



New Jersey manufacturing is **Built to Last.**

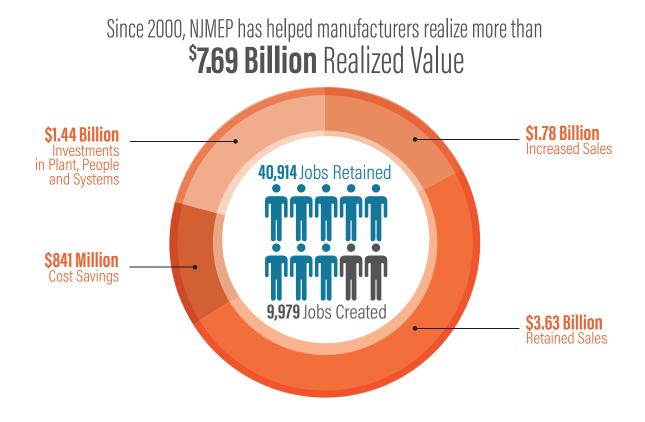
ABOUT NEW JERSEY MANUFACTURING EXTENSION PROGRAM (NJMEP)

New Jersey Manufacturing Extension Program (NJMEP) operates through a cooperative agreement with the Hollings Manufacturing Extension Partnership (MEP) Program of the National Institute of Standards and Technology (NIST) under the Department of Commerce. NJMEP is part of the MEP National Network made up of 51 Centers throughout the country including Puerto Rico.

Utilizing staff expertise and collaborative partnerships, NJMEP enhances operational performance and productivity, drives new product development, market expansion, workforce development and upskilling initiatives, and technology adoption for New Jersey's manufacturers. NJMEP serves the unique needs and challenges of small and medium-sized manufacturers (SMMs) through a broad array of services that improve the top and bottom line. NJMEP will continue expanding the outreach to SMMs statewide to ensure every business has access to the services they require.

NJMEP is rated as one of the top MEP centers in the country. Over the last year, the National NIST-MEP Network alone created, or helped retain, 125,745 jobs, generated \$14.4 billion in new or retained sales for manufacturers, and helped save businesses over \$1.5 billion. NJMEP and the MEP National Network are dedicated to enhancing the productivity and technological performance of U.S. manufacturing. The impact these organizations have, and the benefits they bring to our economy are not just impressive—they are crucial to the sustainability of the nation.

NJMEP's services produce measurable results for manufacturers in New Jersey. Quarterly independent third-party surveys of the clients we serve certify the economic impact.



Catbridge Machinery Benefits from Qualified R & D Tax Credits

Background

Catbridge Machinery is a 'MADE in New Jersey' company that designs and manufactures high-performance web converting machinery. Founded in 1999, this Montville, NJ manufacturer provides slitter rewinders and web converting systems for countless industries to help customers succeed in today's dynamic global markets.

This industry leader utilizes decades of precision engineering and machine building experience to make top-quality converting machinery for their customers' specific needs. They take pride in their commitment to producing durable machines with faster cycle times, less set up, less waste, and fewer operator errors, giving customers better results.

A company like Catbridge Machinery is the perfect example of an organization that constantly innovates and one that should be able to benefit from this investment and effort.

Challenge

Manufacturing companies are eligible to apply for certain types of tax credits but oftentimes aren't aware of the credits or are unsure how to apply for them. New Jersey is an expensive state to do business. Every single business can benefit from tax incentives for the contributions to their industry, their local community, and the nation. Tax credits can reduce the amount of taxes companies owe to the federal or state governments or can increase a return, but are generally complex and require the combined expertise of engineering and financial professionals. Smaller manufacturers don't have the staff or the knowledge to understand what credits they may be entitled to receive.

Catbridge Machinery was looking to see if they could take advantage of specific R & D tax credits and leadership was referred to NJMEP by several of their peers. Catbridge's leadership consists of individuals with engineering backgrounds but theyneeded additional support to ensure they were in compliance and would receive the largest tax credit possible. They needed to enlist NJMEP's team of experts to see how they qualify for the tax year 2020 credits.

Solution

From positive experiences of working with NJMEP on past tax credits, Catbridge Machinery turned to NJMEP's account manager, Jeff Meister, for help once again. Catbridge has had lots of success with NJMEP's services in the past and has credited NJMEP with helping their business grow substantially from a \$4 million company to a \$34 million business since 2006. Jeff, who has had years of experience working with manufacturers attempting to qualify for tax credit, worked with NJMEP's R&D resource to review Catbridge's operations and discovered they qualified for the R&D Tax Credit TY2020.

Through examining each of Catbridge's research and development activities, NJMEP's team was able to identify which ones qualified. A list and documentation were compiled of all these qualified R&D activities to calculate the tax credits.

"We talked to [NJMEP] about helping initially with some hiring and then we found out about the tax credit. I'm an engineer. I'm not a finance guy, but I talked to some people and they're like, 'Oh you got to do the R&D tax credit because you guys do a ton of that stuff,' and then I really learned about it through our rep at NJMEP. There's always challenges to it," Catbridge Machinery Vice President, William Christman explained. "We're two engineers that ran the company. So we always like to take on the challenges, and that's also what's made the R&D tax credit a little bit more challenging for us, was being able to collect all our thoughts, all the data to back it up, and then compile all that information and get it all into one coherent analysis."

