

2022 - Issue #2

Helping New Jersey Manufacture Success

www.njmep.org



# ADVERTISE

Engage Thousands of Decision-Makers Monthly



MANUFACTURING MATTERS 2022 - Issue #2

#### **Features**

Manufacturing Monthly Themes	4
State-Of-The-State of Manufacturing Gave the Industry a Chance to be Heard	6
Year of Women in Manufacturing	9
NJMEP Welcomes Life Science Leader Andre' DiMino as the Newest Board Member	10
NJMEP, NJBIA Announce 'Manufacturing Counts' Partnership	12
Celebrating the 'Year of Women in Manufacturing' Trailblazing and Industry-Leading Co-CEOs Set an Example	18
The 'Year of Women in Manufacturing' Hightlights Aixa Lopez	21
FDU Bestows AACCNJ's John Harmon with Prestigious Honor	23
A Brief History of Manufacturing in New Jersey	24
Be Unforgettable	27
The First Legislative Manufacturing Caucus Meeting of 2022	28
American Aluminum Supply Coalition Pushes to Remove Obstacles	30
American Aluminum Supply Coalition Q&A & DEAR EDITOR	31
Spring Season Is Budget Season in Trenton	34
Single-Use Plastic Bag Ban	35
Breaking Down Outdated Stigmas	37
No Debt, Real Experience, Unlimited Potential	38
Bridging the Skills Chasm by Highlighting Stories of Alternate Career Paths	40
NJMEP is leading the charge to make NJ a major player	43





Connect with NJMEP



26

Trenton Talk

# MANUFACTURING MONTHLY THEMES MOVING 'MADE IN NEW JERSEY' FORWARD IN 2022

2022 will be a turning point for manufacturing companies in the Garden State. The world is beginning to reopen and the industry is bouncing back from two years filled with disruptions and workforce challenges that highlighted the importance of domestic manufacturing. As we've seen over the last two years, having a transparent supply chain and a strong workforce is an absolute requirement to weather any storm.

In this quarter in Manufacturing Matters, you will find a collection of critical themes and insights to keep up with the latest industry developments. This quarter highlights Supply Chain, Year of Women in Manufacturing, and Cybersecurity. Explore each theme and find out how to better prepare for the future.

A look back at the first quarter of 2022:

#### **JANUARY - SUPPLY CHAIN**

The pandemic has taught us how crucial the supply chain is to local manufacturers and the economy. Manufacturers continue struggling to secure their raw materials and meet demand. Having the tools, resources, and a plan in place to better manage the supply chain to address any potential disruptions will play a critical role for manufacturers looking to grow in 2022 and beyond.

Having a fractured supply chain poses all sorts of challenges that include direct hits to the bottom line, creating a less competitive organization, and leaving businesses vulnerable. Understanding and managing a diverse, resilient supply chain to better handle future bottlenecks is possible. Management and their staff must understand the intricacies of a particular supplier network, and create partnerships to ensure a reliable flow of raw materials. As manufacturing businesses work their way through 2022 it will be vital they don't leave behind the lessons on supply chain resilience 2020 and 2021 taught the industry.

#### FEBRUARY - YEAR OF WOMEN IN MANUFACTURING

2022 has been named the 'Year of Women in Manufacturing' by NJMEP which is working to highlight all the incredible contributions women have made and continue to make to the industry. Women business leaders have been driving the industry forward and they deserve recognition. There are too few chances for these incredible business leaders to share their experiences with peers, students, and young women exploring career options. This is going to change. NJMEP teams have set out to engage with women business leaders and give them a platform to connect and collaborate. Through articles, interviews, 'We Made It' series episodes, and think tanks, the 2022 'Year of Women in Manufacturing' is only the beginning.

As women are celebrated throughout the year, there will be more opportunities to inspire more women to be a part of the industry. The 'Year of Women in Manufacturing' gives everyone a chance to pass their knowledge to



young women looking for female role models while giving women leaders a voice to promote manufacturing as an inclusive industry that provides sustainable career paths. Manufacturing can lead to a vast array of roles that require experience in Science, Technology, Engineering, and Mathematics (STEM). There are countless ways to get involved with manufacturing. Celebrating the 'Year of Women in Manufacturing' is the perfect way to educate, inspire, and empower more women to consider the field and explore its value.

target. DoD manufacturers don't have a choice any longer. The Cybersecurity Maturity Model Certification (CMMC V2) which provides a framework to protect businesses from frequent and complex cyberattacks is going to be required for any manufacturer bidding on a government contract in May of 2023. However, every other 'MADE in New Jersey' manufacturing business must react to the changing digital climate and take precautions. October may be Cybersecurity month, but businesses don't have time to wait.

#### **MARCH - CYBERSECURITY**

Cyber theft is becoming a prevalent issue for many manufacturers, particularly for smaller companies that don't have the staff or resources to keep information out of the wrong hands. Having a business' sensitive data breached by opportunists can be costly in many ways, financially and legally. These breaches are even posing a risk to national security. Strengthening cybersecurity practices and incorporating this culture into a business plan is the only way to mitigate these threats or at the very least have a plan of action if a breach were to happen..

With increasing threats resulting from the Ukrainian-Russian conflict and previous cyberattacks including the Colonial Pipeline ransomware attack in 2020 that took down the largest US fuel pipeline and led to shortages across the country, it's vital small and medium manufacturers take action to make themselves less of a

Check back every quarter to review the manufacturing themes driving industry forward. Explore a focused snapshot of how the industry is transforming here in New Jersey and throughout the United States. There are countless ways businesses can improve, so being able to cut through all the noise will be key. Set aside time to focus on Apprenticeships, Human Resources opportunities, and Lean Manufacturing. Discover how these themes can impact your business and uncover the latest ways to get involved.

Follow the latest from New Jersey manufacturing by following @NJMEP on Twitter, Facebook, and LinkedIn. Stay engaged all year long to help protect and support the industry.



#### GAVE THE INDUSTRY A CHANCE TO BE HEARD

# 'MADE IN NEW JERSEY' MANUFACTURERS COLLABORATE WITH STATE LEGISLATORS TO ADDRESS MOST DISRUPTIVE CHALLENGES

'MADE in New Jersey' manufacturing took another step forward at the State-of-the-State of Manufacturing on May 5. Hundreds of manufacturers showed up at the Trenton War Memorial to have their challenges addressed by members of the state legislature during two Town Hall sessions. Manufacturing leaders took to the stage to directly address the legislators in the audience. Those business leaders that weren't on the stage even had a chance to ask questions to state representatives from the audience. The goal of the day was to help educate policymakers on the support the industry requires and encourage them to consider developing legislation that would help these companies continue to grow in New Jersey. Topics that dominated the conversation include: Workforce Development, Diversity, Public Perception of Manufacturing Careers, and Regulations



New Jersey Manufacturers Spoke Up

Over 500 concerned manufacturers observed or were directly engaged in a variety of conversations to move manufacturing forward. This event, co-hosted by NJMEP (New Jersey Manufacturing Extension Program) and



Senator Michael L. Testa Jr. (R) Co-Chair of the Legislative Manufacturing Caucus

NJBIA (New Jersey Business & Industry Association), not only sparked discussion, but it was a way to directly connect manufacturers with the legislators representing their company's district. Legislators were given the opportunity to understand the impact 'MADE in New Jersey' manufacturing has on the economy, the community, and its residents.



Senator Linda R. Greenstein (D) Co-Chair of the Legislative Manufacturing Caucus

Nearly 30 Legislators and Congressional Representatives were in attendance including New Jersey Bipartisan & Bicameral Legislative Manufacturing Caucus Co-Chairs: Senators Michael Testa and Linda Greenstein. Congressional Representatives for Congressmembers Donald Norcross, Josh Gottheimer, Andy Kim, and Mikie Sherrill were in attendance. Among the legislators were Assembly Speaker Craig Coughlin; Senators Andrew Zwicker, Patrick J. Diegnan Jr., Declan O'Scanlon, Steven Oroho, and Edward Durr; Assemblymembers Daniel Benson, Verlina Reynolds-Jackson, Anthony Verrelli, John DiMaio, Marilyn Piperno, Don Guardian, William Spearman, Victoria Flynn, Clinton Calabrese, Brian Rumpf, Sadaf Jaffer, DeAnne C. DeFuccio, Robert Auth, Carol Murphy, and John Catalano.



NJMEP and its partners, NJBIA President & CEO, Michele Siekerka; SHCCNJ Chairman, Luis O DeLaHoz; NJEDA CEO, Tim Sullivan; CIANJ President, Anthony Russo and AACCNJ Founder, John Harmon addressed the crowd and discussed the importance of supporting the industry and the value in working together to drive the entire state forward. 'MADE in New Jersey'

manufacturers and 'Year of Women in Manufacturing' participants General Technical Services' Co-CEO Mari Kovach and Groezinger's Provisions' Alexandra Groezenger were also on stage as keynote speakers giving testimony of their success as manufacturers but highlighted the need for more support.



Two Town Halls Highlighted 'MADE in New Jersey' Manufacturing Challenges

Lobster Life Systems' Thomas Olsen, Norwalt Design's Michael Seitel, HK Metalcraft's Joshua Hopp, and Power Container Corporation's Aren Millan were the industry's leaders to participate as panelists in the morning town hall session moderated by MC and NJ 101.5 news anchor, Eric Scott. They offered up a wide range of questions directed to the state legislators in the audience, including the major topic of workforce development that was brought up by many manufacturers in the crowd.

Commercial Metals Company's Mark Zimmerman, Glutenlibre Food's Steven Leyva, FrontEnd Graphics Inc.'s Betty Maul, Ameral International, Inc.'s Louis
Grieco, LPS Industries' Paul Harencak, Jema-American's
James Natalini, and Europastry's Dixita Soni took part
as panelists for the afternoon town hall moderated
by MC and NJBIZ Chief Editor, Jeffrey Kanige. They
provided insight into ways manufacturing could
move forward by focusing on state incentives
and support programs for those with families.



Alexandra Groezinger, President Groezinger Provisions Inc.

New Jersey manufacturers are all unique, however many of the challenges they face are shared. Their perspectives differ, and their ideas for progress vary, but a clear message was sent out to the legislature; manufacturers need support from the state.

Doing business in New Jersey includes a host of benefits, from its access to ports, rail lines, and interstate highways, to the highly qualified and highly educated workforce. Still, these advantages come at a cost. The common themes mentioned above are disruptions that cannot be solved by the industry alone. Without support from the state, the industry





here in New Jersey will not be able to grow or thrive. Manufacturing is advancing at a rapid pace but without creating a more business-friendly environment, New Jersey will not be able to retain manufacturers. Those in attendance did not want to move. This state is their home, but other states are providing incentives that are almost impossible to turn down. State-of-the-State of Manufacturing offers the industry and the legislators a chance to come together and create solutions to keep these manufacturers, their workforce, and their economic contributions from picking up and relocating.



#### 'MADE in New Jersey' Showcase – The Largest Ever!

In addition to the town hall discussions, a 'MADE in New Jersey' showcase was held in a separate room at the War Memorial. This segment highlighted all the products manufacturers at the event produced to show the policymakers manufacturing is still strong in the Garden State. Manufacturers from a variety of industries ranging from food and beverage to

disposable bags demonstrated their latest products. Segmented by state legislative district, it showed the true scale and scope of this vast industry.

This is the first year since the COVID-19 pandemic began that State-of-the-State was held in person. The event was co-hosted by NJMEP and NJBIA to bring manufacturers and STEM companies together with state legislators to encourage manufacturing growth in New Jersey. NJMEP continues to remain an active partner to the industry and works with these incredible 'MADE in New Jersey' manufacturing companies and the legislature to ensure manufacturing is healthy and contributes to the state's economic growth while continuing to provide sustainable career opportunities for its residents.



#### Manufacturers Need to Engage to Drive Industry Forward

One of the largest concerns impacting the industry is the need for more manufacturers to participate

in events like this one. Even with over 500 business leaders in attendance, the crowd represented just under 5% of the total industry. NJMEP CEO, John Kennedy emphasized in his closing remarks that 'MADE in New Jersey' manufacturers must continue to be proactive. By having the industry come out in full force and express their challenges to legislators, it will show the policymakers that manufacturers are here and care.

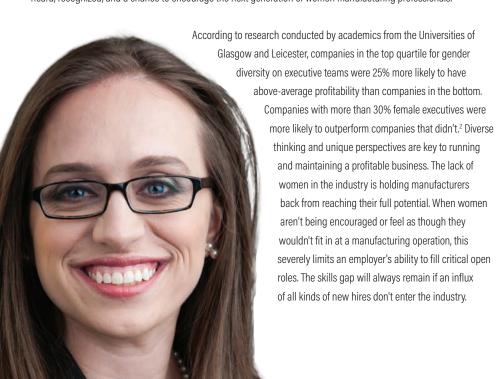


Presenting these concerns to the elected officials is a good start but more work needs to be done for 'MADE in New Jersey' manufacturing to move forward. It is vital to continue advocating for the industry at these events because the community's voice is crucial to showing legislators manufacturing matters to all the companies operating in the state and across the nation. Without the support from individual businesses, the industry will continue to be forgotten. Manufacturing made headlines during the COVID-19 pandemic and is in a rare position to have the public's ear. It is more important than ever to be at these events created specifically for manufacturers to change the paradigm here in New Jersey.

# Year of Women in Manufacturing

#### What It Means and Why It Matters

NJMEP and its partners are working together to highlight influential women manufacturing leaders that continue to drive 'MADE in New Jersey' manufacturing forward. Women are a largely underrepresented demographic in the manufacturing industry. Only about 30% of the 15.8 million people employed in manufacturing industries are women and even less, 1 in 4 women hold leadership positions according to the National Institute for Standards and Technology (NIST). ¹ This creates countless issues for the industry. Challenges range from workforce shortages to a lack of diverse perspectives in decision-making. The 'Year of Women in Manufacturing' is an initiative to highlight those New Jersey women leaders, and provides them and their communities a foundation to be heard, recognized, and a chance to encourage the next generation of women manufacturing professionals.



Constantina Meis

Community Relations

Manager

#### The Industry Steps Forward

To address misconceptions, provide platforms for leaders to engage and collaborate, and highlight the challenge the industry continues to face, the NJMEP team made it their mission to come together and drive progress forward under the 'Year of Women in Manufacturing' initiative. This concentrated effort is a culmination of a variety of opportunities. From interviews and articles to participating in NJBIA's Women Business Leadership Forum as a panelist for the Women Business Leaders Forum event, there are countless ways to get involved. The goal remains, to show students and young adults that incredible career paths are waiting for them in the manufacturing space. Turn to PAGE 18 or 21 to see some of these stories firsthand.

If you are a women manufacturing leader or have someone in your organization that deserves to be recognized, reach out to Mike Womack, NJMEP Marketing & Communications Manager at mwomack@njmep.org to learn more.

- 1 https://www.commerce.gov/news/blog/2021/03/ making-place-women-manufacturing
- 2 https://onlinelibrary.wiley.com/doi/full/10.1002/ijfe.2089



#### NJMEP Welcomes Life Science Leader Andre' DiMino as the Newest Board Member

#### DiMino's Addition Will Help NJMEP and 'MADE in New Jersey' Grow

NJMEP (New Jersey Manufacturing Extension Program) has been expanding recently. The Board of Trustees has announced the appointment of ADM Tronics President and CEO Andre' DiMino as the newest addition. DiMino becomes the 17th board member. His work and knowledge which made ADM Tronics a life sciences leader is invaluable to NJMEP and its Board.

