IMC Celebrates Manufacturing Week

written by Lauri Moon | October 5, 2022

IMC, along with partners across Pennsylvania and the United States, is excited to celebrate **Manufacturing Week on October 7-14, 2022.**

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Governor Tom Wolf has proclaimed the week as **Manufacturing Week in Pennsylvania** to honor our manufacturing industry, our makers, and encourage the next generation of talent to take a closer look at manufacturing careers in the commonwealth.

Today's industry demands experienced problem-solvers and strategists, digital operators, engineers, and others who can blend management and STEM skills. And we're proud that our state is preparing the next generation of talent for careers in manufacturing. We know these careers offer challenging, fulfilling, and stable work — presenting us with the opportunity to bring Pennsylvania's innovation, imagination, and legendary can-do spirit to the industry at the heart of our economy and communities.

MANUFACTURING IS AT THE HEART OF PENNSYLVANIA'S ECONOMY.

(bea.gov Employment by State 2020; Pennsylvania Manufacturing Advisory Council, PA's Manufacturing Competitiveness Playbook 2022)

- 6th largest manufacturing industry in the United States by employment
- \$113.2 billion in gross domestic product (GDP) in 2021
- 562,700+ employees (accounting for ~9.5% of all privatesector jobs in PA)
- 14,000+ manufacturing establishments

MANUFACTURING OFFERS WELL-PAYING, FAMILY-SUSTAINING JOBS.

(Pennsylvania Manufacturing Advisory Council, PA's Manufacturing Competitiveness Playbook 2022)

- Manufacturing workers earn 33% more compared to the average for other nonfarm businesses in the state
- \$86,129 avg. compensation in manufacturing in PA, including benefits

U.S. MANUFACTURING JOBS HAVE GREAT EMPLOYEE BENEFITS.

(Pennsylvania Manufacturing Advisory Council, PA's Manufacturing Competitiveness Playbook 2022; U.S. Chamber of Commerce)

- Many manufacturers offer on-the-job training that helps employees expand their skillsets and adapt to new industry needs
- 90% of U.S. manufacturing employees have access to medical benefits through their employer
- 78% of U.S. manufacturing employees have access to retirement benefits from their employer
- U.S. manufacturing workers have the highest job security in the private sector.

MANUFACTURERS AND MAKERS COME FROM DIVERSE BACKGROUNDS AND HAVE A VARIETY OF SKILLS AND EDUCATION LEVELS.

(bls.gov, Manufacturing Career Outlook, From Prototype to Production: Careers that Bring Ideas into Being, 2018)

• Entry-level positions have different educational requirements ranging from a high-school diploma (or equivalent), to a bachelor's degree or higher.

- Many manufacturing positions include apprenticeship opportunities and onthe-job training – offering an opportunity to earn income while learning new skills
- Career opportunities abound for those looking for work in the manufacturing industry including:
 - Industrial designers
 - Mechanical and electrical engineers
 - Graphic designers
 - Systems software developers
 - Team assemblers
 - Electricians
 - Computer-controlled machine tool operators (metal and plastic)
 - Industrial machinery mechanics

Pennsylvania 2022 PARTNER TOOLKIT

Help us spread the word about modern manufacturing, its positive impact on our economy and communities, and how it benefits existing employees and students who are exploring career options. DCED's digital toolkit will help you get started with suggested social media posts, newsletter content, and digital graphics. Get involved and be sure to share your own manufacturing resources and stories. Be sure to tag IMC in your social media so that we can share your posts all week. IMC's Facebook. IMC's LinkedIn. Download PA's toolkit here. Post your events on the national mfgday.com site - Or IMC can for you. National MfgDay Toolkit.

Resources

Check out information about Central Susquehanna's What's So Cool About Manufacturing Video Contest.

For a list of manufacturers who have worked with IMC, check out our directory!

Volatile Energy Prices Will Impact Bottom Lines

written by Lauri Moon | October 5, 2022 IMC recently hosted a webinar where our energy partner, APPI Energy, shared what the volatile energy markets will mean with historic increases in the cost of energy for manufacturers in PA for the coming year and beyond. Dan Forgacs, VP of Market Intelligence & Analytics for APPI, presented



both historical data and projected commercial energy costs as well as potential ways to combat its effects on the bottom line. Included were the projected or confirmed commercial energy increases by utility companies in PA:

- PECO: \$.07699/kWh, up from \$.06816, June 1 August 31
- PPL: \$.11695/kWh, up from \$.09675, June 1 November 30
- Met Ed: \$.10625/kWh, up from \$.07482, 42% increase, June 1 August 31
- Penelec: \$.11056/kWh, up from \$.08031 per kWh, 38% increase, June 1 -August 31
- Penn Power, \$0.12533/kWh, up from \$.10002 per kWh, 25% increase, June 1August 31
- West Penn Power, \$0.10115/kWh, up from \$.06542, 55% increase, June 1 August 31

Key to potential solutions were the reduction in peak demand, the use of alternative energy sources, and increasing energy efficiency in facilities. Also presented were opportunities to explore energy procurement opportunities and potential grants and incentives for energy related improvements.