The following steps were taken:

- A summary of the qualified research expenditures (QREs) incurred by Catbridge Machinery for the tax year
- Calculations of Federal and State tax credits for the tax year in a format suitable for easily transferring the figures to the appropriate Federal and State tax forms
- 3. A table summarizing the qualifying research activities carried out by Catbridge Machinery during the tax year
- 4. A detailed description and sample contemporaneous



documentation (if provided) pertaining to one or more representative project(s) to demonstrate the company's process of experimentation and how the research activities meet the IRS guidelines

- A company profile containing general information about Catbridge Machinery, its products and/or manufacturing processes, and its need for carrying out research activities
- A review of IRS criteria for identifying qualified research activities and expenditures, together with demonstrations as to how the company's activities and expenses satisfy these criteria
- A description of Catbridge Machinery's overall approach to research and development, including how various personnel are involved in research activities and the types of contemporaneous documentation that are maintained

Each of the points above requires multiple individual steps and documentation to finish. Qualifying for R&D tax credits is long and complex without the right support and partner. Having an R&D professional with experience compile a report after identifying all the activities, documents, and familiarity in Federal and state tax credits ensures that Catbridge has everything needed to qualify.

"It's a lot of work and I really appreciate the engineers and the technical people that we work with, both on the accounting side and the technical side. I know everything, but just getting it out sometimes can be a challenge because there's so many things that I have to sort through in my head to get it all collectively out in a coherent way, and that seems to be one of the great skills that the NJMEP team has while working through the R&D tax credit process," Christman said.

Results

GTS completed its CMMC requirements and have fulfilled the Cybersecurity requirements to secure future contracts and have options on current contracts exercised. Through the support of NJMEP and their Cybersecurity service provider, GTS was able to quickly and efficiently meet their contractual requirements and stands ready for inspection and audit. Without reaching the correct CMMC level, they could be at risk of losing business. The below results reflect the impact GTS experienced while engaging with NJMEP over the past 12 months:

- ✓ Estimated Qualified Research Expenditures: \$2,900,187
- ✓ Estimated IRS Credit: \$218,830
- ✓ Estimated IRS Cash Benefit: \$172,875

"We've always been satisfied. There were some changes that the original consultant that we worked with at NJMEP connected us with had changed. They were able to maintain some continuity for us which was nice because I think normally, had we been using them on our own without NJMEP as the intermediary, we may have just kind of lost a connection completely and had to go out somewhere else. It's nice to have that because NJMEP is familiar with our business, and they have a good idea on how to approach the analysis going into it. It makes the process very easy for us."

William Christman, Catbridge Machinery, Vice President

General Technical Services, LLC Overcomes the CMMC Challenge

Background

General Technical Services, LLC (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 support the development of advanced RF technologies and sensors, advanced electro-optical technologies, directed energy weaponry, electronic materials and devices, and power sources. With a track record of success, they support clients through complex R&D program management, providing Engineers, Scientists and Technical Staff to DoD laboratories and technical centers which helps ensure the US remains a technical leader.

GTS leadership is not only innovative but incredibly proactive. Since they work closely with the Department of Defense, they are continuously monitoring the latest policies and regulations to ensure they remain compliant and provide the highest level of service. Cyber Security policies and regulations have now taken a very high profile role for companies under contract or seeking to do business with the Federal Government.

Challenge

Contract clauses and regulations are flowing down from the DoD that will impact every organization that handles Controlled Unclassified Information (CUI) on their contracts. Businesses that handle CUI will need to comply with the Cybersecurity Maturity Model Certification (CMMC) to qualify for DoD contracts as well as retain their current contracts.

GTS is a New Jersey business that is required to abide by CMMC regulations. Ensuring a facility is compliant with the correct CMMC control level requires a significant effort. The process requires a (NIST 800-171) self-assessment which results in a score that gets posted in the Suppliers Performance Risk System (SPRS) database. Contracting officers can now check this database prior to contract award or exercising an option year to ensure the self-assessment is complete, a score is posted and a plan of action and milestones is available to close any gaps found in the

self-assessment. It doesn't stop with the self-assessment. Contract Requests for Proposal will soon be requiring CMMC compliance to be considered for award. The CMMC level will depend on the contract and type of work. Bringing an organization up to CMMC compliance is a big task for a Firm that isn't in the Cyber Security business and really requires a credible, experienced partner to get there. The consultative support required to get a business in-line with all the separate controls required at any CMMC level can be costly. Many service providers will also not offer the comprehensive consultive support required to ensure the client succeeds. Although GTS' self-assessment resulted in a highly favorable score, they were facing the challenge of finding a partner to help close identified gaps and get positioned for a CMMC audit without overspending on this extraordinarily specific service.

Solution

Knowing CMMC enforcement was upon them, GTS began shopping around in search of a partner that could provide the support they required at a reasonable price. During the search, they found plenty of businesses that said they could help but the services they would provide were either incomplete or exorbitantly overpriced.

"I started searching for programs around the state and came across NJMEP. Once I made contact, I became educated about their relationship with NIST and the relationship they had with expert vendors, it was all the things we needed in addition to an incredibly fair rate!" Kurt Kovach, EVP of Strategy and Business Development, GTS explained.

A CMMC project requires substantial commitment on the part of the service provider as well as the client. This journey required multiple steps to ensure GTS complied with the correct CMMC requirements.

The following steps were taken:

. Cybersecurity Assessment - Based on the DFARS



252.204-7012 and the DoD designed set of controls as prescribed in the NIST SP800-171 revision 2

- 2. NIST SP 800-171 Rev2 Gap Analysis and cross reference with CMMC V1.02 Level 1-3
- Cybersecurity Monitoring and Detection Services Monitoring and Detection Service based on the DFARS and DoD controls
- Cybersecurity Security Operations Center Service (SOC) - Providing outsourced monitoring and detection to include real-time visibility of data reflecting the state of risk to security posture, the network, endpoints, cloud devices, and specific applications

Each of the above points requires dozens of individual steps to complete. CMMC is not an easy certification to achieve without the right support and partner. However, with the right team, a manufacturer will be guided through every individual requirement to ensure compliance and audit readiness will be reached as quickly and efficiently as possible.