DiMino has been invaluable in his current role for the 'MADE in New Jersey' manufacturer, helping them become an innovative leader in the medical device electrotherapy industry. Headquartered in Northvale, NJ, ADM Tronics was founded in 1969 by the late Dr. Alfonso DiMino who is regarded by many as a scientific genius of inventions. He was given the Marconi Science Award and Medal from Unico National and was named New Jersey Inventors Hall of Fame's New Jersey Inventor of the Year. He made it the company's mission to develop and manufacture innovative technologies and products that help people, animals and the environment.

Since then, ADM Tronics has been a producer of electronic components, assemblies and complete systems on a proprietary and OEM contracted or project basis for the medical device field. They utilize the latest in 3-D prototyping, precision instrumentation and specialized software and peripherals to ensure their products are among the best in the industry.

As a recognized industry leader, DiMino was carefully selected by NJMEP CEO John Kennedy to participate as a board member. His dedication to being a trendsetter for the life sciences industry is a perfect example

that 'MADE in New Jersey' manufacturing is still going strong.

"I am honored to be appointed to the NLMEP Board of Trustees," stated DiMino. "I believe manufacturing is crucial to New Jersey and, actually to our entire country. NJMEP has been a great resource for my company, and all other NJ manufacturers, especially during the extreme challenges of the pandemic. I look forward to working with the other trustees, John Kennedy, and the entire team at NJMEP, in support of manufacturing in New Jersey."

NJMEP's Board consists of manufacturing leaders who have made impacts in their industry across the Garden State. Having these industry influencers as part of the Board is truly representative of the state's 11,000+ manufacturers and STEM companies. As NJMEP continues to work with manufacturers across the state, the influence of the Board will move 'MADE in New Jersey' forward for years to come.

About NJMEP: NJMEP is a private, not-for-profit organization that improves the profitability and competitiveness of New Jersey's manufacturers. Backed by the National Institute of Standards and Technology (NIST), NJMEP enables organizations to enhance their productivity and efficiencies, reduce costs, and improve employee performance. For more than 20 years, NJMEP has used its extensive network of connections and proven track record of success to help manufacturers adapt to the latest innovative technologies and best practices to realize more than \$6.03 billion in value. Our services are categorized into the following three areas: Operational Excellence, Innovation and Growth and Workforce Development.



Presented By







Horizon Blue Cross Blue Shield of New Jersey

**GOLD SPONSOR** 



**SILVER SPONSOR** 



**BRONZE SPONSORS** 









**MEDIA SPONSORS** 







#### THANK YOU FROM THE













#### **TAKE ADVANTAGE** OF THESE LOW-COST EMPLOYEE RETENTION **SOLUTIONS**

New Jersey manufacturers have access to three highly effective Employee Retention Solutions. They are self-paced certification programs so it doesn't interrupt the workday, while teaching critical logistics or production skills to upskill your staff.



NJMEP.org | info@njmep.org | (973) 998-9801 | PARTOF THE NATIONAL NATIONAL



#### Many Solutions, One Focus...You

With a full range of property and casualty and employee benefits services, we will work tirelessly to design an insurance program that moves you forward, even in the most competitive of markets.

alliant.com



**Kurt Rataski Senior Vice President** D 732 588 1196 C 908 675 0327 331 Newman Springs Road Suite 314 Red Bank, NJ 07701 Kurt.Rataski@Alliant.com







#### NJMEP, NJBIA ANNOUNCE 'MANUFACTURING COUNTS' PARTNERSHIP



The New Jersey Manufacturing Extension Program (NJMEP) and New Jersey Business & Industry Association (NJBIA) have entered into a formal agreement to unite, broaden and strengthen the support of manufacturing businesses throughout the state.

Under the new Manufacturing Counts partnership, NJBIA, the largest statewide employer association in the nation, and NJMEP, the foremost provider of resources, programs and information for New Jersey manufacturers, will coordinate efforts and resources to bolster advocacy, collaboration and visibility for the industry.

The Manufacturing Counts announcement precedes the first Legislative Manufacturing Caucus meeting of 2022, which took place on Feb. 24, at Source Brewing in Colts Neck.

"As NJBIA's manufacturing roots go back more than a century and the industry faces continuing workforce challenges and costly burdens, we look forward to productively build off of this partnership with NJMEP," said NJBIA President and CEO Michele Siekerka. "By aligning our dedicated and collective efforts, we can fulfill our joint mission to truly strengthen and grow our manufacturing industry, which is so essential to New Jersey's economy."

"When one considers the overall positive financial and employee impacts that 11,000-plus firms in manufacturing, STEM and transportation & logistics make in our state, it is obvious that partnering and teamwork are the best available options to support these sectors," said NJMEP CEO John W. Kennedy.

"Since I started at NJMEP 10 years ago, NJBIA has always been a strong partner. And as we progress forward, it made the best sense to work closer together in a more structured capacity. Exciting times."

The Manufacturing Counts partnership will see both organizations embark on an engagement campaign of New Jersey manufacturers for the purposes of building a stronger grassroots network, utilizing government affairs events and other networking events from both groups.

This will include opportunities for the sharing of peer-to-peer best practices, and additional surveying and research to bring a deeper understanding of the needs and concerns of manufacturers.

Armed with greater information and collaboration, NJBIA and NJMEP will advance a timely, relevant, and specific agenda, with prioritized actions items, for the Legislative Manufacturing Caucus, the full Legislature, and the Murphy administration.

"We know that New Jersey manufacturers need improved workforce development, support for the innovation ecosystem, a reduction in mounting burdensome regulations and protections from liability," said NJBIA Chief Government Affairs Officer Chrissy Buteas. "Through this collaborative process, we can fine-tune and address those needs through legislation and communication with our policymakers."

Further, the Manufacturing Counts partnership will seek input from a broader coalition of business, industry and nonprofit groups to provide support for the collective work. This will include a communications campaign to increase awareness of manufacturing careers.

"This partnership is a tremendous opportunity for both NJBIA and NJMEP, however, the entire industry stands to gain," said NJMEP Senior Director of Business Development Sally White. "When we combine our expertise and networks through this collaborative relationship, we provide more opportunities for local businesses and amplify their voice."

The work of the Manufacturing Counts partnership has already begun, which was seen during NJMEP's 2022 State-of-the-State of Manufacturing on May 5th in Trenton, New Jersey.



New Jersey manufacturing is **Built to Last.** Come discover some of the featured manufacturers in this edition of Manufacturing Matters.

#### SUPERIOR GLASS AND METAL & CASE MEDICAL

#### **SUPERIOR GLASS & METAL, LLC.**

Three New Jersey natives came together in 2005 to start Superior Glass & Metal, LLC. based in Wyckoff. It didn't take them long to become a leader in the installation of storefronts, Curtainwall Framing, and glass and glazing space. Small 'MADE in New Jersey' manufacturers like Superior Glass & Metal play a vital role in developing and constructing some of the most notable commercial buildings throughout the state. Using decades of experience in the fabrication and construction of commercial building aluminum windows and doors allowed this shop to stand out from the competition. Known for their quality, dependability, and support, this manufacturing business exemplifies the 'MADE in New Jersey' industry. Most domestic manufacturing businesses are small, but many play a vital role in the supply chain.

COVID-19 caused a slew of disruptions for businesses of all kinds. Commercial property and construction projects were facing an uncertain environment. To ensure this 'MADE in New Jersey' manufacturing operation could continue investing in their employees and its operation, leadership connected with NJMEP. Superior Glass and Metal soon found all the innovative practices which turned them into an industry leader would qualify as R&D. See how this allowed them to receive their R&D Tax Credit on PAGE 14.

#### **CASE MEDICAL, INC.**

New Jersey is where many of the most advanced medical devices get their start. This highly regulated industry requires manufacturers to maintain incredible product standards. Known as the "Medicine Chest of the World" New Jersey is a leader in this space, but many products end up overseas. Case Medical has proprietary medical devices that make their way across the Atlantic and into the EU. Since 1992 they've been developing incredibly sought-after devices and instruments but even with over 30 years of experience, new EU medical device standards required a tremendous amount of resources to ensure its 'MADE in New Jersey' operation complied.

To comply with the new regulatory standards in the EU medical device market, Case Medical collaborated with NJMEP's Life Science experts. But, compliance is only part of the challenge. New documentation standards required medical device manufacturers to employ rigorous new workflows that took note of each step in the process. A comprehensive approach was needed to abide by the new standards but also to maintain these new procedures. Find the entire journey on PAGE 15.

New Jersey manufacturing is Built to Last. These businesses and the employees that make it all possible are truly, 'Unsung Heroes'.

Check back in Manufacturing Matters every quarter to see the Built to Last manufacturing list.

To be included, contact Mike Womack at mwomack@njmep.org and show the world your company is Built to Last.

### LOCAL NEW JERSEY MANUFACTURER WORKS WITH NJMEP TO UTILIZE STATE INCENTIVE THAT REWARDS R&D

SUPERIOR GLASS & METAL, LLC REALIZES THE SCALE AND SCOPE OF THEIR R&D PRACTICES



#### BACKGROUND

Founded by Emil Saporito, Joseph Zisa, and Kenneth Warnet, Superior Glass & Metal, LLC has been directly involved in the fabrication and construction of commercial building aluminum windows and doors since 2005. Together they bring over 30 years of experience in the installation of Storefront, Curtainwall Framing, Glass and Glazing. This 'MADE in New Jersey' manufacturing business is known for its quality, attention to detail, and ability to complete projects on time. Their experience allows the organization to take on complex projects and provide solutions to any of the challenges that are common when architectural projects begin to take shape. Based in Wyckoff, New Jersey, they can custom fabricate window jambs and sills in a variety of metals depending on the architectural drawings.

Superior Glass & Metal, LLC and its leadership's experience allow the 'MADE in New Jersey' manufacturer to continuously improve and innovate their processes to remain ahead of the competition.

#### CHALLENGE

New Jersey is an expensive state to conduct business. Taxes always weigh heavily on any operation, but this is especially true when it comes to a small manufacturing shop in northern New Jersey. While moving past the COVID-19 pandemic, Superior Glass & Metal, LLC was looking for any relief after nearly 2 years of disruptions. An influx of capital would allow this 'MADE in New Jersey' manufacturing shop to move forward without any additional pressure from an uncertain year as demand for commercial properties and construction began to speed up.

Many manufacturers often overlook certain programs and incentives because they underestimate their work. New Jersey gives manufacturing businesses access to unique ways to offset costs and provides ways to create a more manageable business environment.

#### SOLUTION

Superior Glass & Metal, LLC was searching for ways to improve their business. They were open to learning about new options that may have not been previously explored. After the Controller participated in NJMEPs annual State-of-the-State of Manufacturing event they were connected with their local Account Manager. Ryan Sheehy, their local Account Manager conducted a General Business survey to learn more about their manufacturing operation and see where NJMEP could add value.

After developing an understanding of their needs, current operation, and workforce, it was clear a long-term relationship and growth plan were required but immediate support could be provided. This manufacturing operation was in the ideal position to benefit from R&D Tax Credits. They didn't notice the amount of R&D they were practicing daily. Many businesses imagine R&D only takes place when scientists in cleanrooms are involved. However, manufacturers of all kinds are constantly improving their specific processes in their respective industries. This 'MADE in New Jersey' manufacturing business has decades of experience in the Glass and Glazing industry. All this experience, years of trial and error, and their diverse backgrounds culminated into an incredibly efficient and effective business thanks to the R&D that was taking place.

NJMEP and its resource provided support and assistance every step of the way to ensure compliance while also capturing all qualified R&D activities

#### RESULTS

Superior Glass & Metal, LLC was successfully able to secure an impactful R&D Tax Credit. These funds were able to be reinvested into their business, and its people. The following results were provided by the 'MADE in New Jersey' manufacturer through an independent third-party survey from the company's engagement with NJMEP over a 12-month period.

INCREASED SALES: \$1,500,000
RETAINED SALES: \$3,000,000

EMPLOYEE RETENTION: 15

COST SAVINGS AMOUNT: \$550,000

"We started out by getting involved through their State-of-the-State event which caught my interest because it gave me the chance to voice my concerns with local legislators, but then I had a chance to learn how they could help my business. I'm an accountant but these **R&D Tax Credits required** a real understanding of engineering to document. Working with NJMEP and their experts was necessary for our local manufacturing business."

Michelle Womack, Controller, Superior Glass & Metal, LLC

# CASE MEDICAL, INC. COMPLIES WITH EU'S NEW MDR 2017/745 STANDARDS FASTER, AND MORE EFFICIENTLY BY TAKING ADVANTAGE OF NJMEP'S EXPERTISE



#### BACKGROUND

Case Medical, Inc. is a 'MADE in New Jersey' manufacturer that produces and offers high-quality, cost-effective instrument processing products and services. They were originally founded in 1992 as a supplier of custom graphics trays to medical device manufacturers. In their 30 years of business, they've become a leader in the medical device space and are best known for the DIN-sized, SteriTite(R) universal sealed container and modular customizable MediTray(R) inserts that are regarded as the gold standard in instrument protection and organization. This local manufacturer prides itself on providing customers with products of the highest level of safety and effectiveness, using a universal design providing long-term cost savings and a high return on investment.

#### CHALLENGE

In May of 2017, the European Union adopted Medical Device Regulations MDR 2017/745 to replace both Medical Device Directive MDD 93/42/EEC and Active Implementable Medical Device Directive AIMDD 90/385/EEC. Issues with specific medical devices in the European Union forced them to add devices that were not regulated under the original directives. All medical device manufacturers and suppliers had 3 years to implement the changes required under the new regulation. There is no grandfather clause. This is a mandatory regulation for these businesses.

The challenge for manufacturers like Case Medical is when reviewing the language of the regulations, it is not necessarily written for their business. Understanding what exactly a manufacturer must do to comply is a full-time job and requires a working knowledge of exactly what auditors review during the audit process.

Even though Case Medical is compliant with all the FDA regulations, the EU MDR requires manufacturers to have even more documentation in place to meet these standards. It's incredibly time-consuming to document every step of the manufacturing process, especially for a business without experts on staff with a working knowledge of EU MDR.

#### SOLUTION

Case Medical reached out to their NJMEP Account Manager, Peter Russo for assistance in complying with these new regulations. They needed an expert that understands all the nuances that are involved in meeting these high standards and to find out exactly where the gaps were in their current documentation and quality process. Peter Russo was a former auditor and has done extensive research into the new EU regulations to provide manufacturers with a more concise and easier to understand process which helps ensure organizations would become compliant as efficiently and effectively as possible.

The first step to help Case Medical meet these new standards was to review the current QMS system and compare it to MDR 2017/745 compliance and audit current documentation and records. Peter Russo helped assess the MDR 2017/745 technical requirements and current Post Market Surveillance (PMS) vs. MDR CE Mark Classification Review.

Next, Peter Russo provided the results of the Gap Analysis. The NJMEP team outlined all non-conformances to the new MDR and provided options to rectify these issues. Additional training was needed to help Case Medical meet its goals of being MDR 2017/745 compliant. Case Medical then went on to take advantage of the CARES Act funding to help offset that future training.

#### **RESULTS**

Case Medical was able to successfully meet the new European standards for medical devices. Through their engagement with NJMEP's Subject Matter Expert, they were able to achieve compliance in a much more efficient and effective manner.

