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The Arizona Manufacturing Extension Partnership (AZMEP MEP) is a 501(c)3 non-profit organization whose mission is to create opportunities for Arizona's small and medium sized manufacturers, by helping them become more efficient, productive and globally competitive. Arizona MEP serves manufacturers throughout the State. The Arizona MEP home office is located in Scottsdale and project managers are located throughout the state. Recent examples of our work include:

**Phoenix, AZ – Spirit Electronics, Inc.** engaged Arizona MEP to facilitate a three-phased program. In the first phase, the Arizona MEP team performed an enterprise assessment, interviewing and rating everyone to identify the company's strengths and opportunities for improvement. The next step was to identify the primary area to work on, using the Value Stream Management System (VSM). The team began mapping their present process in their order management office to establish their current state. "The VSM revealed many opportunities where things could be done more efficiently. With the help of the Arizona MEP team we envisioned our future state and saw how we could improve the way we process orders. We reduced our 32-step process to only 14 and shortened our lead time which left additional time for us to work with the customers and process more orders." **Vickie Wessel, President, Spirit Electronics**

**Phoenix, AZ – Vantage Mobility International**, a company which converts top-of-the line vans into vehicles designed for individuals in wheelchairs, was growing and looking for ways to perform on a new plane. The engaged Arizona MEP to make some sustainable changes. The Arizona MEP team implemented several Lean techniques, including workplace organization and Value Stream Mapping. "Working with the Arizona MEP was definitely a major investment for our company and worth every penny. We now have employees who we'd classify as new thinkers, as they are leading the Lean transition. Our whole team is committed to making this transformation, and now we're all speaking the same language. We owe much of our newfound success to the Arizona MEP." **Steven Crandell, VP of Quality, Vantage Mobility International**

### Major Accomplishments

Arizona MEP Clients are surveyed annually by an independent third party survey house. As a direct result of the MEP services received MEP clients reported that over the past five years they:

- **Increased or retained sales of \$430.5 million**
- **Invested \$41.3 million**
- **Saved \$22.1 million**
- **Created 1205 jobs**
- **Retained 1649 jobs that otherwise would have been lost**

The total value of those impacts on the State of Arizona economy is estimated to\*:

- **Generate \$2 billion in total economic output**
- **Support 11,573 jobs paying \$563.8 million**
- **Contribute \$219.9 million federal, state and local taxes, including \$69.3 million at the state level**

**The Arizona MEP worked with over 226 clients over the last year**

\* Results based on inputs from the NIST-sponsored survey and modeled through Implan©

## Services

On a project fee basis, Arizona MEP offers a full range of training and technical assistance to manufacturers through a wide variety of products and services. MEP works directly with clients, on their site and within their facilities, to work in collaboration with employees and management to assess and deliver required needs. Delivery of services is performed by Arizona MEP project managers or through qualified third-parties managed by the MEP project manager on behalf of the client. In addition, public training courses are offered throughout the state to introduce new manufacturing techniques and methods to manufacturers.

### **Continuous Improvement – Performance Improvement as a Foundation**

Global pressures and increasing customer demands require manufacturers to operate at ever higher levels of competency. To achieve world-class status, companies must focus on lowering costs by reducing waste, increasing throughput, improving lead times, and putting customer satisfaction at the top of their priority list. Arizona MEP provides the experience and lean manufacturing expertise that help our clients achieve the right focus.

Microchip Technology, Inc., a leading provider of microcontroller and analog semiconductors, brought in Arizona MEP to train their employees in Lean manufacturing.

“Microchip constantly looks for ways to rise above the competition and, in the spirit of continuous improvement, we wanted to learn Lean Principles. Arizona MEP educated and trained select teams on lean practices, which helped put in place a new strategic direction and procedures to improve overall performance. The training enabled Microchip to save valuable production time and costs, and employees started looking for additional ways to do more with less, all the while further reducing waste. At Microchip, each manufacturing employee is involved in ‘leaning out’ the process to make it better, faster and less costly as part of our culture of continuous improvement. Now, we are more efficient thanks to our collaboration with Arizona MEP.”

**Joanne Valestin, Senior Manufacturing Manager, Microchip Technology, Inc.**

“The lean tools that Arizona MEP taught (us) have become a flexible template that allows Universal to focus on our processes. Working with the Arizona MEP team has been very worthwhile. They allowed us to do the actual work while they provided guidance. Among other things, we were successful in improving sales, inventory metrics, and on-time delivery. The Lean experience will be a lasting one and it will be ongoing. We are now empowered to continue the process on our own.”

**Donnie MacDonald, Plant Manager, Universal Forest Products**

When Sub Zero needed to increase output, capacity and overall productivity, they turned to Arizona MEP to help turn undeveloped factory space into multiple new production lines. “Arizona MEP had the best overall package for us. We used them extensively....to get the most out of our business. The team effort led by Arizona MEP was successful both in its outcome as well as a great learning experience for our employees.”