Results

GTS completed its CMMC requirements and have fulfilled the Cybersecurity requirements to secure future contracts and have options on current contracts exercised. Through the support of NJMEP and their Cybersecurity service provider, GTS was able to quickly and efficiently meet their contractual requirements and stands ready for inspection and audit. Without reaching the correct CMMC level, they could be at risk of losing business. The below results reflect the impact GTS experienced while engaging with NJMEP over the past 12 months:

- ✓ RETAINED SALES: GREATER THAN \$15,000,000
- ✓ JOBS CREATED: 1
- ✓ EMPLOYEES RETAINED: 7

Kinetics Industries Benefits from Their ISO 9001 Certification Journey

Background

Kinetics Industries Inc. has been in operation since 1939. This Trenton, NJ-based manufacturer is a leader in producing highly reliable and durable SCR regulated and diode line-regulated power rectifiers, industrial DC power supplies, fuseless bolted fault rated magnet rectifiers, flux forcing magnet rectifiers, crane rectifiers, DC substations, synchronous motor field and generator excitation systems, and power conversion solutions.

Their staff of world-diverse, engineering and technical staff design and manufactures industrial, commercial, utility, and military application power conversion products to the highest domestic and international standards. Dry type transformers, enclosure and panel fabrication, digital and analog electronic circuitry, and power semi-conductor assemblies are among Kinetics Industries' design and manufacturing capacities.

Kinetics Industries already delivers top quality products, but they were looking to expand their client base and require specific certifications to break into this new market.

Challenge

Countless manufacturers across the country were impacted because of the COVID pandemic. Like many manufacturers impacted at the height of the pandemic, Kinetics Industries' sales and work were affected due to the limitations enacted by the state and federal government. They were offered a substantial order from a client for work in Saudia Arabia during the pandemic when significant size orders were limited due to COVID restrictions, but the client required an ISO 9001: 2015-2021 certification.

Kinetics Industries needed help to be ISO 9001: 2015-2021 compliant and secure the contract. They were scrambling to find an ISO expert for help. Through a recommendation, they reached out to NJMEP for support. Kinetics Industries' workforce also needed additional training since ISO 9001 addresses certain aspects of quality management. They were running out of time to complete the contract and enlisted

NJMEP's expertise to help them receive ISO 9001:2015-2021 certification and to upskill their staff to ensure continued compliance.

"Because we had already made a substantial engineering investment, we had to get this done. It was just a win-win all the way around. The project is immediately addressing the challenges with the workforce. Then you throw in ISO which is all about engagement and commitment, attention to detail, following rules," Kinetics Industries Inc. President, Keith Secrest explained. "We knew nothing else about ISO 9001 so we needed a consultant and we needed to get ourselves organized. Bringing someone in that was very knowledgeable and was able to get us up to the point where we could secure the certification in a quick period of time because our customer was asking us for a cert right away was key."

Solution

After speaking with NJMEP at the recommendation of the Mercer County Workforce Development Board, NJMEP created a plan to help Kinetics Industries achieve ISO certification. With their NJMEP account manager's help, their knowledge of ISO 2001: 2015-2021, and all the resources NJMEP provides, Kinetics Industries was able to receive their ISO certification quickly.

Through their account manager's suggestion, it was recommended the project be split into two phases: ISO virtual training, to save travel time and as a direct result of the state's pandemic guidelines, and additional training to ensure they received certification in the time needed. This helped Kinetic Industries secure the required training to be certified.

"Having the resources and the expedited process, that was just huge. Here you are given a project and this black cloud of COVID is hanging over us. I don't know how we would have really done it without the help of New Jersey MEP. It brought so many resources to bear in a very tumultuous time," Secrest stated. "It made us look at our process. It empowered me as a manager, because now I had a program and a process and



a documentation of the structure that we could refer to. It was a good force in the long run, even if we don't need it for customers. We need it for ourselves."

The following steps were taken:

Phase I - Virtual Training-ISO 9001: 2015:

- Module 1: Awareness Session/Overview(4 Hrs)
- Module 2: Gap Analysis (4 Hrs)
- Module 3: Identification of key business processes aligned with the business model of the company (4 hrs)
- Module 4: Quality Policy/Quality Objectives(4 hrs)
- Module 5: Risk Analysis/Assessments (4 hrs)

Phase II - Additional ISO Training 36 Hours

- Management Overview 6.0 Hours
- Documentation Review and Development 8.0 Hours
- Risks and Opportunities 6.0 Hours
- Internal Auditor Training and Audit Mentoring 10.0 Hours
- Assessment Preparation 6.0 Hours

Each of these phases above requires multiple individual steps and documentation to complete. The ISO 9001: 2015-2021 training and certification process can be long and complex without a fully knowledgeable partner. Working with an experienced team of ISO specialists to identify their needs

for improvement allowed Kinetic Industries to be certified, receive CARES funding, and secure a massive contract with their client.

Secrest explained, "Half of the problem is really identifying the problem. Is the problem just a micro or is it macro? I think that's how NJMEP really helps you to find out you're not alone!"