Throughout their time working with NJMEP, Case Medical cited the following results during their latest NIST Survey:

RETAINED SALES: \$200,000

EMPLOYEE CREATION: 2

COST SAVINGS: \$50,000

**NEW PLANT EQUIPMENT** 

INVESTMENTS: \$1,500,00

"Thanks to Peter Russo we were able to meet these standards in a much more lean fashion without hitting dead ends. When he was helping us, we would navigate the regulatory pathways at a much better pace. We are definitely happy with the service we received."

Michael Polozani,

Microbiologist, Case Medical



# Celebrating 'MADE in New Jersey' Manufacturing

Highlighting Essential 'MADE in New Jersey'
Manufacturers That Drive NJ Forward



**SUNKEN SILO BREW WORKS** This Garden State brewery has been crafting top-notch beer for customers deep in the heart of Hunterdon County since 2019. This Lebanon, NJ brewery is ran by owner Jeff Donlon. Donlon started the business to address the lack of breweries in the town. Sunken Silo Brew Works makes a variety of beers including stout, IPA, and ale for customers to choose from. He enlisted the help of master brewer, Matt Harrison and leans on Harrison's expertise to craft a variety of high-quality beers to match the tastes of nearly any patron. This 'MADE in New Jersey' manufacturing operation is one that shouldn't be overlooked!



FAST BAGS CORP. (BAG UPS) This manufacturer is an industry leader in developing biodegradable trash bags. The company has paved the way to produce sustainable garbage bags at a time when the world is moving to sustainable options. Their products are completely oxo-biodegradable and made in the USA. Military veteran-owned and -operated, the 'MADE in New Jersey' company works to ensure they create employment opportunities for veterans and people with disabilities. This sustainable bag manufacturer has created the perfect eco-friendly trash bag option while also making the process easier for everyone.



**CLIMAX BREWING CO., INC.** Located in Roselle Park, NJ, this microbrewery was started because of the need for a local brewery that produces classic styles of fresh beer. It was founded by Dave Hoffman, the former "The Brewmeister", homebrew-supply store owner and head brewer, and his dad, Kurt. Having an extensive background with 10 years of homebrewing, two years of professional consulting experience for a brewery, and owning a home-brew supply store, the co-owners have turned the brewery into a community stable, known for its Northeast US-exclusive Hoboken Ale and Shanghai Pale Ale. Since opening, they have generated an incredible amount of interest in their locally brewed beer. So much interest that many New Jersey taverns, restaurants, and liquor stores could not pass on up the opportunity to offer Climax Brewing products to their own customers.

Manufacturing is a critical part of the New Jersey economy. These businesses play a vital role in their local community and have proven to be essential to the state and nation. 'MADE in New Jersey' is a complimentary program that helps highlight these businesses which are incredible economic stimulators and providers of competitive employment opportunities.

With over 11,000 manufacturers that make their products right here in New Jersey, be sure to check back every week for the latest 'MADE in New Jersey' manufacturer shoutouts!

Sign up to become a MADE in NJ member by contacting mwomack@njmep.org.

#### 'MADE IN NEW JERSEY' BENEFITS:

#### ALL NEW 'MINJ' MEMBERS ARE LISTED IN MANUFACTURING MATTERS MAGAZINE

Manufacturing Matters is distributed to over 14,000+ business leaders throughout New Jersey.

#### HAVE A CHANCE TO BE SELECTED AS "MANUFACTURER OF THE WEEK"

One MINJ member is highlighted and shared via all on NJMEP social media networks each week.

#### A PROFILE PAGE ON NJMEP'S WEBSITE SHOWCASING YOUR COMPANY

Improve your company's brand awareness and search engine ranking.

#### DISPLAY THE MADE IN NEW JERSEY LOGO ON YOUR WEBSITE

Show businesses and customers visiting your website that you manufacture products here in NJ.

#### RECEIVE AN OFFICIAL 'MADE IN NEW JERSEY' PLAQUE TO DISPLAY ON SITE

Showcase your New Jersey pride by displaying an official MINJ plaque at your manufacturing facility.

Available upon request.

Sign up to become a 'MADE in NJ' member by contacting mwomack@njmep.org.



# epm

## 'MADE IN NEW JERSEY' MANUFACTURING CONTINUES TO IMPRESS.

### ELECTRO PRODUCT MANAGEMENT, INC (EPM) IS LOCAL DOD LEADER

Electro Product Management, Inc. (EPM) is not only a leader as a defense supply chain contractor, they're also an Electronic Test Lab leader in the United States. They were recently recognized as one of Quality Leadership's top manufacturers in the country for 2022.

EPM ranked second overall according to Quality Leadership's survey that evaluated companies on factors such as continuous improvement and quality programs, contribution of quality and average number of hours that employees receive quality training to ensure compliance to standards such as ISO 9001, AS9100D, ESD-20.20 and ITAR.

This Fairfield, 'MADE in New Jersey' manufacturer specializes in designing, verification testing, environmental stress screening procedures, tests and hardware for electrical, electronic and electromechanical (EEE) components used in the aerospace, defense and industrial electronics industries.

The husband-and-wife team of Ray and Clorinda D'Alessandro started EPM in 2001. This ISO 9001:2015 and AS9100D, ESD-20.20 certified and ITAR registered company currently has 18 employees on staff, many who have been with them since they began operations.

The announcement is a testament to their focus and management philosophy that contributed to the prestigious recognition.

"We just focused on providing our customer with the best service, support, and product quality," VP-Engineering, Ray D'Alessandro emphasized. "The quality is the results of stringent and concise procedures and most importantly mutual respect between employees and management result in employee retention and their related experience."

Quality is a big reason why Quality Leadership named EPM as a top-ranked manufacturer. Ray emphasizes the need for quality and service to be top-notch. "Business is based on recurring sales," he told Quality Leadership. "Quality is the most important thing that I live by. Customers keep coming back. They trust us, and they know that they're going to get their parts back with no issues."

"Having the right people, with the proper training, and treat them with respect. That's my formula," said Ray.

EPM is one of over 11,000 manufacturers that have established New Jersey as its base for manufacturing. Both Ray and Clorinda are from Italy and Ray pursued a BSEE from the Milwaukee School of Engineering; however, they consider New Jersey to be home. Despite some of the challenges their business faces, they believe the Garden State is ideal for finding talent.

"In spite of high labor cost and cost of living, we find that New Jersey is the best fit for our company to recruit technical talent and experienced operators," D'Alessandro explained.

EPM has an impressive resume of clients. These clients include many top-level defense and aerospace

contractors. Some of the testing can be for missile systems, submarines and aircraft. "All these parts have to have a reliability high enough to withstand these extreme environments," D'Alessandro said.

Transparency is necessary for the industry EPM is involved in. D'Alessandro states their services are "provided with the utmost transparency." He also offers customers the ability to tour their lab to see the testing occur.

His advice to other companies looking for a blueprint to success, "Most importantly, treat your employees with respect. They will appreciate that and want to do a good job, which translates into good quality and good service."

D'Alessandro requires employees to go through yearly training while EPM adapts to changing market requirements such as the DoD's new cyber security certification, which is mandatory for contractors in the defense supply chain.

Ray credits engaging with NJMEP to help EPM maintain this initiative such as keeping their staff updated on the latest cybersecurity rules. NJMEP works closely with EPM to provide training/instructing his staff to protect CUI documents, cybersecurity threats, and the latest rules protecting defense related information. He recommends other manufacturers looking to grow work with local MEPs such as NJMEP to help drive their business forward, "NJMEP has provided EPM with helpful resources and support." In order to strengthen domestic manufacturing, businesses need a partner they can trust. It's vital manufacturers like EPM take advantage of every resource possible to become as competitive as possible.

#### Celebrating the 'Year of Women in Manufacturing'

### Trailblazing and **Industry-Leading** Co-CEOs Set an Example

Bv Mike Womack, Marketing and Communications Manager, NJMEP

2022 is being hailed the 'Year of Women in Manufacturing' by NJMEP. This dedication to the incredible women business leaders that continue to drive the industry forward is taking many forms over the course of the year. One way in which these manufacturing leaders are being recognized is through a series of interviews between NJMEP and stand-out professionals to gain unprecedented industry insight and give them a platform to share their impression of modern manufacturing and STEM fields. This will be a chance for them to pass down their knowledge to young women who look up to them as role models and to give women leaders a platform to inform the public that manufacturing is an inclusive industry that provides countless opportunities and career paths.

General Technical Services, LLC (GTS) was one of the first companies approached to participate in the 'Year of Women in Manufacturing, GTS provides technical, management, and administrative support to US Government agencies, universities, and industry partners. Their staff of scientists and engineers have an incredible breadth of knowledge and experience to help support the development of advanced RF technologies and sensors, advanced Electro-Optical technologies, electronic materials and devices, and power sources. With a track record of success, they support clients through complex R&D program management which helps ensure the US remains a technological leader.

NJMEP was lucky enough to catch up with the leadership team from GTS. Barbara J. McGivney and Mari C. Kovach are GTS Co-Chief Executive Officers and were spectacular examples of two women leaders in the industrial space. See below for the conversation between McGivney, Kovach, and NJMEP's Marketing & Communication Manager, Mike Womack.

Mike Womack (MW): Can you tell me a little bit about yourselves? I'd like to know how each of you found yourself in the Research, Development, and Prototyping industry.

Barbara J. McGivney (BJM): "It's by chance that I found myself in this field. I applied for a business position with a defense contractor who was providing research, engineering, and management support services to Fort Monmouth at the time. When that office closed the manager who I was working for decided to open his own contracting business and ask if I would be interested in being



Barbara J. McGivney

his office manager. I accepted and became the first employee of GTS! In addition to managing the office, I was responsible for contract administration and finance, and almost 40 years later here I am."

McGivney is a wonderful example of the limitless vertical movement a career in STEM / Manufacturing can provide. She went from being an Office Manager to CEO. Career paths are never a linear progression. However, if a person works hard in the manufacturing space, virtual growth is almost always an option.

Mari C. Kovach (MCK) was asked the same question and here's what she had to share: "I started my career at Fort Monmouth in the Electronic Warfare Laboratory which morphed into the Intelligence and Information Warfare Directorate. I spent a total of 30 years at Fort Monmouth until it was BRAC-ed (Base Realignment and Closure). For the last 10 years of my career, I was in the R&D Center's Headquarters so in going from one of the labs to the Headquarters, I got an appreciation for what it's like to run a larger entity than what I was used to in the laboratories. Then it came time when

BRAC was happening for real, and they were getting ready to put the padlock on the gate. I really didn't want to move.
Our daughter had been through a serious

illness that same year,



Mari C. Kovach

and she still had follow-up appointments to make. I didn't want to uproot my family and move to Maryland. One of my former colleagues I worked with in the Army was working for GTS as the program manager. He was considering retiring and he asked me if I would be interested in replacing him at GTS. He set up the interview with GTS' owner at the time, Mike Mirarchi and voila, here I am."

MW: Can you tell me a little more about GTS and its business?

MCK: "We're an engineering services company providing technical expertise, administrative assistance and program management to our clients who are primarily the US military. We have a group that's on-site in the Army Research Laboratory in Adelphi, Maryland. They provide engineering and scientific support mostly in the development of sensors and electronic components that make up those sensors to make them better, see farther, improve fidelity, etc. for the soldier. And then we have another side where we execute programs. Again, research and development programs, in the power and energy space. That encompasses things from energy generation to storage to the distribution of it. A lot of the projects that we run are primarily geared towards the soldier, improving the battery life of their sensors or giving them wireless connectivity, so they don't have to carry batteries into the battlefields. We work from the soldier-level up to base camps so that also encompasses large power distribution. We've been doing this for a long time. We're good and fortunately for us, we have repeat clients. We've been doing this for 35 years now."

BJM: "In addition to Mari's above comments, as a retired government employee, Mike Mirarchi's vision was to provide the government engineers with some of the services that they found more difficult to get in house. We are proud of the reputation that GTS has in the DoD community.

MW: What role do you play within the organization? You don't see many companies with Co-CEO . How does that system work?

BJM: "GTS' founder and owner was winding down his career. After over 30 years working for the Government and nearly 30 years running GTS, he was looking to Mari and I to run the company. I was running Operations, Finance, and Contracts. Mari was running the technical end of the business, Program Management, and interfacing with Government customers. Shortly after the founder had passed away, Mari and I were having a conversation about the company while traveling down to Maryland to visit a client. At the time we were uncertain what the estate intended to do with the company, and we both knew that GTS was very important to us for a lot of reasons. Mari looked me in the eye and said, 'we should try to buy the company and run it together... I would love to own a company like this. I looked at her and said I never really thought about something like that and thought, 'Wow'. Between my operational experience and her technical expertise, we felt we were a great mix and we got along very well both personally and professionally. It seemed like it was a good combination. So, I said, 'You know what? Let's try it!'. We spoke to our families, found a good lawyer and banker, and bought the company. The Co-CEO title came about after Mari and I closed on the sale. We weren't sure what titles we wanted to use and were going back and forth with ideas when one day I was reading a Meridian Ocean Medical Center Newsletter and inside the front cover, was the forward by the then-president/ CEO of Meridian. He was saying how Meridian was now joining Hackensack Medical Center and was introducing his Co-CEO. I thought, it was a novel idea and maybe something that Mari and I could use for our titles! I sent the article to Mari and said, 'What do you think of Co-CEOs?'. That's how it really began.

We've been very happy, and the company has done so well in the last four years since we bought it that I often think about what Mike would say if he could see GTS now. I don't think he ever would envision how great it could become."

MW: How was your experience entering the field of Government contracting? Can you give me some examples of hurdles you had to overcome, personally and professionally?

BJM: "As I mentioned earlier, my entering the field of Government contracting was quite by accident. I applied for a position as a contracts/financial person and it just happened to be in the defense industry. I was very lucky to be surrounded by well experienced co-workers who were willing to take me under their wing and I took every course I could find in Government contracts administration. It surely was an on-the-job kind of a training and one thing led to another. There were more and more growth opportunities and I grabbed each one that I could and learned as much as I could."

MCK: "It's funny because they don't teach you government contracting in engineering school. It was sort of a new experience. Fort Monmouth relied a lot on its defense industry partners. That was a whole new thing just to learn contracts. What is a contract? What kinds of things do you need to consider? How do you write a proposal? How do you make sure you get everything on time and all that? That was something I wasn't anticipating when I was in engineering school. When you're around for 30 years you pick things up."

MW: Did you have a role model growing up that pointed you toward the defense industry? If so, who were they and when did they first inspire you?

MCK: "Both my parents worked at Fort Monmouth, so I knew about the defense industry from them. I heard lots of their stories growing up. Over dinner at night, my dad would tell us about the particular challenges he may have had that day. When I got to actually work as a full-time civilian employee, there were very few women in leadership positions. There was a woman engineer, a mathematician, and a scientist that I was personally acquainted with. They were all great women and very friendly. Always willing to help and give advice. Over the years, eventually, you wait around long enough there were more and more women in leadership positions... To include me – eventually! There were several men who were my Branch Chiefs who were very supportive; always available to help



out, answer questions and give consult. But I can't say that there was just one person; one role model."

BJM: "No, I didn't have a role model in the defense industry when I was growing up. My dad was in the retail business."

MW: Studies show a more diversified workforce leads to a more profitable business. In your opinion and from your experience, what other ways can an organization benefit?

BJM: "We have a pretty diverse team at GTS. Recruiting is open and fair, and we won't tolerate anything less. Mari and I trust our employees and we let them do their job without micromanaging. If our staff members need training, we sponsor the training. If they need certifications, we sponsor that as well. We have an open-door policy and encourage our staff at all levels to feel comfortable to come to us at any time with any issues/concerns they may have in regards to their job performance and or needs in order to do their job. In addition, we were both working moms and fully understand all the challenges that brings.