**Ron Jones, Plant Manager, Sub Zero Freezer Company**

### **Sustainability – Embracing the Green Economy**

Sustainability has become a key driver of economic growth as global demands for diminishing resources increase, renewable and alternative energy technology needs expand, and environmental concerns heighten. Whether it is simply a response to rising energy and resource costs or as a corporate growth strategy, sustainability seeks to balance economic, environmental, and societal challenges and opportunities.

## **Workforce Development – Establishing and Enabling a Strong Workforce**

A strong, engaged, and skilled workforce spanning all levels of the organization is a key element necessary for manufacturer's growth. Together, with partners at the federal, state, and local levels, MEP has developed and delivered training and workforce assistance tailored to the unique needs of the smaller manufacturer

**The H-1B Innovation Program** – The Northern Arizona Council of Governments (NACOG) and the Arizona MEP worked in synergy with the US Department of Labor (US DOL), outside technology experts, and client organizations to assess and determine areas for improvement or innovation to enhance workforce competencies, facilitate high-wage job growth, technology utilization, production management, and supply chain system effectiveness.

NACOG monitored the Innovation Program partnership's progress along the road toward entering the market and coordinated with regional economic development, workforce areas, and One-Stops to assist with workforce growth requirements, Arizona MEP provided project management and developed a Strategic Technology Road map and a Professional Workforce Development Plan for the client organizations. job opportunities prior to the training, resulting in overall business expansion and job growth.

### **High Praise for the H-1B Innovation Program**

“Our technology has a number of safety applications for cars, like predicting degradation of anti-lock breaking systems and electronically alerting the driver of their mechanic of a potential problem. Thanks to the project team, we are not working with a major auto manufacturing on ways to implement our technology into their vehicles. Without the Arizona MEP's assistance and the support of the H-1B grant, we would be months or years away from where we are now and wouldn't have tapped into what is a very promising growth opportunity for our company.”

**Doug Goodman, President/CEO, Ridgetop Group, Inc.**

### **Innovation Program Helps Phoenix Company Improve Work Flow and Customer Satisfaction**

Results: Order processing was reduced from 32 steps to 14 and standardized workstations were created with a visual, more relaxed working environment.

“We have seen great results within our company and have some extremely powerful tools to use for continuous improvement and growth.”

**Vicki Wessel, President, Spirit Electronics**

### **Innovation Program: A Sustainment Strategy that Works**

The Innovation Program has established a remarkable record of success. Focusing on how companies can stay ahead of the competition by adopting new technologies, identifying new markets and developing new products, the program generates business and employment opportunities.

### **Grants and Guidance Assist Tempe Firm in Making Product Development Transition**

“Their (Arizona MEP) assistance in helping us obtain grant funding has been integral to the success of our transition from a service-based business model to a product-based, service-differentiated mode.”

**Sarah Harron, Human Resources Manager, Research Integrations, Inc.**

## Partners

The Arizona MEP partners with economic development organizations throughout the state to bring the broadest range of services possible to every client, eliminate duplication of services, and share referrals. These partnerships are a critical component of the program's outreach and marketing efforts.

Arizona MEP partnered with the Arizona Manufacturing Council and the Arizona Economic Resources Organization to host the Arizona Governor's Manufacturers Summit. The focus groups addressed workforce development, energy efficiency, technology transfer, and the need to develop a cohesive voice for Arizona manufacturing and business concerns. Governor Janet Napolitano addressed the Summit.

Arizona MEP has also partnered with the National Association of Manufacturers to launch the "Dream It Do It" program. Launched at the Summit, the national campaign is designed to spotlight attractive manufacturing careers. The campaign will focus on educating students, teachers, counselors, parents and career seekers to the new age of American manufacturing.

The Arizona MEP partners with the Arizona Quality Alliance to provide information on best practices, opportunities for application to the State Quality Awards, and collaborate on promoting quality in the manufacturing sector. The Arizona Technology Council and Arizona MEP collaborate on activities that assist technology-based industries and manufacturers by working together to train technology workforce and assist manufacturers with innovation and technology transfer. Specialty and Light Manufacturing Association and Arizona MEP partner to support and encourage manufacturing companies in the greater Yavapai, Arizona area to come together to promote solutions to their challenges in staying globally competitive and profitable. The Arizona MEP works with the Arizona Chamber of Commerce and Industry to promote workforce education and development to advance Arizona manufacturers competitive position in the global economy and stimulate economic growth. The Arizona MEP is an education partner of the Arizona Tooling and Machining Association and works to promote workforce education and development and business process improvement.

"Manufacturing is the highest paying sector in the Arizona economy. For the future growth of high skill, high wage Arizona jobs it is our responsibility today to ensure a qualified workforce for tomorrow. The economic downturn we are currently experiencing is exactly the right time for us to turn a focus on building career opportunities here at home." **Mark Dobbins, Chairman of Arizona Manufacturing Council**

## FACTS ABOUT ARIZONA MANUFACTURING

- 4,674 Manufacturing firms
- 179,122 Manufacturing employees
- Average yearly manufacturing wage - \$31,622
- Average hourly manufacturing wage - \$16.47
- Manufacturing employment is 14.62% of total state employment