Results

Kinetics Industries secured their contract with the client after completing ISO 9001:2015-2021 training and receiving certification from the certifying body and accreditation firm, SAI Global. NJMEP offered and executed an expedition action plan; this, combined with financial assistance via a grant, worked successfully for both Kinetics and their customer. The results below reflect the impact Kinetics Industries experienced while engaging with NJMEP:

Retained Sales: \$100,000

New Sales: \$20,000

New Jobs: 2

Retained Jobs: 2

✓ New Investment in Workforce: \$10,000

"ISO helped because it enabled us to keep people focused on a project and a thing that was really on a workplace floor. It tremendously helped our quality! It made everything very visible. Yes (I'd recommend NJMEP to other manufacturers) because you're not reinventing the wheel. This is something you guys do day-in and day-out. You have the resources to be able to go and get it done. You go through New Jersey MEP, they looked at resources that are out there through grants or funding. That's part of their mission"

Keith Secrest, Kinetics Industries Inc. President

Falstrom Company Committed to Continuous Improvement and Partners with NJMEP

Background

Falstrom Company is a 'MADE in New Jersey' company that primarily serves large and second-tier US defense and aerospace manufacturers by producing custom, battle-proven, large enclosures precision machined parts and electronic assemblies for avionics to mission-critical shipboard systems and platforms. Falstrom was founded in 1870 by Gustav Falstrom, an immigrant from Sweden, as a supplier of fabricated metal products including skylights, metal roofing, cornices, leaders, and gutters. In its 152 years of business, Falstrom has become a leader in the US DoD supply chain building a reputation for its reliable electronic enclosures, electromechanical assemblies, precision parts and integrated systems. Headquartered in Passaic, NJ, this local manufacturer has received many accolades and awards including being named NJMEP's "Manufacturer of the Year", Lockheed Martin's "Small Business Subcontractor of the Year", Northrop Grumman's "Preferred Supplier", Rockwell International's "Subcontractor of the Year" and receiving a letter of appreciation from DRS. They proudly provide their customers and the warfighter with the highest reliability solutions for electronic enclosures and electromechanical assemblies for a range of systems that help complete missions safely.

Challenge

Manufacturers nation-wide are experiencing a wide range of challenges that are impacting their ability to grow. Cybersecurity Renewal SOC 2019 and 2020 and employee development and training, particularly with lean manufacturing principles and technical skills were top priorities for this specific New Jersey business. They're federally mandated as a defense manufacturer to be compliant with the new CMMC regulations. Organizations are required to manage cyber security threats and apply effective processes and controls in place to respond and recover from breaches.

The biggest challenges smaller manufacturers like Falstrom face are having limited resources and a staff to address these

needs to train talent and at the same time ensure they're compliant with the latest rules and regulations like CMMC. As a smaller company, they needed support. They enlisted NJMEP's experts to help them address workforce challenges, earn the necessary certifications and become compliant on SOC 2019 and 2020 by the deadline dates in order to maintain their defense contracts.

With a small staff and fewer resources, it's incredibly challenging for Falstrom to be compliant with all the latest CMMC certifications required in the industry, keep their team trained, and their business continuously improving.

Solution

Falstrom reached out to their NJMEP Account Manager, Stacy Cooke for assistance on all their specific needs including certification and upskilling. They've had plenty of success with NJMEP's services in the past, so they knew exactly how to get started enlisting the MEP's help. Stacy, who has had decades of experience working with DoD manufacturers, discussed the current business environment, reviewed Falstrom's operations and what their needs were, and worked to uncover ways they could address those specific needs.

A comprehensive solution was developed. Falstrom would work with NJMEP's experts to become CMMC compliant, work with Lean trainers to create a customized curriculum. Thus, ensuring that Falstrom would be compliant with the latest DoD rules and requirements.

The following steps were taken:

Cyber Security Renewal Managed SOC 2019 and 2020 – 24x7 Network Security Monitoring/Intrusion Detection, Annual Vulnerability Scan, Customized Threat Intelligence and SIEM

Lean and Technical Skills Training – Training for Blueprint Reading, Metrology GD&T and Advanced, Shop Mathematics and Fixturing and Tooling

Compliance Assistance - New NIST 800-171 Cybersecurity requirements including remediation

Each of the points above requires multiple individual steps to finish. CMMC isn't an easy certification to



achieve without the right support and partner. Lean is an easy concept to understand but takes buy-in and effective training to ensure it carries once the trainers and consultants are gone. However, with the right team, a manufacturer will be given every single tool they need in order to thrive.

"I think that the consultative way in which NJMEP works with clients like Falstrom Company really helps tailor the solution in a way that's really unique for each company and really benefits the company," Falstrom President & CEO, Clifford Lindholm explained.

Results

Falstrom was able to successfully meet all the CMMC requirements, provide their team with all the knowledge needed to apply lean manufacturing principles, as well as receive the technical training to remain complaint with the new DoD rules.

✓ Retained Sales: \$12,000,000

✓ Increase Sales: \$500,000

✓ Cost Savings: \$800,000

✓ Jobs Created: 2

✓ Employees Retained: 95

"If you're a manufacturer looking to improve your social media presence but haven't decided which service company to use, I recommend contacting NJMEP. They vet the service provider and supervise the project to make sure goals have been met."

Clifford Lindholm, Falstrom President & CEO

Century Service Affiliates, Inc. Experiences Growth Using R&D Tax Credits

Background

Century Service Affiliates, Inc. is a family-owned business that specializes in providing custom foam and case solutions for every type of need imaginable. This Paterson, NJ-based custom foam fabricator has been calling New Jersey home for over 30 years. Century Service Affiliates manufactures all types of carry cases including: blow molded plastic cases, injection molded cases, all-weather cases, and shipping cases. They are fully staffed and manufacture their products completely in-house at their 39,000 square foot New Jersey facility.

Their Pro-Design team works with customers to create the perfect custom case solution for their items by creating and producing custom foam inserts or a case with precut foam. Their cases come from all major manufacturers, including Pelican, Doro, SKB, Seahorse, Nanuk, Flambeau, and HPRC.