MCK: "It comes down to respect. We respect our

employees and they respect us. I used to say all the time, 'We're not in kindergarten anymore.' You hire someone they have a job to do, and they do it. If they have question or issues doing their job then you're there to help them through it but you don't have to micromanage people or do their job for them to get a great outcome. As Barb said, we have a pretty diverse team... we also have a very high performing team which is reflected in the feedback from our clients".

Now Barbara and Mari are in a position to be role models for the next generation of women engineers, manufacturers, and business leaders. This next question was asked to provide real guidance to young women from people that have walked the path before them. The next few questions are specifically geared to offering invaluable insights to the emerging women manufacturing business leaders.

MW: What advice would you give to young women that are currently exploring career opportunities?

MCK: "My daughter just recently graduated (with a degree in Engineering). She and I talked a lot about plotting a path forward. So, what did I tell her? In her case and mine, you have this picture in your mind of

what you think you want to do when you graduate. Then depending on the job market, COVID aside, you have to make a choice. The advice was: don't have your heart set on your dream job to start with because the opportunities and the universe might not have the planets lined up just yet for that. Try different things, explore the opportunities. You look at each job as an opportunity and just do your very best at that job. Soak it all in, learn, grow. In her case, she was very fortunate and landed a really good position with a great firm. She's learning a lot and growing as an Engineer."

BJM: "Don't be afraid to try anything! And if something looks interesting, go for it and make the most of it. When you're younger, you're more intimidated by other people and I think just trying to get over that is important. I know that was true in my case. Sometimes I just think, 'Oh, I really wouldn't want to ask that question, or it might just be a silly question.' It took me quite a while to be able to just come right out and ask questions in an open forum. I found that often it wasn't a silly question that I wanted to ask and the people around me didn't have an answer either until we worked through things together. I think then you get more confident the longer you're working around other people."

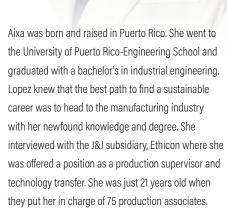
2022 is NJMEP's 'Year of Women in Manufacturing' for a reason. Stories like the one shared by Barbara and Mari are instrumental in encouraging more young women to explore fruitful careers in the STEM space. Throughout the year NJMEP will be connecting with more women business leaders and giving them a platform to share their experience and shine a light on these incredible individuals through articles and speaking events.

More women are entering the field than ever before. These incredible people need role models to look up to and learn from as they've already seen the path and can now help guide others. If you're a woman in manufacturing, engineering, or any STEM discipline or know of one that has a story to share, reach out to Mike Womack, NJMEP Marketing & Communications Manager to set up an interview or learn about upcoming Women in Manufacturing-focused speaking opportunities, today.

#### The 'Year of Women in Manufacturing' Hightlights

## Aixa Lopez

There is a disconnect in the manufacturing industry. Business leaders continue to struggle finding qualified professionals to fill their ranks but historically, these companies were only looking to recruit a specific kind of individual. As society progresses, it is absolutely critical to show young women the vast array of career paths that are available in the manufacturing space. These careers provide sustainable income with nearly limitless vertical potential. This is one of the goals of NJMEP's 'Year of Women in Manufacturing' initiative. It is an industry-wide effort to highlight trailblazing women leaders that have broken the mold and give these individuals a platform to share their stories and be role models for the next generation of women manufacturing and STEM leaders. Aixa Lopez, P.E., is currently Operations Oversight for the Statewide Hispanic Chamber of Commerce of New Jersey but she wasn't always in that position. She began her career in the manufacturing space and took the time to share her personal experiences with NJMEP. Her story provides an incredible look into the value of this professional field. Lopez provided amazing insight into her career path and was willing to offer guidance on how the next generation can get involved in the field. Come explore Aixa Lopez's story of how she found herself in the industry and the valuable lessons she learned and applied to her work outside manufacturing.



Using her engineering skill set, she had the opportunity to observe and analyze the production process she was now responsible for directing. Every day she would spend a few extra hours working with the IT Department to develop a spreadsheet algorithm that received production throughput data to calculate shift productivity. The company was massively impressed by the initiative and its value and promoted Aixa from her 3rd shift position to 1st shift. She went on to implement a manufacturing planning software company-wide and was directly responsible for helping the organization rectify its severe backorder issue. After J&J, she moved on to work for Medtronic, where she expanded packaging output and implemented a pull system that ended the raw material shortages the company was facing. Aixa was and still is a problem solver. Her engineering experience and her creative approach to



problem-solving are an asset in the manufacturing industry and can be applied to any other line of work.

#### The Path Forward -Manufacturing and Beyond

Her journey ultimately led her to become an accomplished and trusted engineering and operational consultant and volunteer her time to the Statewide Hispanic Chamber of Commerce of NJ. The skills and experience she has acquired throughout her career allow her to excel in both positions. A few questions remained about how she found herself in a position to explore the manufacturing industry which she was happy to answer.

Mike Womack, Marketing and Communications
Manager from NJMEP asked (MW): "What
led you to become an engineer? Can you
share some examples of hurdles you had to
overcome, personally and professionally?"

Aixa Lopez (AL): "I never thought I was going to become an engineer. I loved numbers, but I also loved fixing things. When I was researching career fields, I found industrial engineering. I loved how it was described. It was the interconnection between machines and people.

The biggest challenge I see is that people like to put boundaries on career fields. For example, when people think about engineering, they only think about manufacturing, design, or construction. I've worked in all of them and in marketing, business development, and nonprofits. There are no boundaries in engineering. You can apply it to anything.

Being a woman in the industry has also been difficult, especially in the 90s when all production supervisors were male. In the year 2000, I made a shift and entered the Public Works/Construction industry, which was a challenge. I was the first woman Director of Public Works in the municipality and the first non-civil engineer in charge of almost 300 employees. However, I stuck to what I knew; managing and communicating were my "go-to" skills, and when the employees saw the results and transformation

of the processes, the paradigm shifted. Suddenly, a young female industrial engineer didn't seem odd."

This led to the next question, and just as in past 'Year of Women in Manufacturing' interviews, female role models in the industrial space were nearly impossible to come by. Instead, Aixa has become a strong, talented, and accomplished role model for the next generation of young women entering the field.

An essential aspect of a role model or mentor is passing down advice that came out of years of personal experience. The next question focuses on the advice every young woman considering her career path should hear.

MW: "What advice would you give to young women that are exploring career opportunities?"

AL: "I would say that they should think about what they like and explore career fields they can develop and thrive in. Also, to look at their career as a moving target and a universe of possibilities.

I've had many people in my career believe in me and encourage me to "go for it".

You need those people in your life.

We need to teach girls not to take things personally, to open their ears and eyes, and embrace opportunities even if they feel unsure. We have so much potential to lead, grow, and make a difference."

Manufacturing is a much different field than it was a couple of decades ago. Aixa shared her perspective on why there were so few women in the manufacturing industry historically; The field is demanding and before the internet, cell phones, and remote technology, people had to be on the shop floor around the clock if an error occurred. It was impossible to balance this environment with starting a family. Flexibility and support are still a challenge that need to be addressed to attract and retain more women in the industry. However, it is much easier to achieve today on both the business owners' side and the employers' end.

Studies have shown a diverse workforce leads to a productive and profitable business. Aixa has seen

this firsthand. She stated that "Diversity triggers synergy. The interaction of diverse agents produces a combined effect more significant than the sum of their particular parts." When she worked in public works, she had departments and teams that were made up of individuals whose ages ranged from 18 to 75 years old. When she tackled a project, she would consult the young and old to use their unique perspective to find the best possible solution. The same goes for gender diversity. When people grow up and experience the world differently, they can bring that unique experience to their work. The benefits are impossible to ignore.

"Embracing diversity and everyone's strengths brings the best outcome possible to any organizational goal. Result-driven organizations execute, adjust, and grow by allowing their diverse workforces to pave the path toward a business thriving. There's no automation, machine, or Al that can replace what a diverse and motivated workforce can attain," Lopez explained.

The Statewide Hispanic Chamber of Commerce of New Jersey (SHCCNJ) is the largest Chamber of Commerce in the state. It represents over 120,000 small business owners from all sectors, contributing over \$20 billion to the state's economy. Manufacturing is of particular interest to the chamber. They have a significant number of entrepreneurs involved in manufacturing, importing/exporting, logistics, supply chain, and other critical aspects of the industry.

SHCCNJ works extensively with NJMEP's Pro-Action Education Network to help individuals in local New Jersey communities gain the necessary skill set to thrive in a manufacturing career. The chamber supports the entrepreneurial side by running an 8-week program for Latina business owners which is completely free and sets out to help women scale up their businesses. At the same time, the instructors help guide these professionals better address women-related issues they face while conducting business. The Modern Latina event is another way they support this demographic. It provides a platform for professional women to speak about their experiences and discuss women in any industry.

When Aixa began volunteering at the Chamber in 2014, her engineering hat kicked in. She began

identifying ways to improve the organization, address critical challenges, and became an unstoppable force elevating the SHCCNJ to new heights. All her work culminated in an efficient, and effective Chamber of Commerce that gives back to the local community and supports all its members in a multitude of unique ways. Her approach to addressing challenges head-on, creating plans of action, and measuring results are a direct result of her work in the manufacturing space. Sharing Aixa's story should serve as an inspirational message to any young women as they explore their career options. Engineering, manufacturing, and industrial work of all kinds provide sustainable income and exceptional foundational skills.

2022 is NJMEP's 'Year of Women in Manufacturing' for a reason. Stories like the one shared here are instrumental in encouraging more young women to explore fruitful careers in the STEM space. Throughout the year NJMEP will be connecting with more women

business leaders and giving them a platform to share their experiences and shine a light on these incredible individuals through articles and speaking events.

More women are entering the field than ever before. These incredible people need role models to look up to and learn from as they've already walked the path and can now help guide others. If you're a woman in manufacturing, engineering, or any STEM discipline or know of one that has a story to share, reach out

to Mike Womack,
NJMEP Marketing
& Communications
Manager to set up an
interview or learn about
upcoming Women
in Manufacturingfocused speaking
opportunities, today.



MIKE WOMACK

MARKETING AND COMMUNICATIONS

MANAGER, NJMEP



# FDU Bestows AACCNJ's John Harmon with Prestigious Honor

NJMEP partner and African American Chamber of Commerce of New Jersey (AACCNJ) Founder and CEO, John E. Harmon, Sr. recently received the prestigious honor of receiving an honorary Doctorate of Humane Letters from Fairleigh Dickinson University (FDU). The school presented Harmon with this distinction while he delivered a commencement address during their graduation ceremony.

As an FDU alumnus, Harmon earned a BS (Ruth) in 1983 where he became a first-generation college graduate in his family. During the speech, he paid homage to his family and education while infusing it with enthusiasm and pride for the university. Over 2,400 students received associate's, bachelor's, master's and doctoral degrees during the 2022 year's graduation.

Harmon has an impressive and long list of accomplishments that include being appointed to the US Chamber of Commerce – Board of

Directors and being the former President and CEO of the Metropolitan Trenton African American Chamber of Commerce (MTAACC). In his role with AACCNJ, he has been integral to connecting AACCNJ members and supporters with resources and opportunities to grow and sustain their business and personal goals. He also serves as an advocate on behalf of the 1.1 million African American residents and the over 70,000 black-owned businesses statewide to ensure that policy on all levels provide fairness, equity, and access to a level playing field.

His work with NJMEP has been instrumental in addressing workforce challenges for the manufacturing community by ensuring many New Jersey residents receive career opportunities through workforce development, training, and apprenticeship programs. In addition, his dedication towards these wonderful opportunities has helped 'MADE in New Jersey' manufacturing find the talent it needs to grow and in terms provides sustainable career paths for so many New Jersey residents.

This honorary degree is well deserved. Harmon brings an unwavering dedication to helping the community and businesses across the state. He exemplifies the true meaning of being a leader in New Jersey. NJMEP and the entire manufacturing community congratulates him for this astounding achievement.



The entire NJMEP team wants to congratulate John Harmon for this incredible achievement and all the good he and his organization has done to help New Jersey progress forward.

# A BRIEF HISTORY OF MANUFACTURING IN NEW JERSEY FROM THE COLONIAL TO MODERN ERAS

By Ken Schwemmer, Advocacy and Operations Support, NJMEP

America's history has always been impacted by manufacturing. Manufacturing has a rich history across the United States, from the colonial cottage industries to the massive industrial plants that were in the "Rust Belt." While it is easy to point to the famous car factories that were in Michigan, or the steel plants in Pennsylvania, there was another state that also has deep historical ties to manufacturing, New Jersey. New Jersey has a very long history with manufacturing that stretches far back into colonial times and was considered one of the main manufacturing centers in the United States for decades. This essay is going to provide a historical overview of New Jersey's manufacturing sector and its impacts not just within the state but also how it impacted the rest of the United States.

Colonial New Jersey did have some manufacturing enterprises operating in the colony from the late 1600s to the 1700s. With the accounts and documents that exist for this period, two specific examples of manufacturing industries that operated in the colony were glass manufacturing and paper mills. One of the oldest documented paper mills in New Jersey was in Elizbeth and owned by William Bradford. Only two newspaper advertisements mention the paper mill, but it seems Bradford's paper mill operated some time during the early 1700s. Concerning glass manufacturing, some of the first successful glass manufacturing enterprises in the United States seem to have started in Salem County, New Jersey. In an

article from 1885, the author noted that one of the first glass manufacturers in New Jersey was founded by Caspar Wistar in 1738.<sup>4</sup> Though Mr. Wistar's glass manufacturing business is possibly one of the first glass manufacturing companies in New Jersey, there is little evidence to explain what happened to the company after 1781.<sup>5</sup> These are just two cases of the early manufacturers that were operating in New Jersey during the colonial period. They show the longevity of manufacturing in the state.

After the American Revolution, came a renewed focus on manufacturing. This renewed focus in manufacturing was due to Treasury Secretary Alexander Hamilton's 1791 report on manufacturing, which laid out the arguments for encouraging manufacturing in the United States.<sup>6</sup> Hamilton was so passionate about increasing industry in the United States that he heavily invested in The Society for Establishing Useful Manufactures (S.U.M.), which focused on developing manufacturing.7 This group and Hamilton would eventually choose to build manufacturing facilities on a small plot of land in northern New Jersey and named it Paterson so they could gain support from then-Governor Paterson.<sup>8</sup> Despite S.U.M.'s efforts to make Paterson a manufacturing city, the facilities they established would only last until 1796 and manufacturing somewhat stalled.9 Though Hamilton's Paterson project was not a success, Paterson would eventually become a major manufacturing center by the 1820s for New Jersey.10 In the following decades, Paterson and other industrial centers would see a boom in manufacturing and find New Jersey supplying many manufactured goods to the rest of the country.

During the first half of the nineteenth century, New Jersey started to industrialize which allowed for manufacturing to grow by leaps and bounds. One of the main innovations to cause this advancement in manufacturing was commercialization of inland farming after 1815, which led to an increase in domestic demand for different manufactured goods. This new economic environment led to Paterson having a surge in factories, mills, and forges sprouting up. By 1827, Paterson had grown so much that it had become a manufacturing city of 6,000 people. Then in 1830, Paterson would have seventeen cotton mills and they



were producing around five million yards of cloth.<sup>14</sup> Paterson's growth and optimal location even made Sam Colt, the famous inventor of the repeating rifle, open a gun mill in the city in 1835.<sup>15</sup> What once was Hamilton's dream of creating a manufacturing city had finally started to become a reality in Paterson; however, another city would also industrialize around the same time and become one of New Jersey's most famous manufacturing centers, Newark.