If you missed the webinar, but are interested in learning more, or would like to

connect with an IMC Business Advisor to discuss ways to potentially reduce your energy costs through efficiency measures, process improvement, and/or energy procurement services with APPI Energy, email info@imcpa.com.

Pennsylvania Manufacturing Advisory Council Releases Playbook for Competitiveness

written by Lauri Moon | October 5, 2022



As Pennsylvania's third-largest employment sector – with more than 560,000 full-time workers generating nearly \$115 billion of goods last year alone – manufacturing drives Pennsylvania's overall economy. On August 31, 2022, the Pennsylvania Manufacturing Advisory Council, a nonpartisan partnership

of manufacturers and industry experts, released Pennsylvania's Manufacturing Competitiveness Playbook - an actionable strategy document that identifies three game changers and 10 specific recommendations to make Pennsylvania's manufacturing economy more robust and resilient - thus creating more good-paying jobs for Pennsylvanians.

The efforts of the industry-led, 25-member Pennsylvania Manufacturing Advisory Council were focused on developing recommendations that government leaders across the Commonwealth should consider as ways to expand Pennsylvania's manufacturing economy. The Council's resultant Playbook includes data and advice derived from insights and commentary offered by more than 500 Pennsylvania manufacturers.

"Over the course of the past year, the Council conducted industry roundtables, oneon-one interviews, and surveys to learn directly from manufacturers what statewide policy and programmatic or procedural changes would most immediately and dramatically enhance their ability to compete, win and grow in today's economy, and the Council's report reflects that knowledge and insight," said Eric Joseph Esoda, Council Co-Chair.

Through careful analysis of industry input, the Council, within its Playbook, recommends three game changers for strengthening Pennsylvania's manufacturing competitive position:

- Recapture Pennsylvania's manufacturing competitive advantage by aggressively pursuing manufacturing growth sectors to drive prosperity.
- Invest in the factory of the future to boost the performance of small and medium-sized companies, improve the quality of manufacturing jobs and provide better career options for more of Pennsylvania's citizens.
- Unleash the power of advanced manufacturing to drive regional prosperity through policies and services that are more responsive to the needs of manufacturers.

The Playbook builds on Pennsylvania's historic strengths in manufacturing and captures a vision for Pennsylvania's future as a global leader in advanced manufacturing.

"It's vital that we do more for manufacturing because it represents one of Pennsylvania's largest sectors, pays better than most others and offers good benefits," said Dan Fogarty, Council Co-Chair. "The Playbook is a great first step toward coming together around how we can be there for the sector and for communities across the Commonwealth that both support and benefit from our great industrial employers," he added.

The full report can be downloaded on the Manufacturing Advisory Council's website: https://www.pamanufacturingcouncil.com/playbook.

Picking Area Error Reduction Efforts Successful at Diamondback Automotive Accessories

written by Lauri Moon | October 5, 2022



Diamondback Automotive Accessories, located in Philipsburg, PA with 117 employees, manufactures load-bearing pick-

up truck covers and accessories used primarily by outdoor enthusiasts.

Diamondback continues at a rapid growth rate at their Phillipsburg facility, experiencing 25% growth in 2020, followed by 45% growth in 2021. As the company enjoys rapid growth, it also experienced an increase in customer complaints. The main reason for the customer dissatisfaction was errors in picking the right parts to be shipped along with the truck cover. As a percentage of orders, greater than 2% contained picking errors.

IMC's Continuous Improvement Expert, Jeff Kopenitz, facilitated a dedicated team of Diamondback employees to focus on the errors in the picking areas. Over the course of eight days of on-site facilitation plus off-site coaching, Jeff guided the team through various Lean tools such as A3 thinking, PDCA cycles, DMAIC projects, FEMAs and Coaching Katas.

As a result of these efforts, manufacturing communications were improved, key parts visualization was enhanced using shadow boards, labelling was enhanced, equipment such as scales were deployed, and processes were changed and improved. In one year, the picking errors percentage has dropped from 2.29% to 1.29%. Diamondback is well on their way to achieving their next target goal of less than 1% picking errors.