Challenge

Small and medium-sized manufacturers can be eligible for R&D Tax Credits, but need the right kind of expertise to navigate through all the documentation. NJMEP account manager Stacy Cooke informed Century Service Affiliates they could apply for the R&D Tax Credit for Tax Year 2020.

Century Service Affiliates looked into the tax credits and noticed their work qualifies as R&D. This tax credit was particularly important because they were conducting R&D work on their printing foam and print builder at the height of the COVID pandemic. They needed support from an expert to identify ways to optimize their R&D tax credit. Without the tax credit, they couldn't stay competitive or purchase the machinery needed to produce their new products.

"We looked into it. We saw that what we're doing is R&D and we would be eligible for the credits," explained Century Service Affiliates Inc. Owner & President, Steve Holand. "We're changing things, doing things, and 2020 was specifically the year that we started our research and development on our printing foam and our print builder."

Solution

Century Service Affiliates enlisted NJMEP to help them after prior positive experiences with earning the R&D tax credits dating back to 2018. Through their past project successes, and after being informed of the tax credit for 2020, they enlisted Stacy's help. Stacy, who has years of experience working with businesses to qualify for tax credits, walked Century Service's team through all the steps.

She helped ensure they understood the tax credit process, and provided the information needed to move forward. Through examination, verification, and staff interviews of all of Century Service Affiliates' projects and activities for 2020, the team put together documentation that ensured Century Service Affiliates qualified for the credits.

"Stacy put us in the right direction. She was there the whole time, holding our hand and making sure that we understood it and making sure that we got the most out of it. We worked hand in hand with Stacy and she helped us and provided us the information that we needed to move forward," stated Holand.

The following steps were taken:

- Century Service Affiliates enlisted NJMEP to help them after prior positive experiences with earning the R&D tax credits, dating back to 2018. Through their past project successes and after being informed of the tax credit for 2020, they enlisted Stacy's help. Stacy, who has years of experience working with businesses to qualify for tax credits, walked Century Services' team through all the steps.
- She helped ensure they understood the tax credit process, and provided the information needed to move forward. Through examination, verification, and staff interviews of all of Century Service Affiliates' projects and activities for 2020, the team put together documentation that ensured Century Service Affiliates qualified for the credits.



- 3. "Stacy put us in the right direction. She was there the whole time, holding our hand and making sure that we understood it and making sure that we got the most out of it. We worked hand in hand with Stacy and she helped us and provided us the information that we needed to move forward," stated Holand.
- 4. Each of the points above requires multiple individual steps and documentation to finish. Without the right support and partner, qualifying for R&D tax credits is a long and complex process. Having an R&D professional with experience put together a report after identifying all the activities, documents, and familiarity in Federal and state tax credits ensures Catbridge has everything needed to qualify.

Results

Century Service Affiliates was able to meet all the R&D Tax Credit TY 2020 requirements while saving time and the extra work of putting all the information together. They expressed interest in continuing NJMEP's service for the next tax credit. Below is the reported impact from engaging with NJMEP:

✓ Increased Sales: \$150,000✓ Retained Sales: \$200,000✓ Employees Retained: 5

✓ Jobs Created: 2

✓ Cost Savings: \$50,000

"We're doing R&D to fill the business and be competitive. That's always something that we did. We just didn't know there was help available for it to absolutely take that and move it up to the next level because with the tax credits it allows us to reclaim funds that we were paying for the R&D and use it in other places in our business. NJMEP held our hands the whole time. We did have to send information to them about what research and development we've done, but basically, they handled all the rest of it. Really, it was very easy!"

Steve Holand, Century Service Affiliates, Inc. Owner & President

Local New Jersey Manufacturer Works with NJMEP to Utilize State Incentive that Rewards R&D

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 Stateof-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

Zero Surge Doubles Down on Digital Marketing to Expand Business

Background

Zero Surge, located in Frenchtown, New Jersey began in 1989 when J. Rudy Harford was presented with the challenge of reinventing the surge suppressor. By closely examining failed surge suppressors Harford was inspired to improve the classic design. He developed and patented a seriesmode surge suppression circuit that protects against the worst surges and he only continued to improve his design. Harford never stopped improving and Zero Surge's entire product line incorporates his revolutionary surge suppression technologies that are more reliable and more durable than other technologies on the market today.

Now led by Jim Minadeo, Zero Surge continues to develop additional models for emerging applications and improve the customer experience. The company is dedicated to using only US sourced components from US vendors. Currently, they have 7 employees and are constantly innovating to drive growth.

Challenge

Surge suppressors are used in a plethora of industries spanning from restaurants and IT support to military and manufacturing and are critical in large-scale infrastructure projects as well. Zero Surge has a massive client pool but cutting through the noise is always difficult. All the time and effort spent upgrading their infrastructure while continuing to service key accounts and new business meant there was little time to spend on their digital presence. Their website was aging, and they weren't taking advantage of social media to strengthen their brand recognition and generate leads.

Since there are so many kinds of customers it creates a challenge when it comes to creating a focused marketing message. Zero Surge is a business made up of electronic and engineering experts. The individual responsible for marketing wears multiple hats and strictly focusing on digital and traditional corporate communications is not an option.

The combination of a large customer base and a product focused business meant that Zero Surge was having

trouble leveraging marketing to generate sales and growth opportunities.

Solution

Zero Surge has engaged heavily with NJMEP events, open enrollment courses, and is active in the manufacturing community. Their product is unique and their needs are specialized. This history of engagement and trust made it easy for Zero Surge to reach out to NJMEP and talk through some of their pain points.