Newark was and is still considered one of New Jersey's main industrial hubs. The city has a rich history of industrial development and being a manufacturing juggernaut for multiple decades in New Jersey. Originally founded as a Puritan settlement in the 1660s, Newark was meant to be a religious community that revolved around agriculture and devoting oneself to God.16 However, by the end of the eighteenth century, Newark had emerged as one of the main hubs from which New Jersey's agricultural products were shipped to New York to either be used by locals or shipped to different markets.<sup>17</sup> The reason this occurred was due to the town's proximity to lower Manhattan and the development of roads that were able to make Newark a good stopping point between the Hudson and Delaware Rivers.<sup>18</sup> This led the town to develop and grow into a manufacturing hub for New Jersey.

By the end of the 1700s and into the first half of the 1800s, Newark became known for variety of manufactured goods. Newark was able to manufacture shoes, hats, saddles, carriages, jewelry, trunks, and harnesses.<sup>19</sup> There were people like Seth Boyden Jr., who moved from Massachusetts to Newark in the early 1800s and opened the nation's first malleable iron foundry which aided the production of buckles, harnesses, and other parts used in the carriage industry.<sup>20</sup> There was also the chair manufacturer David Alling, who was producing "fancy chairs" as early as 1803 in Newark.<sup>21</sup> Then there was the shoemaking industry, which by 1826, one-third of the city's labor force was producing cheap to high-end

shoes.<sup>22</sup> Newark became such a manufacturing hub in the first half of the nineteenth century that by 1840 eighty percent of Newark's labor force was engaged in manufacturing.<sup>23</sup> The reasons for this success and growth of manufacturing in Newark came from different innovations and infrastructure projects that occurred in the first half of the nineteenth century, but it was also due to a large amount of trade that was done with the American South.

Newark's boom in manufacturing was due in part because of several trends that were occurring in the first half of the nineteenth century. There were the technical innovations that allowed for steamboats and trains to cut down travel time, infrastructure projects like the Morris Canal which brought different materials from around New Jersey and other states, and there were markets in southern states that bought the manufactured goods in large numbers. The Morris Canal, which was completed in the 1830s, allowed for raw materials to flow through New Jersey and get to places like Newark so that the materials could be made into manufactured goods. The completion of a railroad line to Jersey City in 1834 reduced the travel time to New York and the steamboats allowed for faster travel to New York as well as other states.<sup>24</sup> These improvements made Newark a manufacturing hub for New Jersey; however, one of the biggest reasons for manufacturing's success in the city would be due to its trade with the South.



Newark's manufacturing success did come from selling manufactured goods to New York and from technical innovations and infrastructure projects, but trade with the south in the first half of the 1800s was a major contributor to Newark's success. As early as the 1790s, Newark was already manufacturing shoes and boots for southern trade.<sup>25</sup> This trade continued to grow with the American South to the point that numerous southern states had conceded entire manufacturing industries to manufacturing cities, which in turn

gave Newark massive profits for their manufactured goods.<sup>26</sup> A perfect example of this is David Alling, the Newark-based chair manufacturer, who had his first documented account of manufactured chairs going to New Orleans in 1819 and by 1835 three-quarters of his chairs went to the American South and Latin America.<sup>27</sup> Newark developed such a strong relationship with the south that it was dubbed a "Southern workshop" because around three-quarters of manufactured goods were sent to southern states.<sup>28</sup> By the time of the Civil War, Newark's success in trading manufactured goods had made it become one of New Jersey's biggest exporters of manufactured goods to the rest of the United States as well as to other parts of the world.

#### to be continued...

- John Bidwell, American Paper Mills, 1690-1832: A Directory
   of the Paper Trade with Notes on Products, Watermarks,
   Distribution Methods, and Manufacturing Techniques
   (Hanover: Dartmouth College Press, 2012), 135.
- 2 Bidwell, 135.
- R. M. Acton, "A Short History of the Glass Manufacture in Salem County, New Jersey." The Pennsylvania Magazine of History and Biography 9, no. 3 (1885), 344, http://www.jstor.org/stable/20084716.
- 4 Acton, 344.
- 5 Acton, 345.
- 6 "Founders Online: Alexander Hamilton's Final Version of the Report on the SUBJEC ...," National Archives and Records Administration (National Archives and Records Administration), accessed March 2, 2022, https://founders. archives.gov/documents/Hamilton/01-10-02-0001-0007.
- 7 Graham Russell Gao Hodges, "New Jersey in the Early Republic." In New Jersey: A History of the Garden State. Eds. Maxine N. Lurie and Richard F. Veit (New Brunswick: Rutgers University Press, 2012), 106.
- 8 Hodges, "New Jersey in the Early Republic," 107.
- 9 Hodges, "New Jersey in the Early Republic," 107.
- 10 Michael Birkner, "New Jersey in the Jacksonian Era, 1820-1850," in New Jersey: A History of the Garden State. Eds. Maxine N. Lurie and Richard F. Veit (New Brunswick: Rutgers University Press, 2012), 122.
- 11 Paul E. Johnson, "Paterson," in A New Jersey Anthology. ed. Maine N. Lurie (New Brunswick: Rutgers University Press, 2010) pg. 164.
- 12 Johnson, "Paterson", 164.
- 13 Johnson, "Paterson," 164.
- 14 Johnson, "Paterson," 159.
- 15 Birkner, "New Jersey in the Jacksonian Era, 1820-1850," 122.
- 16 Brad R. Tuttle, How Newark Became Newark: The Rise, Fall, and Rebirth of an American City (New Brunswick: Rutgers University Press, 2009), 16.
- 17 Don C. Skemer, "David Alling's Chair Manufactory: Craft Industrialization in Newark, New Jersey, 1801-1854," Winterthur Portfolio 22, no. 1 (1987), 5, http://www.jstor.org/stable/1181145.
- 18 Tuttle, 18.
- 19 Birkner, "New Jersey in the Jacksonian Era, 1820-1850," 122
- 20 Birkner, "New Jersey in the Jacksonian Era, 1820-1850," 123.
- 21 Skemer. "David Alling," 3.
- 22 Birkner, "New Jersey in the Jacksonian Era, 1820-1850," 122.
- 23 Birkner, "New Jersey in the Jacksonian Era, 1820-1850," 122.
- 24 Birkner, "New Jersey in the Jacksonian Era, 1820-1850," 122.
- 25 Skemer. "David Alling," 6.
- 26 Tuttle, 24.
- 27 Skemer. "David Alling," 6.
- 28 Tuttle, 24.

### TRENTON



#### TALK

Craft alcohol manufacturing is growing across the country, and the states embracing this burgeoning new sector are seeing incredible returns. While New Jersey is fortunate to have its own community of creative, skilled craft alcohol manufacturers, our state's regulations have at times presented obstacles to growth that their peers in nearby states like Pennsylvania and New York don't have to contend with.

The continued growth of New Jersey's craft alcohol manufacturers will contribute to the state's economy as well as provide the state with more quality, homegrown products for locals and visitors to enjoy.

COVID-19 presented the state's craft alcohol manufacturers with unique challenges, but in confronting those challenges, they collectively found innovative solutions that supported their businesses through the pandemic and created new avenues for the distribution of their products.

As the state emerges from the pandemic, it's crucial that we keep those avenues open to craft alcohol manufacturers so they can not only recover in the wake of the pandemic, but grow.

I have two pieces of legislation pending that I believe will help New Jersey craft alcohol manufacturers continue to grow.

S355, which was reported from the Senate Law and Public Safety Committee last month, will extend the "cocktails-to-go" allowance New Jersey implemented during the pandemic. Allowing alcoholic beverages to be taken out and delivered during the pandemic not only benefited restaurants, it helped craft alcohol

manufacturers continue sales when they could no longer rely on customers visiting them in person.

The home delivery option, however, did more than allow craft alcohol manufacturers to reach their existing customers during the pandemic, it created opportunities for them to reach new customers. As we emerge from the pandemic, I think it's important we don't arbitrarily close off these new opportunities. We've seen that home alcohol delivery works, and should therefore ensure it is allowed to continue.

In addition to working to extend the home delivery option for craft alcohol manufacturers, I have also introduced a bill, S1299, that will allow breweries and wineries to sell their products at New Jersey farmers markets year round. Much like the home delivery legislation, I believe this will give breweries and wineries another opportunity to reach new customers and grow their businesses.

Breweries and wineries are manufacturers, their products are made by skilled craftspeople and distinctly local. As such, I believe allowing these products to be sold at farmers markets is appropriate, and will help New Jersey highlight its quality, local products.

The two bills I've discussed are a step in the right direction, but even if and when both pass, we will have more work to do to ensure our state supports its growing craft alcohol manufacturers. New Jersey has historically been a strong advocate for its homegrown products. As the craft alcohol industry continues to grow and evolve, it's important the state keeps that trend alive.

If you ever have suggestions about how the New Jersey Legislature can help support the state's craft alcohol manufacturers, or local manufacturing in general, please reach out to my office; I am eager to hear from you.



NEW JERSEY STATE SENATOR VIN GOPAL, DISTRICT 11 SENATE MAJORITY CONFERENCE LEADER AND CHAIRMAN OF THE SENATE EDUCATION COMMITTEE

### BE UNFORGETTABLE

#### How advocacy gives the industry a voice

It can be easy to forget the importance of a strong domestic manufacturing base. These businesses, especially small to medium manufacturers, which often make up most of local industry, rarely have a chance to be seen by the public in a positive light. When the public forgets the value of an industry, local and federal government focus their attention elsewhere.

This lack of awareness translates into what those manufacturers deem excessive restrictions and regulations, and a general lack of promanufacturing legislation at all levels of government. Manufacturing and workers were hailed as heroes during the COVID-19 pandemic when global supply chains crumbled and domestic manufacturers and suppliers stepped in to fill those gaps.

However, as the support for healthcare workers waned, so did the attention given to the manufacturing industry. No substantial positive action to help support and sustain a strong domestic industrial base in the United States was provided. The reason for this is the industry is a quiet one, keeping its head down to make payroll and grow business.

#### Change the status quo

Manufacturing can make its way back into the hearts and minds of the American people. More specifically, the industry has the perfect opportunity to inject itself into local and federal decision-making because of all the goodwill it has developed over the past two years. These organizations have the chance to reassert their value to elected officials and educate decision-makers on why the industry should receive adequate protection and government support.

No matter how an individual might feel about bureaucracy and government programs or incentives, the federal and state government is the silent partner of all business. It has the power to either prop up an industry allowing it to thrive, neglect it or over-regulate it. Many manufacturers have

raised the issue of regulatory overreach. Positive change starts with the industry speaking up for itself by coming together and getting involved.

#### Advocacy

Advocacy is not the same as lobbying. There are plenty of associations and chambers currently accepting dues-paying businesses to join their ranks as they fund professional lobbyists to fight for specific legislation on Capitol Hill. Advocacy can be done by anyone but has little power without a connected and committed group of individuals and organizations.

In New Jersey, the New Jersey Manufacturing Extension Program (NJMEP) works to bring manufacturers together periodically throughout the year to advocate for the industry on a local level. New Jersey's MEP helped develop the bipartisan, bicameral Legislative Manufacturing Caucus that meets with focused groups of manufacturing leaders from specific sectors to learn about the most disruptive challenges these businesses face. Every year, NJMEP hosts the State-of-the-State of Manufacturing, which brings together hundreds of manufacturing business leaders to show the lack of support is not a localized issue, but an industrywide challenge. These events quantify the value of the local industry and provide examples of how much more it can contribute to the local and national economy if it received more support—either the elimination of red tape or new incentives for expanding or operating in the state.

New Jersey's deep-rooted past of industrialization was thought by many to have dissolved. The public and a majority of the legislature thought New Jersey was nothing more than a service-based economy. Now, in 2022, a majority of the local legislature not only understands that the state is home to over 11,000 manufacturing, engineering and STEM firms, a majority employing an average of 32 people, but also just how much these businesses contribute to the state's GDP.

The over \$56 billion that manufacturing contributes to New Jersey's GDP is no longer being ignored, and more and more policymakers are supporting the industry and working to develop legislation with the goal of making New Jersey a more manufacturing-friendly state.

This was accomplished because manufacturers came together to amplify their voice. They took time to connect, engage, and speak up for themselves and their fellow manufacturers. Manufacturers all over the country should follow their lead and begin working to break through to their legislature. As more manufacturers take on the responsibility to engage publicly, recognition and support will follow. If the industry continues to keep its head down, it only has itself to blame for being forgotten and underserved.



MIKE WOMACK
MARKETING AND COMMUNICATIONS
MANAGER, NJMEP

# THE FIRST LEGISLATIVE MANUFACTURING CAUCUS MEETING OF 2022

#### Manufacturers and New Jersey Legislators Come Together to Drive Manufacturing Forward

New Jersey manufacturing has faced tremendous obstacles for decades from a dwindling workforce, subsided foreign competition, and red tape from state and federal governments. The industry is struggling to remain competitive here in New Jersey and nationwide. 'MADE in New Jersey' manufacturers are tired of being forgotten, overlooked, and forced to abide by rules and regulations that are baseless and hindering these businesses' ability to remain in New Jersey. One way NJMEP and now NJBIA helps support the entire industry is by providing the opportunity for local 'MADE in New Jersey' business leaders and state policymakers to collaborate. A primary tool to drive more manufacturing support is by calling on the bilateral bicameral Legislative Manufacturing Caucus to host meetings throughout the year focused on specific sectors and the challenges these businesses face. The first Legislative Manufacturing Caucus meeting of the year was held on February 23 at Source Farmhouse Brewery in Colts Neck, NJ, and focused on the challenges New Jersey brewers and wineries face when conducting business in the Garden State. The Legislative Manufacturing Caucus is a bipartisan, bicameral group of legislators that have become manufacturing allies. Those that sit on the caucus have made it a personal mission to help support the industry. To keep manufacturing in the minds of the entire legislature, the industry needs these allies to speak up for them on the public stage. Bringing the industry and the caucus together is one of the most effective ways to ensure the industry is being heard and supported. Manufacturing Caucus meetings take place throughout the year and focus on specific sectors, but they use the same format; roundtable discussions between a panel of manufacturers and the Legislative Manufacturing Caucus where manufacturers can voice their concerns, ask their questions and provide input. The caucus then engages with these manufacturers, proposes ideas and potential solutions to see if these ideas can help alleviate their bureaucratic bottlenecks. This back-and-forth discussion with the goal of developing real solutions is an effective and inclusive way to build a more manufacturing-friendly New Jersey.

It is rare for a legislator or any kind of policymaker to have any real-world experience with the manufacturing industry. When they create laws, subcommittees are tasked with interpreting that law and developing the rules and regulations that must be followed by businesses. This can cause some issues in how laws are interpreted.

New Jersey wants to keep manufacturing businesses here in the state. The industry is a huge economic stimulator and a fantastic source of highly competitive employment for its residents. With manufacturing contributing more than \$54 billion to New Jersey's GPD, roughly 10% of the total state GDP, and the source of nearly 400,000 jobs, the state government relies heavily on the industry even if they don't understand it completely. The ultimate mission of these Legislative Caucus Meetings is to help bridge that information gap. By giving manufacturers a platform to directly engage with legislators, state decision-makers become more aware of how their laws are being interpreted by subcommittees. They become better educated about the true scale, scope, and impact of the local manufacturing industry, and can pass this information over to their colleagues in Trenton.