"The results of this project far exceeded my expectations. Every minute and every dollar spent with IMC has resulted in tremendous returns. With IMC's help, we are achieving our mission of being a company that people love to buy from." Gerald Gardner, Quality Manager

Central Susquehanna What's So Cool About About Manufacturing? Award Winners Announced

written by Lauri Moon | October 5, 2022

The What's So Cool About Manufacturing? program is a video based educational tool that increases awareness of career paths in manufacturing. This innovative career awareness program is "peer marketing" – kids telling kids what's so cool about manufacturing and manufacturing careers.

This contest gives students the opportunity to connect with local manufacturers, document their experiences and present them in an educational and "cool" way. The contest was created to generate excitement that draws students towards manufacturing career paths, and CTE and STEM education. The Central Susquehanna WSCM contest is made possible by the Innovative Manufacturers' Center (IMC), The Foundation of the Columbia Montour Chamber of Commerce, Advance Central PA, Central Susquehanna Intermediate Unit (CSIU) and BLaST Intermediate Unit.

This year's Central Susquehanna contest featured schools from Columbia, Lycoming, Montour, Northumberland, Snyder, and Union counties and the following manufacturers:

BrightFarms

- Girton Manufacturing Co., Inc.
- Kawneer
- Playworld Systems, Inc.
- PMF Industries, Inc.
- Ralph S. Alberts Co., Inc.
- Strong Industries, Inc.

AND the Awards go to! (click here to view all the videos)

- Outstanding Overall Program: Selinsgrove Middle School/Bright Farms
- Viewer's Choice: Selinsgrove Middle School/Bright Farms
- Outstanding Team Spirit: Danville Middle School/Strong Industries, Inc.
- Outstanding Brand Placement: Lewisburg Donald H. Eichhorn Middle School/Playworld Systems, Inc.

Two district and manufacturer partners will also be moving on to the statewide competition May 18th in Harrisburg: Selinsgrove Middle School/Bright Farms and Central Columbia Middle School/Kawneer.

CONGRATULATIONS to all!



Central Columbia Middle School/Kawneer



Danville Middle School/Strong Industries, Inc.



Lewisburg Donald H. Eichhorn Middle School/Playworld Systems,

Inc.



Selinsgrove Middle School/Bright Farms

The Manufacturers' Guide to Finding and Retaining Talent

written by Lauri Moon | October 5, 2022

As part of their annual survey, NIST MEP asks clients from the 51 MEP Centers, including IMC, to identify the top three challenges their companies will face over the next three years.



The Manufacturers' Guide to Finding and Retaining Talent

Not surprisingly, manufacturers continue to report that employee recruitment and retention are their greatest challenges. In fact, these concerns have heightened during the COVID-19 pandemic and subsequent workforce disruptions. The market forces driving these challenges are not likely to improve soon. Based on a Manufacturing Institute and Deloitte study, the National Association of Manufacturers estimates that manufacturers will need to fill 4.6 million jobs by 2028.

In this guide, we outline steps that will help you improve and enhance your employee recruitment, retention and engagement. We'll look at:

- Strategy
- Attracting and retaining talent
- Training and development
- Workplace culture

MEP Manufacturers Guide to Finding and Retaining Talent Whitepaper

Penn College Apprenticeship News

written by Lauri Moon | October 5, 2022

New Apprenticeship Cohorts Forming

Penn College Apprenticeship Cohorts to begin in August 2022! Topics include:

- Industrial Manufacturing Technician (IMT)
- Intro-Mech
- Machining Fundamentals CNC Machining Year 1
- Mechanical Components Mechatronics Year 1
- Robotics Year 1

IMT is DESIGNED FOR NEARLY ANY OPERATOR OR TECHNICIAN. The Industrial Manufacturing Technician (IMT) program emphasizes foundational skills for a broad range of manufacturing roles. Technical competency development is combined with communication, teamwork, and other business skills to train a well-rounded apprentice.

Intro-MECH is a one-year introduction to mechatronics and maintenance aligned to NIMS Industrial Technology Maintenance (ITM) credentials. This course consists of four, 36-hour modules (144 hours total) each dedicated to one of four core mechatronics competencies: Mechanical Systems, Fluid Power-Pneumatics/Hydraulics, Electrical Systems and Electrical Controls (PLCs & VFDs).

Machining Fundamentals provides a fundamental knowledge of machining processes. Topics include machining technologies, shop safety, understanding drawings, layout work, hand tools, processes of drilling, lathes, grinding and milling machines. Emphasis is on production performance as a basic machinist or CNC operator who is training for advancement in the CNC precision machining field.

Mechanical Components provides apprenticed and associate technicians with fundamental knowledge of industrial mechanical systems and component topics considered necessary by subject matter experts for successful completion of routine mechanical maintenance and troubleshooting tasks on advanced manufacturing equipment.

Robotics provides maintenance technicians with robotic and automation systems repair responsibilities, the skillsets for troubleshooting the PLC interfaces comprising most modern manufacturing robotic/automation systems. This course strengthens existing PLC knowledge with emphasis on the control interface between PLC's and robotic automated process equipment.