An initial consultation was conducted between Zero Surge leadership and their NJMEP Account Manager. NJMEP has visited the facility a few times over the course of 6 years, but it is critical the complimentary business assessment is as upto-date as possible before exploring possible solutions to any business challenge. The Account Manager was introduced to the manufacturing process, toured the facility, and sat down for a lengthy discussion to ensure they understood all of Zero Surge's challenges. It was confirmed that exploring digital marketing could be an ideal way to offset COVID-19 disruptions in the short term while also helping their business grow and expand in the long term.

The next step was to bring in the Digital Marketing resource alongside the NJMEP Account Manager to meet with leadership. The Digital Marketing resource was introduced to Zero Surge and a thorough examination of Zero Surge's current marketing materials and digital presence was conducted. Once all the current materials were reviewed, an extensive digital plan was presented to Zero Surge.

NJMEP and Zero Surge is collaborating in the following areas:

Social Media activity and engagement

NJMEP is training Zero Surge on social media best practices. Social Media posts are developed weekly and the Digital Marketing resource works with the Zero Surge team to refine the message.



Original content development in the form of blog posts

Blog Posts and original web content is being produced to enhance the manufacturer's digital presence. The client is being educated on best posting practices and the value of original content to their digital marketing efforts. Website Design

A new home page is being developed to increase lead capture.

An updated theme is being used to make the site more functional and appealing. New photos and graphics are being added to clarify the applications and audience reach.

Promotional Video Development

6 promotional videos are being produced to serve as content for social media and featured website content.

Amazon Content Updates

NJMEP is assisting Zero Surge in updating and improving its brand content for Amazon while educating Zero Surge on the best eCommerce product description practices.

Results

Manufacturers that can effectively deliver their message in the digital space can increase their brand presence and bottom line. Zero Surge took the initiative to partner with NJMEP and improve its digital marketing efforts through a combination of training and consultative programs.

Zero Surge cited the following impacts from working with NJMEP over the past 12 months:

✓ Increased Sales: \$90,000✓ Cost Savings: \$10,000✓ Employees Retained: 7

Knickerbocker Machine Shop Launches into New Markets



Background

Knickerbocker Machine Shop Inc. has been in continuous operation since 1943. Starting as machine designers and welders in a 3-car garage in Paterson, New Jersey, the Company soon focused on producing the ASP Brand of austenitic stainless steel, duplex and high alloy pipe fittings, plugs and unions in 1944. The ASP Brand, marketed by Alloy Stainless Products Company Inc. became well known and internationally sold through PVF distributors for use in the chemical, pharmaceutical, petro-chemical, power & energy, shipbuilding, and nuclear power industries.

Challenge

Knickerbocker Machine Shop needed to improve its competitiveness and productivity. They had issues being able to expand their business and reach new prospects or new markets, and needed a way to engage with the community and business collaborators. It was imperative that the company develop new, sustainable revenue streams to remain viable.

Solution

Knickerbocker Machine Shop reached out to NJMEP for assistance and NJMEP met with Knickerbocker's senior staff to complete an on-site assessment with a plan to identify and clarify the organization's sales and marketing strategies.

The project focused on a needs analysis, and conducted a strengths, weaknesses, opportunities and threats (SWOT) analysis. Through a structured process, NJMEP helped Knickerbocker identify and characterize the markets, trends, value chains, and website enhancements.

NJMEP initiated a program that consisted of individual training modules: Destination Innovation, Establishment of Growth Opportunity Criteria & Project Goal Setting, Sales & Marketing Outreach Planning, and Monthly Market Scouting & Business Development Support.

The training produced:

- An expansion of Knickerbocker's ability to reach new prospects and or new markets through a carefully planned and professionally executed growth strategy.
- Distinct criteria that will define, weigh and go on to set a hierarchy of the organization's efforts as related to top line growth.
- Expert facilitation and project support that will instill a:
 Plan, Do, Check and Act inspired system to drive market diversification efforts.
- A structured process for identifying market needs and opportunities, while building a strategy and tactics to pursue carefully vetted market opportunities.

Results

After completing the training, Knickerbocker created new marketing messages and established a marketing strategy. The company is in a more sustainable position now that it has a formalized marketing plan and website in place.

Knickerbocker Machine Shop benefited from NJMEP's help in many ways:

✓ Retained Sales: \$4,500,000

✓ Cost Savings: \$50,000

✓ Savings on Investments: \$50,000

✓ Workforce Practices: \$50,000

✓ New Sales: \$150,000

Puratos Corp Six Sigma Green Belt Training

SUCCESS STORY: INNOVATION & GROWTH

Background

Puratos is an international group offering a full range of innovative products, raw materials and application expertise to the bakery, patisserie and chocolate sectors. Their headquarters are just outside Brussels (Belgium), where the company was founded in 1919. Almost a century later, their products and services are available in over 100 countries around the world and, in many cases, are produced by their network of local subsidiaries. Above all, they aim to be 'reliable partners in innovation' helping their customers around the world to deliver nutritious and tasty food to their local communities.

Challenge

Puratos Corp aims to be a reliable partner in innovation helping customers deliver nutritious and tasty food to their local communities. Customers tend to be artisans, industrial manufacturers, supermarkets, and food service companies. They wanted their employees to have the tools and techniques to improve and evaluate supply chain logistics and distribution processes to improve production in daily operations. With those goals Puratos wanted to go through Six Sigma Greenbelt training.

Solution

Puratos worked with NJMEP to work on the Six Sigma Greenbelt Certification. Six Sigma is a universally recognized standard of excellence for continuous process improvement. This course will prepare all participants for Green Belt certification - an accomplishment that will add value to each of their their careers. The participants will have the tools and techniques to improve and evaluate supply chain logistics and distribution processes to improve production in daily operations. The students will understand project opportunities and determine quantifiable savings by participating in Six Sigma training.