Building a collaborative, rather than a combative relationship with local government is essential. Government is the silent partner of business and it has the power to either bolster or destroy an industry. Showing the value of manufacturing to the state legislature encourages these individuals to consider the industry when drafting new legislation.

#### 'MADE in New Jersey' Brewers and Wineries

Brewers and wineries from all over New Jersey came out to participate in the Legislative Caucus Meeting. There were even manufacturers that have no relationship with the sector to show support for their fellow manufacturers. Each brought a different perspective but nearly all of their concerns aligned, showing there are systemic issues with current regulations hindering these businesses' ability to remain in New Jersey. There were over 12 legislators that attended the meeting, from both parties from both the house and senate. Take a look at the full list of those businesses and legislators that helped drive the conversation, below:

#### New Jersey State Legislators in Attendance:

- Senator Greenstein,
   Co-Chair of the Manufacturing Caucus
- Senator Testa,
   Co-Chair of the Manufacturing Caucus
- · Senator Gopal
- Assemblyman Calabrese
- · Assemblyman DiMaio
- Assemblywoman Eulner
- · Assemblyman Greenwald
- · Assemblywoman Flynn
- · Assemblywoman Piperno
- Assemblyman Stanley
- Assemblyman Barranco
- Assemblyman Scharfenberger

#### Manufacturing Business Leader Panelists:

- Jeff Donlon, Owner, Sunken Silo Brew Works (P1)
- Roger Apollon Jr., Co-Owner,
   Four City Brewing (P1)
- Denise & Leo Sawadogo, Co-Owners, Montclair Brewery (P1)



- Phil Petracca, Owner,
   Source Farmhouse Brewery (P1)
- Rick Martinez, Owner, Senor Sangria (P2)
- Bob King, Co-Owner, Lone Eagle Brewing (P2
- · Scott Wells, Owner, Bolero Snort Brewery (P2)
- Lori White, Owner,
   Zeds Beer / Bado Brewing LLC (P2)
- John Companick, SpellBound, Co-Owner (P2)
- David Wolin, Owner / Wine Grower,
   Old York Cellars (P2)

There were two panels made up of a mix of breweries and wineries to ensure each participating manufacturing business had a chance to address the caucus. Breweries and wineries must abide by countless rules and regulations, all developed with the safety of their customers in mind. However, once a law is passed, that law must be interpreted by a subcommittee which ultimately develops the regulations these businesses must follow. During the Caucus meeting, legislators were informed about some of these rules that went against logic. Some of the rules such as breweries can only have a maximum of three TVs, they can't promote local restaurants, not being allowed to sell coffee, and sunsetting the ability to deliver to people's homes are just some examples of regulations that surprised the legislators on the panel. These business owners want to open more breweries in New Jersey, but local laws make that dream impossible. Instead, they will instead look to expand into neighboring states like Pennsylvania.

#### Collaboration Drives Progress for New Jersey Manufacturing

By bringing manufacturers and legislators into the same room to highlight some of the most business-hindering regulations, the industry took an impressive step forward. The legislators in attendance were supportive, willing to listen, and work with the manufacturers to come up with ideas that might be able to alleviate some of these pressures. The manufacturers were listened to and understood. This first Manufacturing Caucus meeting of the year succeeded in educating state policymakers and building trust with local businesses so they can work together rather than breaking down the adversarial relationship.

"It's very refreshing that our legislators are listening to us and understanding. What you see here are the concerns amongst all the breweries throughout the state with different business models that are consistent. We're very hopeful we can get some sensible legislation passed to curtail these regulations that are hampering the ability for us to scale up," Phil Petracca, Owner, Source Brewery stated.

Scott Wells, Owner, Bolero Snort Brewery had this to share, "I think it was very informative all around. I think we helped highlight some of the major manufacturing issues that our sector is facing. I always hope to find better legislative partners, but I find that to find better legislative partners they really need to understand the unique challenges and

opportunities that we have to deal with in our world."

The entire event ran from 10 AM - 3 PM. It included a tour of the facility, a chance for NJMEP, NJBIA, SHCCNJ, and the legislators to share a few words with the manufacturers in attendance about the goal of the meeting, and then the panel discussions began. When the manufacturers were asked their impression of the meeting, it was clear they felt their voices were heard. Follow-up is always essential, especially in advocacy. On May 5th, 2022, NJMEP and NJBIA hosted State-of-the-State of Manufacturing at the Trenton War Memorial, Trenton, NJ. It was no cost for manufacturers and the goal is to follow up on progress being made as well as invite every manufacturing sector to share their concerns, and work together with the Legislative Manufacturing Caucus as well as other members of the New Jersey legislature to educate and drive real positive change here in New Jersey. Without manufacturers being willing to speak up for their industry, 'MADE in New Jersey' businesses will continue to face tremendous bureaucratic challenges without any hope of gaining the support of the individuals that have the power to make a difference. 🍥



ALAN GUNG COPYWRITER, NJMEP

# AMERICAN ALUMINUM SUPPLY COALITION PUSHES TO REMOVE OBSTACLES IMPACTING MANUFACTURING

# Demand for aluminum in the United States continues to soar.

Without aluminum, manufacturers wouldn't be able to produce soda cans, vehicle parts, cooking utensils, household products, airplanes, wire, the list goes on. The federal government-imposed tariffs on aluminum imports have caused prices to nearly double in the past few years. The American Aluminum Supply Coalition (AASC) is looking to push for policies that lessen the burden on domestic manufacturers. AASC is working to encourage the legislative bodies to do away with these damaging tariffs. The AASC is particularly looking to reduce tariffs on Aluminum suppliers that utilize sustainable technologies since a large portion of the aluminum used by manufacturers in the United States is imported and produced in countries using outdated processes which are less environmentally sustainable.

The American Aluminum Supply Coalition is a group that bridges producers and users of aluminum together to strengthen the aluminum supply chain. They want to remove barriers that impede the production of low-carbon aluminum. They're hoping to eradicate the tariffs and trade barriers that reduce supply and increase costs which encourages state-subsidized companies from China to continue aluminum dumping practices that continue to plague the industry. Addressing these issues would strengthen the sustainable aluminum supply chain while allowing the United States to meet domestic demand.

#### The Obstacle Facing Domestic Manufacturing

One of the obstacles is Section 232 of the Trade Expansion Act. Section 232 is designed to protect American businesses but has potentially done more harm than good. This Act allows the President to implement tariffs on aluminum to mitigate unfair trade practices from China and other foreign entities. However, the US only produces one out of every five tons of primary aluminum which makes it extremely difficult to compete on a global scale. Aluminum prices have skyrocketed from \$1,800 per ton to over \$2,900, according to the American Aluminum Supply Coalition.

'MADE in New Jersey' manufacturers stand to gain from American Aluminum Supply Coalition's mission.

Manufacturing contributes to New Jersey's economic growth including generating over \$56 billion towards the

state's GDP and being responsible for approximately 350,000 jobs. In addition, the industry generates over \$136 million in state taxes and yields a total impact of \$2.59 billion annually for the Garden State's economy. With low-carbon aluminum friendly policies in place and more affordable aluminum available to New Jersey businesses, local manufacturers will become much more competitive when compared to those overseas.

#### How AASC Plans on Helping Domestic Manufacturing

The American Aluminum Supply Coalition , led by former Congressman and Coalition Chair Baron Hill, is pressing legislators to end the trade restrictions from the Section 232 tariffs. Eliminating the tariffs will help offset costs for consumer goods and materials used in transportation, construction, and manufacturing. When manufacturers have to pay more for a raw material, this price increase is felt by every entity in the supply chain. This is far from a localized issue and one that will continue to hinder local manufacturers' ability to remain competitive.

"Our effort is aluminum specific. We're not dealing with steel at all. It's all about aluminum. Specifically low-carbon aluminum. This is what we're trying to promote," explained Hill. "Section 232 tariffs is what we want to get rid of. It's a little tricky because those tariffs also apply to Chinese aluminum coming into this country. We firmly believe what China is doing is wrong. Not only in terms of dumping their stuff here in the United States but they're also using coal in the production process. For those two reasons, we're opposed to what China's trying to do."

Low-carbon aluminum is made using a cleaner process which leaves a smaller carbon footprint compared to the coal-burning processes used in China. Most of the low-carbon aluminum is manufactured and imported from Canada and Europe. According to Hill, half of the world's aluminum comes from China which isn't as environmentally safe as the low-carbon version. The coalition is promoting policy that benefits American and allied manufacturers.

"We want to get rid of the tariffs because we want the Europeans and our friends and allies to bring their aluminum to this country but how do we prevent the Chinese from dumping aluminum produced with coal in the US? That's a problem for a coalition and it's tricky. We're still working on a permanent solution," he said. US Senators Pat Toomey and Mark Warner are proposing bipartisan-backed legislation that could end the tariffs while giving American companies the opportunity to produce eco-friendly low carbon aluminum. American Aluminum Supply Coalition has been actively promoting this proposed legislation in hopes it passes.

Policy including the bipartisan-backed legislation and the US-European Union agreement to end aluminum tariffs will certainly help the US supply chain. However, the recent US agreement with Japan to remove steel tariffs but excludes aluminum shows the need for proaluminum coalitions to continue educating lawmakers about the need for this important raw material. The US-Japanese agreement states the US will stop charging a 25% levy on Japanese steel imports, according to the BBC. This concerns American Aluminum Supply Coalition which considers aluminum as essential as steel to manufacturing

"I don't know why Aluminum is being left out of the conversation. I was surprised. We're looking into it. Trying to figure out, politically, why aluminum was excluded in this deal. We believe that more attention should be put on aluminum and that is quite frankly what the coalition is about," Hill explained. "It's used in construction to vehicle assembly and food processing. Coca-Cola cans. You name it. It has a huge presence in this country. Why they were excluded is beyond me. Again, that's what that coalition is all about. Is to bring attention to people."

Hill, who served 10 years in Congress, was asked to join the coalition because their mission to promote low carbon aluminum aligns with his emission-reducing beliefs and policies that he implemented including the Cap-and-Trade Program and automotive fuel efficiency standards while in office. He emphasized the need for American manufacturing-friendly policies such as incentivizing manufacturers to use low carbon aluminum.

"In the meantime, when you have European countries that are producing low carbon aluminum, why should we be imposing tariffs on them? We ought to be inviting them to come into this country because aluminum is such an important product for manufacturers like those in New Jersey," Hill explained.

He emphasized larger US aluminum manufacturers such as Alcoa, which has a major presence in his home state of Indiana, are transitioning to low-carbon aluminum.

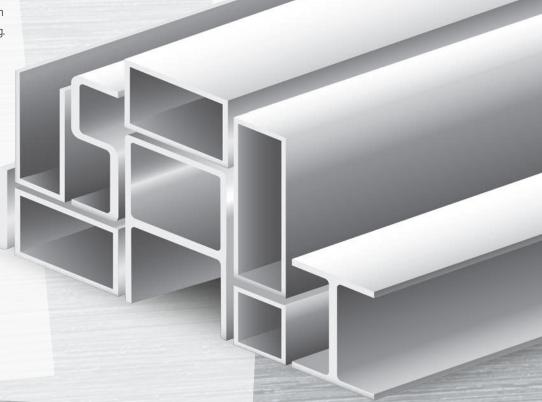
"Now Alcoa is a large producer of aluminum. They have a huge presence in Indiana but still, the United States is only I think producing 1/5 of the needed aluminum production in the country. That's not very good," he stated. "As a matter of fact, Alumina has just announced that they're going to do a better job of producing low-carbon aluminum. So, we're all for that but the reality is that the United States does not produce a whole lot of aluminum and that's why the importance of imported aluminum becomes critical to the manufacturers like the people that you (NJMEP) work with in New Jersey."

The coalition, which is growing, sees this as a two-step approach to having aluminum issues addressed.

"There are two things. Number one; We want to raise the visibility of how important aluminum is to manufacturers. It's a communications effort," Hill stated. "Number two is to get rid of these tariffs and that can be done in two ways. Number one; By raising the level of attention to the importance of aluminum. Number two; We're actively working with members of Congress to try to get the Toomey Warner Bill passed. So, we're moving on two fronts. Communication. Actual lobbying."

Coalitions like these are crucial to the 'MADE in New Jersey' supply chain. They work with legislators to form policies that encourage domestic manufacturing and boost job growth in the Garden State. The AASC is looking for industry support and any manufacturer that is interested in lending their name to the cause can reach out to coalition member Jonathan Jaffe at jaffecom@gmail.com.

The only way for local manufacturing to be supported is to actively engage with causes that directly impact the US manufacturing industry. The AASC is doing just that.



# AMERICAN ALUMINUM SUPPLY COALITION Q&A

#### Question: What is the American Aluminum Supply Coalition?

**Answer:** Our coalition brings together producers and users of aluminum to strengthen the American aluminum supply chain. We are working to achieve this goal by:

- Developing a secure and resilient supply of aluminum to meet domestic demand, strengthen economic activity, and create new jobs.
- Eradicating trade restrictions on imported and exported aluminum such as the Section 232 tariffs.
- Addressing Chinese overcapacity and illegal dumping in the United States.
- Supporting low carbon aluminum production.
- Advancing innovation in modern manufacturing.

#### Question: What are the Section 232 tariffs?

**Answer:** Section 232 of the Trade Expansion Act of 1962 empowers the president to enact tariffs on goods that the executive deems harmful to national security. In 2018, the president implemented tariffs on aluminum in response to Chinese trade activity. However, as a result of these levies, the price of aluminum has climbed from \$1,800 per ton to over \$2,900. Section 232 has hurt the very economy it was intended to protect.

#### **Ouestion: What is low carbon aluminum?**

**Answer:** The United States currently imports low carbon aluminum from Canada and Europe, where utilizes hydroelectric power to forge aluminum results in far less emissions. This process is a much cleaner source for power in contrast to China's use of coal-fired smelters for aluminum production. As part of their environmental effort, the EU is striving to cut



greenhouse gas emissions by 80-95% down from 1990 levels by 2050. Eliminating Section 232 would spur trade with countries that produce low carbon aluminum, reducing our environmental impact.

#### Question: What is aluminum used for?

Answer: Aluminum is a crucial metal for manufacturing, construction, national security, and agriculture. Under Section 232 aluminum cans for soft drink manufacturers and breweries have become more expensive, hurting the hospitality industry as well. Aluminum's lightweight and strength under tension makes it an ideal option for modern buildings, as 25% of worldwide aluminum is produced for construction. High aluminum prices force agricultural manufacturers to choose between rejecting orders due to limited supplies or drive off business as they increase their prices.

### Question: How would increasing the supply of aluminum support NJ manufacturers?

Answer: Aluminum is a crucial metal for the manufacturing industry. Employing nearly 250,000 residents, and generating over \$56 billion towards the state GDP, manufacturing is a foundational sector in the New Jersey economy. Additionally, the aluminum industry alone generates \$136.92 million in state taxes and yields a total impact of \$2.59 billion per year for the state's economy. With a widespread fiscal impact and central in to an important sector, maintaining an ample and affordable supply of aluminum becomes a necessity for a healthy economy.



#### **Dear Editor:**

Our Federal Section 232 tariffs are hurting industries nationwide.

With increased costs on importing aluminum, supply is decreasing and price is increasing. These tariffs have done nothing but raise costs for Americans.

Since the tariff was applied in 2018, aluminum prices have climbed from \$1,600 to more than \$2,900 per ton. These increases hit the businesses first and then hit the consumer.