Sessions attended via two-way live streaming internet at employer's site via the iris system. All sessions are recorded and available 24/7 through Penn College's Learning Management System so off-shift technicians may join in!

Note: Manufacturers are eligible for grant funding through Penn College's Modular Industry-Driven Apprenticeship Strategies (MIDAS) Grant that will cover a significant portion of the tuition. Anyone can participate at the full tuition.

For more information contact apprenticeship@pct.edu or call 570.327.4775.

Pennsylvania Manufacturing Advisory Council Seeks Input From Manufacturers

written by Lauri Moon | October 5, 2022

The Pennsylvania Manufacturing Advisory Council was formed last year as a public-private consortium. Its goal is to provide the Commonwealth's legislative leaders and leading gubernatorial candidates with policy, program and legislative priority recommendations that will enhance the competitiveness of Pennsylvania's nearly 15,000 manufacturing firms and their 585,000 employees. The Council has heard from more than 130 PA-based manufacturers through roundtables, town halls and other venues and **now wants to hear from other manufacturing leaders through their completion of a short survey**.

Manufacturers all across the Commonwealth are being asked to invest 8 minutes of their time to take an online survey that asks their opinions and experience in the areas of workforce, supply chain, technology and the Commonwealth's overall business climate. **Please submit responses by April 8**.

Manufacturers, CLICK HERE to access the survey. More information about the Pennsylvania Manufacturing Advisory Council can be found here.

Success Story: Custom Container Solutions, LLC Surpasses Production Objectives with IMC Support

written by Lauri Moon | October 5, 2022 IMC has been working with Custom Container Solutions (CCS), an area manufacturer of industrial roll-offs, for several years. Past projects have included operational improvements, ERP selection, HR policies, hiring and selection practices and improved job training.

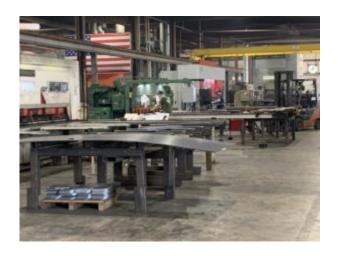


As CCS has grown, they transitioned to a larger facility and now have three production lines instead of one. Each line makes a certain type of unit.

One of the lines makes smaller roll-offs and has proved to be most challenging in terms of reaching desired throughput quotas. The company contacted IMC to

provide support for their efforts to improve production results on the small roll-off production line.

IMC proposed a 3-day value stream mapping (VSM) initiative that also included the supporting fabrication area. The VSM involved workers and supervisors from both production and fabrication along with CCS management and IMC facilitators. The VSM effort started with a map of the current state of both the fabrication support and production operations including critical facts and data on task times, wait times, throughput history and layout, sequence and flow.



A direction and quantitative goals were established, and a future state map developed. Within the initiative, numerous opportunities for improvement were identified, prioritized and structured to ensure successful implementation. Included were multiple visits to the factory floor and many coaching opportunities by IMC's VSM facilitator.

The result to date (2 months following the end of the initiative) is that the line has surpassed the production objectives and is now operating at a consistent level of 25-30% above pre-initiative throughputs. The improvements made in fabrication have also led to improved operations for the other production lines.

"IMC has played a crucial part in the success of CCS – it's like the gift that keeps on giving. IMC has helped us recognize system failures and ask the right questions of our team members without fear. Jeff, Russ and Jen spent multiple days working with our team digging deeper then we could ever dig because we needed outside eyes to see the problems. By implementing workflow processes that are cyclical, we are able to pull the work down the line versus pushing it down the line, which creates a more efficient and happier workforce which, in turn, increases productivity and reduces absenteeism significantly. As we identify areas of improvement, we utilize IMC and its expertise to improve. We are grateful for the help and we look forward to working with IMC again in the future." Chuck Williams, General Manager, Custom

This project was funded, in part, by a grant made available by PennTAP.

IMC Announces Winter 2022 Lean Manufacturing Level One Certification Graduates

written by Lauri Moon | October 5, 2022

IMC is excited to announce the latest graduates of our Lean Manufacturing Level One Certification program.





Congratulations: Strong Spas, Timberhaven Log Homes, LLC, Susquehanna Mills, Pik Rite, Inc., Jersey Shore Steel Company, High Steel Structures LLC, Q.E. Manufacturing, Atlantic Culinary Environments, Inc., ANDRITZ, Actuated Medical, Inc., Philips Ultrasound, TRS Technologies, Remmey - The Pallet Company, SilcoTek Corporation, DiamondBack Covers, Steller Floors and Architectural Precast Innovations, Inc.