In this 5-day course attendees will master the use of the Six Sigma approach to quantify the critical quality issues in the

company. The Philosophy of Six Sigma recognizes that there is a direct correlation between the number of product defects, wasted operating costs, and the level of customer satisfaction.

The implementation of Six Sigma is a team process. As a Six Sigma Green Belt, attendees will be equipped to support the Six Sigma implementation in their company.

Results

Puratos Corp benefited greatly from NJMEP's help in many ways:

New Sales: \$100,000

Retained Sales: \$100,000

Cost Savings: \$200,000

Retained Employees: 2

"The training was insightful and taught in a way that it could be tailored to any industry that is looking to become better, cheaper, and faster all while improving quality. The training was data driven and gave us tools to create metrics to assist us with tightening our spec."

Jaimian Davis, Warehouse Manager of Puratos Corp.

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NutraStar Secures Valuable Food Defense Certification and Engages Workforce with NJMEP's Help

Background

NutraStar is a local manufacturer that specializes in producing custom formulated tablets, capsules, and powders for nutraceutical brands. Located in Farmingdale, NJ, NutraStar has a staff over 250 employees on-site and they manufacture 10 million capsules, 100,000 bottles, and 10,000 kg of custom formulated powder per day, all out of their 60,000 square foot production facility. They are one of the top contract manufacturers for leading supplement brands. NutraStar manufactures their custom formulations using the highestquality raw materials.

Their products, especially capsules, provide quick and efficient dosesfor supplement consumers. They have some of the most technologically sophisticated encapsulation machinery available on the market and deliver their products within industry-leading turnaround times.

Challenge

The FDA requires food manufacturers to comply with the latest food defense requirements. NutraStar needed to ensure its workforce was trained on the proper food defense strategies before the FDA's next visit. In addition, NutraStar understood they needed to take this training seriously and maintain their food defense practices after its FDA audit to remain in good standing with the global safety science organization, UL Solutions. The UL helps companies to demonstrate safety, enhance sustainability, strengthen security, deliver quality, manage risk, and achieve regulatory compliance. The audit encompasses all GMP regulations.

NutraStar was looking for a partner that can help them remain compliant with both the UL and FDA. The FDA recently started requiring food manufacturers to follow the food defense regulations to be considered compliant and receive their GMP certification. Without the GMP certification, it would be difficult for them to continue operating. Customers have requested that NutraStar have the certification before continuing business with them. Customers will check for the certification on a third-party database.

"We knew that if we weren't compliant and we did not follow through with the full process, there's no way we would get that certificate and we wouldn't be able to show it to our customers," explained NutraStar Director of Quality, Sam Brownstein. "They have a way of looking us up in a database. They know that even if we say we're working on it, and we've gotten an extension, but if that deadline had come and we didn't have an audit, we would not be in the third party's database. That would be a major loss of customers. We needed to comply, and we needed to have training, and we needed our staff to have an understanding of what the requirements are."

Solution

NutraStar explored options to upskill their staff and become certified by the FDA's upcoming deadline, and discovered NJMEP has the expertise that would address all their needs. They reached out to NJMEP for help and explained their challenge to the NJMEP account manager.

Their account manager is familiar with the regulations, the timeframe needed for preparation, and its importance. The account manager knew they didn't have much time to prepare so he worked with NutraStar's team to quickly develop a plan. A plan was created immediately after the account manager surveyed their facility and staff and saw how much time they would need for food defense training and certification.

"Within a couple of weeks, the trainer was here. It was a very good experience. The trainer was very hands-on and got everybody involved. Everybody was really able to walk away after that and write their own program for this food defense, which was quite unique," Brownstein said. "The trainees, and everybody on the team that was trained, came back and told me it was interactive, it was fun, and it was something that they would do again with this trainer. That was like a game changer to me."



The key topics that were discussed:

- Understanding the importance of a food defense and training
- Explaining actionable process steps (APS), mitigation strategies
- Describe ways to protect food from intentional adulteration
- Understanding how to recognize and report suspicious activity
- Review FDA Employee FIRST Learning Objectives
- Review employees, role in preventing intentional adulteration

Training took a total of 12 hours to complete, including the eight hours of on-site training and four hours of training customization. The training's focus was on the physical structure for food defense elements to help better explain 21 CFR 121 regulations. Working with a knowledgeable consultant to come up with a quick plan allowed NutraStar to have food defense certification before the deadline, become GMP certified, and ultimately continue their business with customers.

Results

NutraStar's staff received their certification after completing the food defense training, and they completed all the requirements in time for their next audits with the FDA and UL. They also received a perfect audit score of 100 as a result of the training provided by NJMEP's team. This in turn drew more interest from customers who specifically look at audit scores before continuing business.

The results below reflect the impact NutraStar experienced while engaging with NJMEP:

✓ Retained Sales: \$10,000,000

✓ New Sales: \$2,000,000

Retained Jobs: 2

✓ New Jobs: 2

Cost Savings: \$20,000

"Our customers ask us, 'What was your score from your last audit?' When it's a hundred, a certain level of interest and business goes to a whole new level. They look at us differently and, in general, the market would look at us differently, because they see that we're taking our quality very, very seriously and we are sincere about what we do and what products we make and how we make those products. NJMEP played a vital role in that. Our customers are happy and it made our employees happy because everybody now feels a part of an organization that prides over their quality. Prides over how they manufacture our products. So, it was a win-win for employees and for customers."