Facing domestic price increases, we are forced to look to foreign entities for cheaper aluminum to run our businesses. But we need to be very wary about relying on Chinese products. China historically has cheaper product because its manufacturers have lower standards.

There is no need for the U.S. to rely on any country with inferior products, especially when there are plenty of trading partners who can supply the quality aluminum that Americans need.

Now is the time to change the trend of higher cost and reliance on China .

If you are among the many these tariffs have affected, join us in pushing back.

The American Aluminum Supply Coalition supports a secure supply chain for aluminum and helps domestic industries thrive. This is a diverse coalition, showing just how far these tariffs reach.

Whether it is the brewery that has had to increase the price of beverages or the sign manufacturer who has had to increase prices on his aluminum signs, we are all feeling the squeeze.

Join us and lend your voice.

Jonathan Jaffe | American Aluminum Supply Coalition jaffecom@gmail.com

#### **CYBER VULNERABILITY**

Having your data breached can be costly to your company while posing a threat to



Did you know?



ONLY 5% OF U.S. COMPANY DATAFOLDERS ARE PROPERLY PROTECTED



\$133,00 is the average cost to a business of a **RANSOMWARE ATTACK** 



of IT executives have emphasized protecting sensitive data as their top priority

\*Statistics on cybercrime suggest that only a tiny minority of US companies have effectively instituted measures within their businesses that will protect company files. \*\*According to studies and cybercrime stats, the average time it took most companies to identify a breach in 2019 was a surprisingly slow 206 days. That's a long time for bad actor to go unnoticed.

#### **Protect company information by** implementing a cybersecurity plan:



**System Security** 







NJMEP.org | info@njmep.org | (973) 998-9801

#### "YOU ARE ONLY AS STRONG AS YOUR WEAKEST LINK "

#### YOUR WEAKEST LINK IS SITTING IN A CHAIR!



#### Skill-based error

Making common mistakes performing familiar tasks and activities

#### Password problems

Using simple or redundant passwords across all systems

#### **Delayed patching**

Not installing software security updates in a timely manner

#### Lack of training

Lacking proper and modern cyber security knowledge and preparedness



HUMANS DON'T HAVE TO BE THE WEAKEST LINK!



#### SPRING SEASON IS BUDGET SEASON IN TRENTON

Typically, Spring brings about warmer weather and longer days but when it comes to Trenton, Spring brings about discussions on the State Budget. Discussions surrounding the budget are usually contentious. The battle is always over whether to raise taxes or cut spending to make ends meet, and pass a balanced budget by July 1st, but this year, New Jersey is flush with money. Thanks to several federal aid packages including the American Rescue Plan, the CARES Act and the Infrastructure Act, lawmakers will be faced with how to spend the billions of dollars New Jersey has in its coffers. In fact, the Governor's proposed \$49 billion budget calls for a \$3-6 billion surplus this fiscal year along with a similar surplus for FY23.

There is no doubt that part of the focus will be on improving our transportation infrastructure but lawmakers should also focus on improving our business climate by reducing costs of doing business in New Jersey. Part of the surplus should go to replenishing the unemployment insurance fund which would save businesses millions of dollars. Also, businesses need help in retaining and training our workforce. This is not only a priority in the manufacturing sector but in all sectors and New Jersey should assist the business community through training grants and employee retention tax credits to help strengthen our economy. Unprecedented times call for unprecedented action and we urge our lawmakers to think "outside the box" when they work on finalizing a Budget. They should seize this opportunity to attract new investment which will in turn bring new jobs and new opportunities for our residents.



TONY RUSSO

PRESIDENT- COMMERCE AND
INDUSTRY ASSOCIATION
OF NEW JERSEY
CEO/PUBLISHER COMMERCE MAGAZINE

# SINGLE-USE PLASTIC BAG BAN FORCES NJ MANUFACTURERS TO DEVELOP ALTERNATIVE OPTIONS

## Time To Shift Production to Eco-Friendly Bags and Takeout Containers

The single-use plastic bag ban is less than two months away for businesses operating throughout the Garden State. 'MADE in New Jersey' manufacturers that produce single-use plastic bags for retailers and restaurants in New Jersey will be directly impacted by the state-wide ban. These businesses must get ready to shift to include eco-friendly bag options once the law goes into effect on May 4th.

The ban has been rolling out across the country in various cities and states as part of a green initiative to reduce plastic waste from entering the environment. It was created as a response to the harmful impacts single-use plastic bags have on oceans, waterways, forests, and the wildlife that inhabit them. This also cuts down on the vast amounts of waste piling up at landfills that create a challenge for waste management.

Grocery stores, convenience stores, and other businesses are encouraged to use reusable carryout bags as an alternative option. According to the New Jersey Department of Environmental Protection (DEP), reusable carryout bags are considered those made of polypropylene fabric, PET non-woven fabric, nylon, cloth, hemp, or other washable fabrics; have stitched handles and are designed for at least 125 reuses are permitted. Part of the ban (with a few exemptions) includes the use of polystyrene foam foodservice products. In addition, single-use plastic straws will only be provided to customers who ask.

As more states implement bans on single-use plastic bags, polystyrene foam service products, and the possibility of single-use plastic straws, there will be a growing demand for alternative products to help New Jersey's restaurants, markets, retail stores, and many other businesses operate. This presents an opportunity for 'MADE in New Jersey' manufacturing businesses to contribute to New Jersey's efforts to help the environment by producing reusable products. Those that currently manufacture disposable plastic bags are in a difficult position, facing a forced decrease in demand. To offset this massive disruption, businesses must transition to offering reusable products as a substitute.

A wholesale vendor list has been set up for manufacturers and distributors that produce bags and foodservice products that meet state standards as a resource. Businesses can register to be placed on the list through New Jersey Business Action Center's (NJBAC) website.

The DEP, municipalities, and any certified entity are authorized to enforce the law. Penalties can be costly for businesses caught not complying, including up to \$5,000 per day for multiple violations. NJMEP (New Jersey Manufacturing Extension Program) is working with small/medium manufacturers to assist manufacturing businesses as they navigate these new rules and ensure facilities are ready to meet the demand for eco-friendly bags and takeout containers. It's vital domestic manufacturers take advantage of every partner possible to avoid costly disruptions or penalties from the newly proposed legislation.

By Alan Gung, Copywriter, NJMEP





#### **NOMINATIONS ARE OPEN**

#### FOR THE 2022 'MADE IN NEW JERSEY' MANUFACTURING AWARDS

The winners will be announced live at "Made in New Jersey" Manufacturing Day on Friday, October 7th. *The deadline for submissions is August 1st.* 

#### **Categories include:**

#### **Manufacturer Of The Year Awards**

- ► Small (50 or less employees)
- ▶ Medium (between 51 and 250 employees)
- ► Large (251 employees or more)
- ► Young/Start Up (in business 5 years or less)

**NEW Leaders in Life Sciences Award & HINJ** 

#### **NEW Rising Stars Award**

Celebrating the Year of Women in Manufacturing

Nominees must demonstrate industry leadership, innovation, growth through revenues or profits, and a commitment to the development of their employees and communities. Nominees will be evaluated based on factors such as: Operations and Continuous Improvements, Management Philosophy, Workforce Development, and Supply Chain Development.

Nominate a 'MADE in New Jersey' Manufacturing Business, today!











# BREAKING DOWN OUTDATED STIGMAS BY GIVING STUDENTS HANDS-ON EXPERIENCE WITH INDUSTRY LEADERS

#### ENGINEERING WEEK CONNECTS STUDENTS AND MANUFACTURING

Engineering Week is an incredible opportunity for manufacturing leaders to promote modern engineering while breaking down the stigmas associated with manufacturing careers. NJMEP celebrated by providing a platform for young adults and industry leaders to connect. High school students, school administrators, and manufacturing leaders throughout the Garden State attended NJMEP's Engineering Week event on February 23 at the Chris DePace Training Facility in Bellmawr, NJ. Nearly 100 students from New Jersey School Districts filled the training facility for the opportunity to get a hands-on experience engaging with members in the manufacturing community to see the value of a career in the industrial field.

Workforce challenges are one of the biggest issues impacting the industry. This celebration gave manufacturers a chance to show the future workforce there are plenty of sustainable career options that don't necessarily require a college degree. Tarik Ross, Camden Shipyard and Maritime Museum Structural Engineer, and Patricia Clark, Lockheed Martin's Naval Combat and Missile Defense Chief Engineer, were among the invited guest speakers who told their stories to connect with the diverse group of students.

Additionally, representatives from Holtec International Inc., Edmunds Optics and Firmenich discussed the benefits of having an industrial career.

Manufacturing is a STEM-driven industry, and New Jersey is home to over 11,000 manufacturing companies. There are plenty of competitive career opportunities, and the average manufacturing salary is \$97,000 here in New Jersey.

This event sparked interest and understanding in engineering and STEM-related careers for the young adults in attendance. Students got to experience NJMEP's state-of-the-art Augmented Arc Welding simulator and CNC machines. They also watched demonstrations from Fizzy Labs and Rowan University. All the exhibitions introduced students to real manufacturing experiences.

Engineering Week was originally created by the National Society for Professional Engineers to cultivate a diverse and well-educated future engineering workforce. Events like this one bridge students with industry leaders so they're aware of the many career paths available in the manufacturing sector.

Without these events and training programs offered by NJMEP, many students may not realize the advanced skillset required and sustainable income associated with manufacturing careers. NJMEP will continue hosting successful events like Engineering Week since they are crucial to showing the benefits of a manufacturing career to students unsure of their futures while showcasing the importance 'MADE in New Jersey' is to the state and the country. The future of our industrial workforce contributes towards the state's overall economic growth.

By Alan Gung, Copywriter, NJMEP

# NO DEBT, REAL EXPERIENCE, UNITED POTENTIAL

#### **Engineering Week is Our Excuse to Engage Students and Young Adults**

Engineering Week took place between February 21st and February 26th. It is celebrated nationwide, and it's designed to encourage educators, business leaders, and role models to share and explore the real value of a modern industrial career. Manufacturing Extension Partnerships (MEPs) all over the country have been actively engaging students and young adults by introducing them to these alternative career paths. Engineering Week is the ideal time to bring the full force of the industry together to explain what a career in manufacturing really means and what that path may look like in today's modern industry. No career path is identical and that will become clear when reading through this story.

#### **Entering The "Real-World" After High School Graduation**

High school graduation is an intimidating time for many students. 18-year-olds have been told for decades that the only "correct" path after high school is to immediately apply for college. Many students look for schools with an exciting social scene. They begin their higher education journey with no real idea of what they want to study. This causes a host of problems. First and foremost, students bury themselves in debt before even knowing what they want to do for a living. They might earn a degree completely unrelated to the career path they discover after college. These students take out six-figure loans without even knowing if they will be able to see a return on that investment. The current US student loan debt is upwards of \$1.61 trillion, and as society continues pressuring these young adults to jump from high school to college, that number will continue to climb. Another issue demanding a decision from 18-year-olds about their higher education is that they assume they don't need to gain real-world work experience for at least 4 years during their studies. Any recent college graduate that applied for the job understands the frustration of seeing an entry-level position that requires 3-5 years of experience. There is a solution. It begins with helping students recognize that there are countless paths to take following graduation. Knowing that entering the working world does not write off higher education in the future is a message that needs to be spread.

In the article, 'Bridging the Skills Chasm by Highlighting Stories of Alternate Career Paths', readers can hear from a 26-year-old that entered the working world before investing in his college studies. That article offers a perspective from a young adult leaving high school and entering the unknown. It is also vital people understand the other side of the story. The New Jersey Manufacturing Extension Program, Inc. (NJMEP) is New Jersey's MEP center. It is led by John W. Kennedy, Ph.D., a massive proponent for alternative career paths and an advocate for the endless pursuit of education. His story is a beautiful example of where these alternate career paths can lead while also showing that

entering the industrial workforce does not mean the end of professional development. Before diving into the career of John W. Kennedy, review all the value that comes along with a career in the manufacturing space.

#### A Career in Modern Manufacturing

There are over 300,000 open manufacturing positions in the United States. In New Jersey alone, the 11,000+ businesses that make up the 'MADE in New Jersey' manufacturing industry have over 30,000 open positions. On average, these New Jersey-based positions offer an average annual salary of over \$97,000. Job security is also extraordinarily high. With so many open positions, once a manufacturer finds a good employee, there is very little chance they will let them go. Additionally, during the COVID-19 pandemic, every New Jersey manufacturing business was considered essential. That meant when servicebased businesses were laying off their workforce, manufacturers were expanding to keep up with the incredible increase in demand for domestic products. Manufacturers are also known to provide more extensive benefits packages than other industries. Many of these businesses offer their employees the opportunity to take part in credentialing programs to expand their skill set. Supporting their workforce with professional development opportunities doesn't stop at work-related credentials and certifications, either. Tuition reimbursement programs are offered by thousands of New Jersey manufacturing businesses, as well. Entering the manufacturing field provides job security, highly competitive salaries, and the chance to grow professionally. These benefits are evident when looking at John W. Kennedy's own personal career path.

#### Where the Manufacturing Career Path Can Lead

John W. Kennedy, Ph.D. is NJMEP's CEO and Center Director. Acquiring all the skills, experience, and education to lead the NJMEP team to become the number 1 MEP center in the nation was a result of his unique career path. At a very early age, he worked side by side with his dad doing electrical and gas work on nights and weekends. The money earned helped support the family of 5 and introduced him to industrial

work before most children even understood the concept of a career. Once he turned 14, Kennedy sought out a way to generate income for his savings. He accepted a role at a welding and machine shop which allowed him to do just that. Having the chance to get hands-on with metalworking and welding at an early age opened countless career opportunities and gave him skills he still puts into practice today. Kennedy's father passed away in his early teenage years leaving a single mother to provide for three children. John saw his mother work hard every day to do all she could to ensure food made it to their table for dinner every night. He applied to be an Electrical Apprentice but with his father's passing, he had to focus on helping his family, which caused him to lose that spot. He didn't sit back and hope that life would get easier. Instead, he continued to work and contribute to the household. Eventually, he would land a position as a Machinist Apprentice, but he was also interested in pursuing higher education to become a Mechanical Engineer. While attending college en route for his first degree, he continued as a Machinist Apprentice. He graduated in 1978 and was able to offset the cost of college with the money he saved from working at Chiarolanza Brothers Welding & Machine shop, his Apprenticeship, baseball scholarship, and grants he identified and pursued. By the time he graduated in '78, not only did he have a degree, but he had 10+ years of working experience and an apprenticeship under his belt.

John W. Kennedy went on to earn a bachelor's in Mechanical Engineering, Education, and Management, an MBA in Business Management, and a Ph.D. in Industrial Engineering. Throughout this educational journey, Kennedy also acquired his AWS Welding Certification, Machinist Certification, including CNC & Programming, his Six Sigma Black Belt, and ISO Auditor.

#### Engineering Week is One Way to Spread the Word

Gaining work experience and exploring higher education are not mutually exclusive. Instead, real-world experience complements academic studies. An added bonus is that entering the working world allows an individual to generate income which can minimize if not eliminate the need

to take out student loans. Today's high school graduates enter early adulthood at an incredible disadvantage when compared to young adults of a few decades ago. Inflation, a service-based economy, and a host of other factors contribute to this challenge, of course. However, these young adults enter the rat race with the weight of tens of thousands, sometimes hundreds of thousands of dollars in debt with no assets and minimal marketable skills. That forces many to accept their economic position in the world and give in to the idea that they will be buried in debt for most of their life.

