATIONAL RESOURCE DIRECTORY

If you want to find a new car, a new restaurant, or new technology for your office, there are resources you can count on to help make the job easier. Until now, New Jersey has not had a single source at its disposal to provide locations in assisting manufacturers to train their employees. However, State, county and even local governments have their own resources (as do private entities), and NJMEP seeks to fill the need for New Jersey Manufacturers with this Guide.

NJMEP has done the research and contacted key training resources in New Jersey to determine primary contacts, so download it today at www.njmep.org/educational-resource-directory.

Manufacturing Cares.

Every few seconds,
someone, somewhere
needs food.

Be there for
someone else.

Donate today.

Help feed the hungry.



Colder months filled with multiple holidays put extra stress on families to feed their loved ones. Many people have to choose to Heat or Eat...

NJMEP and our Manufacturing Cares partners are working together to rally manufacturers and the community at large to **donate virtually** throughout the fall/winter.

Please join us in helping to feed hungry families throughout the state. Every dollar you donate enables the Community FoodBank of New Jersey to provide \$8 worth of food.

Through donations we've supported 22,000 meals to date!



To donate, go to www.njmep.org/manufacturing-cares/food-drive/