Sam Brownstein, NutraStar Director of Quality

Food Safety Training Helps Ensure Sea Breeze Remains Compliant and Maintains High-Quality Standards

Background

New Jersey is known as the Garden State, but farming is only part of the state's impressive food industry. 'MADE in New Jersey' manufacturer, Sea Breeze is a fourth-generation, family-owned manufacturer and distributor of Premium Beverages On Tap in the Metro New York-New Jersey area since 1925. They manufacture beverage concentrates, milkshake bases, and syrups, including their famous Bosco Chocolate Syrup at their 40,000 square foot facility in Towaco, New Jersey. Sea Breeze has over 75 employees and offers a variety of services in addition to their manufactured products.

The company serves national and regional customers through the installation of custom dispensing equipment and provides emergency repair services 365 days a year. This 'MADE in New Jersey' manufacturing business is a staple of New Jersey, and their products can be found in so many households across the United States. Bars, restaurants, healthcare facilities, schools, catering halls, and establishments of all kinds turn to Sea Breeze as well for their ability to custom install dispensing equipment designed to meet their needs and can rely on this local business to provide support nearly around the clock, all year long. Sea Breeze is a wellestablished food manufacturer that built a trusted brand right here in New Jersey.

Challenge

Food manufacturers are held to high standards. Any product meant for human consumption must be produced in a facility that meets strict requirements and by a workforce that has the right training and certifications. This high standard is especially true for a company like Sea Breeze which hosts an impressive roster of in-house talent. Professional Sales Consultants, Production, quality assurance, their own food science laboratory, warehousing and logistics, office staff, and administration make up the entire Sea Breeze team. This presents a massive competitive advantage but also a tremendous challenge. Maintaining customer trust, a high level of service, and the ability to produce a high-quality product requires a well-trained workforce that follows all foodsafety best practices.

Food regulatory bodies require businesses to participate in annual training for specialized employees and any time Sea Breeze brings on new members of the team, those individuals must be brought up to speed. Additionally, when staff are promoted to a new role, they must be trained to ensure a smooth transition, and production is not hindered in any way.

Solution

Sea Breeze has a long history with NJMEP. When new customized training opportunities are available and the company brings on new people, they turn to their local MEP center to upskill their staff. They recently hired new regulatory employees and brought on new people to work in the food science laboratory.

NJMEP has the capabilities and expertise to provide training in nearly any area within a food manufacturing operation through its highly regarded food manufacturing training suite of services. In-depth courses are led by some of the nations' most highly regarded food regulatory experts in a customizable, engaging, and efficient manner.

A total of 17 courses were identified to meet the regulatory, compliance, and upskilling needs of the client. 30 training days were provided to 10 employees over a 12-month period.

The following Quality Control - Food Safety courses and training were facilitated by NJMEP:

- Food Allergens
- Foreign Supplier Verification Program (FSVP)
- Food Defense
- FDA Food Labeling Nutritional Facts Updates
- **HACCP**
- **SQF** Practitioner



- Preventative Controls for Human Food PCQI
- Internal Auditing for Food Safety Management
- **CGMP Requirement & Readiness**
- Cleaning & Sanitation
- Food Recalls and Withdrawal
- Corrective Action and Root Cause Analysis

Results

All clients that work with their local MEP are surveyed by an independent third party to record the impact the projects conducted had on that business. Sea Breeze, participated in their client survey after NJMEP's training concluded.

NJMEP was cited with the following impact by Sea Breeze:

✓ Retained Sales: \$50,000

✓ Cost Savings, \$15,000

Investment in Workforce Practices: \$15,000

New Employees: 1

Employees Retained: 4

Calandra's Italian & French Bakery SQF Compliance



Background

Calandra's story begins in 1962 with the opening of Calandra's Bakery in Newark, New Jersey.

Luciano Calandra, an Italian immigrant, had been in America for just five years when he went into business for himself and opened a small Italian and French bakery. Mr. Calandra and his wife Ortenza worked hard day and night, and their bakery quickly developed a reputation for producing delicious bread.

Over the next 20 years the business took off as Mr. and Mrs. Calandra's two sons, Anthony and Luciano Jr., began working in the family business. Not only did Mr. Calandra teach his sons the inner workings of the bakery, but he also instilled in them his business principles of a strong work ethic, an emphasis on family, and a belief that the customer is always right. Now, over 50 years later, Mr. Calandra's philosophy remains the guiding light for the family business.

Today, Calandra's Bakery in Newark is a 50,000 square foot operation and the family now has two additional bakeries, one in Fairfield and one in Caldwell. The three bakeries deliver their products to more than 500 supermarkets, delis, restaurants, catering halls and sporting arenas in the tri-state area.

In addition to their bakeries, the Calandra family now owns and operates several hotels, restaurants, and apartment buildings in northern New Jersey. The family also produces and sells their own line of olive oil, coffee, fresh pasta, homemade sauces, and wines from their vineyard in Italy.

Although the family's business has grown substantially since 1962 and employees over 700 employees, two things remain unchanged: Calandra's Bakery is still synonymous with delicious bread, and the family remains driven by hard work, traditional family values, and a focus on customer service.

Challenge

With a company with as much growth as Calandra's has, keeping up with date production records, training records,

recipe books etc, was a great problem for Calandra's. Also they had no SQF Certification to go after accounts like Whole Foods and Trader Joe's. This was a big challenge for their business.

Solution

With a company with as much growth as Calandra's has, keeping up with date production records, training records, recipe books etc, was a great problem for Calandra's. Also they had no SQF Certification to go after accounts like Whole Foods and Trader Joe's. This was a big challenge for their business.

Results

Calandra's Italian & French Bakery benefited greatly from NJMEP's help in many ways:

✓ New Sales: \$100,000

✓ New Investment in Workforce Skills or Practices: \$3,000

"NJMEP should be supported because they truly take care of the manufacturers. They look out for them and find ways for them to succeed."

Kristin Calandra, Vice President of Calandra's Bakery