John W. Kennedy's story is not an impossible one to replicate, at least to some extent. His work ethic, intelligence, and drive contribute to his success. Yet anyone can put themselves in the right position to avoid an avalanche of debt at 18 without any real direction of where they want their studies to take them by instead exploring the host of certifications and credentials that can open the door to a competitive job in the manufacturing field. Many organizations even provide credentialing and training for no cost. NJMEP is currently spearheading a program that provides professional development education and hands-on training to high school students in underserved communities. There are opportunities waiting for students to take part. Opportunities that have the potential to set an individual on an incredible career path that will provide personal fulfillment and financial independence. If a person wants to explore higher education, this alternative route can make it more palatable and effective.

Engineering Week is the perfect excuse to engage young adults and show them first-hand the true face of industrial work. It all stems from educating today's youth on the career paths that are available, outside of the ones they've been taught to accept. There's no shortage of work to be done, There's a shortage of people. Spreading this message is a responsibility everyone in an industrial field must share. Without working together to take full advantage of Engineering Week, National Manufacturing Day, and any other initiative that puts manufacturing, engineering, or STEM in the headlines, the workforce will continue to dwindle until domestic

manufacturing collapses.



# BRIDGING THE SKILLS CHASM BY HIGHLIGHTING STORIES OF ALTERNATE CAREER PATHS

Engineering Week took place the week of February
21st and is celebrated in many unique ways by
countless groups, organizations, and schools nationwide.
The goal is the same regardless of who's celebrating and
how; to break down the stigma surrounding industrial careers
and show the true face of modern engineering and manufacturing.

With workforce challenges amongst the most prevalent issues facing the manufacturing industry today, solutions need to be developed. The most effective way to bridge the skills chasm is to educate teachers, mentors, parents, and students on how far the industry has come. Engineering Week is the perfect excuse for the industry to come together and share the facts with the public while at the same time inspiring the next generation of industry leaders.

The New Jersey Manufacturing Extension Program, Inc. (NJMEP) is taking a creative approach to Engineering Week. An interactive and engaging all-day event and was hosted at their South Jersey training center in Bellmawr, New Jersey, where school administrators, students, and manufacturing leaders were all invited to present, educate, and get hands-on with innovative training technologies.

This is only part of how NJMEP is helping to spread awareness about the value of a career in the manufacturing space. A series of articles sharing real-world experiences from people who experienced the industry first-hand will be shared to help educate those that might not know about all the opportunities that exist.

Mike Womack, NJMEP Marketing & Communications Manager recently sat down with Mike Remshifski, Pro-Action Education Network (PEN) Project Manager to gain some honest insight into how a young adult views manufacturing.



Mike Remshifski, Pro-Action Education Network (PEN) Project Manager

Remshifski is a 27 year old that didn't take a conventional educational and career path. He went to vocational high school and, following high school, explored a career across various industrial fields. He worked for a company that sold and assembled snowplows, aided in the construction of custom-built dust suppression trucks, and even worked for a high-end automotive restoration shop and car detailing business.

While gaining invaluable life and work experience during the day, he attended the County College of Morris at night where he earned a degree in Business Administration. After completing his Associate's program, he enrolled in Kean University's Supply Chain Management program to gain an even deeper understanding of the manufacturing industry as a whole. This path eventually brought him to NJMEP where he now plays an active role in enacting programs that provide credentialling opportunities to youth and works with high schools to educate students about the careers

available in today's modern manufacturing industry.

Remshifski's story is a testament to the fact that higher education is not written off once an individual enters the workforce. There is no "correct" path.

Going to work immediately after high school provides the chance to gain work experience and potentially peruse certifications and higher education without needing to take on copious amounts of debt.

Mike Womack: How did your career path differ from some of your friends?

Mike Remshifski: Most of my friends went to college post-high school and that became their sole focus. Most of my day was focused on whatever role I was working at the time, with my college studies coming into play at night.

I wanted to attend school but affording my classes was difficult, so I had to balance working mornings with my school commitments taking place at night for several years. Working first allowed me to offset some of my student debt while I also gained real-world experience. Instead of entering the real world buried in debt, I was able to start my life with a set of skills that generated income and set me up for the future.

MW: Was there any pushback from teachers, counselors, parents, or any other people of influence?

MR: Within my immediate school circle there was a lot of pressure toward higher education, specifically about college. Most teachers praise the benefits of going to college and that was the main focal point of what you should do when you're done with high school.

I'm very fortunate that my parents were quite open-minded. My father is a diesel mechanic and he's been in that trade for about 35 years.

We have close friends in my family's circle that work as landscapers, construction workers, and in other forms of manual labor/ skilled trades. The understanding that you can make a meaningful career, especially if you want to be a business owner, looking toward the trades is great. So, I didn't have any pushback at home from my parents. But I didn't feel that anything other than college was a door my guidance counselor was really prepared to open for me. My counselors had a lack of knowledge of apprenticeship tracks and other opportunities.

MW: You were in a unique situation to have a deeper understanding of industrial work prior to graduation. Can you share some ways you got hands-on during your time in school?

MR: I actually got to get my feet and hands wet in the waters of machinery, through FIRST robotics.

I was in the robotics club at my high school and

everything we did for our robot was self-made and built, in-house by our team of high school students. If we needed a set of gears, we would use a drill press or a Bridgeport and manually make it. We had a Bridgeport from the late '40s that was the backbone of our team. We did everything in-house.

The most effective way to bridge the skills chasm is to educate teachers, mentors, parents and students on how far the industry has come.

That hands-on foundation really led me to look at going to college for engineering and how I can become a creator and a designer.

MW: When you graduated high school and started working, did your impression of Manufacturing/STEM change?

MR: Entering the "real world" made me realize I only knew a very, very small portion of the entire industry. The work I was doing for what I thought was a big company, was just a small ripple in the ocean of what was going on here (within Manufacturing). It absolutely excited me without question.

Seeing and learning the work within every individual and company I engaged with was fascinating. Learning a little





# UPSKILLING YOUR WORKFORCE WILL HAVE A MASSIVE IMPACT ON A MANUFACTURING OPERATION

Drive the business and your career forwardwith virtual training and consulting from NJMEP.

- Lean Enterprise Overview
- Industrial Communication Skills
- Supervisory Skills
- DoD Cybersecurity Requirements
- Business Crisis Risk
- R&D Tax Credits Overview
- HR Essentials HR Policies and Procedures
- Food Safety Training
- · Six Sigma Black Belt Certification Training
- Discover Global Markets: Helping U.S. Companies Export



Contact NJMEP today to find the right virtual training for you or visit njmep.org/calendar



background to what they do and so forth inspired me to better understand the bigger picture. My curiosity through this exposure at work grew, compelling me to try and learn everything I could regarding mechanical engineering, architectural design, and the ins and outs of our supply chain. The curiosity just keeps growing.

MW: When did you first decide to explore higher education?

MR: Post high school and while out in the world working, I entered an associate's program for mechanical engineering, and I did that while working for the Snowplow group. I was in school for three semesters working towards the end goal of becoming an engineer. It got to a point where I realized the deep level of math I was working within would be reflective of what my daily work experience might be.

I entered school with the thought this (program) was going to be a little bit more hands-on, leaning off organic creativity. I said, let's take a pause. I left school and started working full-time. I did that for a few years and then decided to go back to school several years later. I looked toward supply chain management to get what I wanted out of engineering while also gaining a deeper understanding of the entire industry.

Here at NJMEP, it has been phenomenal to have that background because I can engage in industry-specific conversations, while fully understanding certain work processes that we offer - with all pieces of my background coming together, it was a great decision. The need for real training, specifically in lean is something that nearly every company needs and there isn't a way to articulate it to everyone. But having that time, working on a shop floor, working in a different trade, it really highlights the value of the training that is so often overlooked by local manufacturers.

MW: Were you happy with your decision to work first, then explore additional education?

MR: By sitting back and letting different forms of work come in that led to the next level, that's where I wanted to be. I think seeing that process is healthy. It let me slowly expose myself to what type of environment I want to work in. What type of people do I work best around and where

does my mental health operate best at?

I was able to grow where a lot of my friends didn't until they were 24 and finished school. I think I got a really big leg up on that and then by going back to school with some of that knowledge, I could sit in class, and go, "This subject will help me better understand, X, Y, Z." It helped me connect the dots and operate at a higher level of seriousness.

It's quite wild to sit back and think that we push all these 18-year-olds, millions of young people into thinking they need to make a choice immediately and that choice is often wrong, and that misstep comes with tens of thousands of dollars in debt.

MW: What are you doing in your current role to support the industry, and have you had a chance to share your story with students and young adults?

MR: Right now, I'm helping build and support all programs within the Pro-Action Educational Network. We have a focus on working with the youth population currently to provide apprenticeship opportunities for those interested in exploring a career path within manufacturing. I can take all my life and career experiences and reference when connecting with educators, students, and manufacturers.

I recently had a fantastic opportunity to go back to my high school and share my experience at the first robotics event that NJMEP sponsored in late November. One of the teams in attendance was Roxbury's Robotics Team that I actually helped start in 2011. Seeing some of the young people there, both within Roxbury's Team and other groups, I was able to go and ask people, "Are you enjoying what you do in robotics?"

I shared with them that they can turn this into a career that is ever expanding in depth. College isn't the only way to make that happen.

MW: Finally, if you could share one piece of advice with every high school senior in the US, what would it be?

MR: DO NOT RUSH on any decision you make. Do not feel you are rushed to go ahead and choose. The doors to college, the doors to the activities you love, all those things will remain in the world. It's terrifying to sign up for something with anything less than

full certainty and we do that often to a lot of young people. They feel that college is the only correct path.

This thinking could trap a lot of people and stop them from flourishing further if they had waited because those doors are still going to be there, potentially without college debt.

Mike Remshifski's story is unique, more so now than in the past. Many aren't as lucky. If a young adult is never exposed to the vast variety of industry work and the fruitful careers it can lead to, no blame can be put on that student. Parents, educators, media, all promote college as the only way to secure a stable, high-paying career. Many of these entities have long been unaware of what the modern manufacturing industry has to offer. In New Jersey alone the average annual salary of a manufacturing professional is over \$97,000. With great benefits, professional development opportunities, and even tuition reimbursement programs, manufacturing should not be overlooked.

This is only one story. NJMEP and the rest of the industry need to help open more of these doors.

Engineering Week took place during February 21st – 25th but inspiring the next generation workforce should never stop. Connect with local schools, engage with MEP centers located in every state and Puerto Rico, invite educators to tour facilities, and always be an advocate for manufacturing and STEM. This is the only way to ensure the industry will have a strong base of young adults entering the field.

Michael Womack is the Marketing and Communications
Manager for the New Jersey Manufacturing Extension
Partnership (NJMEP). NJMEP provides consulting,
education, and training to New Jersey Manufacturers.
He began his career in 2015 as a Social Media
Manager for an advertising agency with a client base
of manufacturers and logistics companies across the
United States. Later, he worked for a manufacturer
in Fairfield New Jersey in the marketing department
until his current role at NJMEP. Passionate about
education and manufacturing, he works to shine a
light on today's advanced manufacturing industry,
breaking down the stigma associated with the industry,
working to ensure U.S. manufacturers bridge the skills
gap in order to maintain global competitiveness.



#### NJMEP is leading the charge to make New Jersey a major player in the manufacturing industry

#### By Peter Proko, South Jersey Biz

There is a popular misconception that with the world's heavy reliance on technology, including its increased usage during the pandemic, that the manufacturing industry is on life support. But in actuality, that could not be further from the truth. In New Jersey alone, there are more than 11,000 manufacturing companies that call the state home. As the robust industry evolves to keep pace with the times, Garden State manufacturers have sought guidance and support from a familiar source—the New Jersey Manufacturing Extension Program (NJMEP). Functioning as a staunch advocate consultant, and trainer, NJMEP works closely with the state's Manufacturing Caucus to bolster New Jersey's industry presence by prioritizing three strategic pillars: operational excellence, innovation and growth, and workforce development. Furthermore, the organization is part of a national network of 51 MEP Centers located across all 50 states and Puerto Rico, opening up any number of resources to help manufacturing companies find the necessary tools for success no matter where they are located.

Despite the recent challenges brought on by COVID-19, the manufacturing industry is very much thriving here in New Jersey. That is evident when you consider that since 2000, NJMEP has helped local manufacturers realize \$6.03 billion in growth, with \$1.05 billion in increased sales, and \$2.99 billion in retained sales.

A large component of helping the industry continue to flourish falls on the shoulders of Larry Banks, who manages the workforce development arm of NJMEP, the Pro-Action Education Network™. With disruptions to the supply chain and significant labor shortages across the board, Banks is working diligently to seek out and develop new talent.

"We are working with as many different demographics as we can across the state, from Paterson to Camden, to show people that there is a valuable career path in manufacturing and that you can create a great lifestyle for yourself," Banks says.

Locally, NJMEP opened its new Bellmawr office last summer, which includes a training center created to generate a pipeline for the industry. This includes putting a special emphasis on recruiting 16-to-18-year-olds with a pre-apprenticeship program designed to show younger folks that a career in manufacturing not only exists, but also could be the perfect fit for them. "The manufacturing industry has this stigma that it's a dirty job or only exists in Mexico or China. We want to spread our outreach, and what better way to do that than by offering training tools and bringing people into the fold to give them a hands-on experience that they can translate into real life," Banks explains.

Another key area that NJMEP focuses its efforts is in the food manufacturing space. Juliana Canale served as a food manufacturing and regulatory expert with the organization and says there's a ripple effect with the food manufacturing industry that many may not realize. "Looking at things from a broader perspective, the food and beverage industry is interconnected in a variety of ways with regard to the economy. You have the agriculture side, the sourcing side, materials, importing, processing, warehousing, distribution, packaging, etc. ... and not just with human food, but pet food and animal feed. ... There's a big overlap in pharmaceuticals and chemical manufacturing, whether looking at preservatives or different ingredients going into vitamins or dietary supplements. For example, the flavor ingredient you make at a compounder can go in a boxed cake mix or your toothpaste or your laundry detergent," Canale emphasized.

To that end, NJMEP aims to serve as a one-stop shop to both connect industry leaders and help their businesses grow and develop. While operating under the umbrella of its national network, NJMEP is actually the organizational leader in the U.S. and what Canale refers to as a "technical source of truth" for the other centers. Having that industry know-how and strong support system in place allows NJMEP to expand its reach and better serve clients.

"We are able to speak not only from a local, but a national perspective," says Canale.
"[Companies] realize they are not the only ones having problems and, no matter if they are in Texas or Washington, we have a community that understands [the challenges]."



With the backing of the national group, and its work with the Manufacturing Caucus, and state legislators, NJMEP is helping the food manufacturers of New Jersey reach new heights while steadily

positioning South Jersey as an epicenter for the industry. NJMEP brings its extensive experience working with a variety of food and beverage manufacturers, from Fortune 500 companies to start-ups, allowing them to bring unique insight when working with clients.

"There are a lot of opportunities within connecting the food and beverage space. South Jersey is near the water, near New York City and Philadelphia, and a big hub for things coming in both domestically and internationally," explained Canale. "There's really no limitation in our ability to help manufacturers support their business growth and development needs."



#### Let's work together.

- Customized
   Service
- GoogleCertified Experts
- Transparent Reporting
- Ongoing Optimization

NJ Advance Media champions local business growth. Let us help tell your story.







Targeted Email

Social Media

SEO & SEM

Website Development

Print

Learn more: njadvancemedia.com

Contact **Stacy Koss** at **732-540-3997 skoss@njadvancemedia.com** 



