

# EXPLORING MANUFACTURING MONTH.

*September 26, 2023*



**Illinois**  
**Department of Commerce**  
& Economic Opportunity



## Aly Grady

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### ***Deputy Director***

Department of  
Commerce and Economic  
Opportunity's Regional  
Economic Development  
Team



ILLINOIS  
MANUFACTURERS'  
ASSOCIATION

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**BOLDLY MOVING MAKERS  
FORWARD**





## BENEFITS OF THE IMA

### PRESIDENT / CEO / OWNER

- Network with statewide peers
- Access to daily manufacturing news
- Connect to State Legislators
- Up to date regulatory information
- Annual Luncheon

### GOVERNMENT AFFAIRS & REGULATORY COMPLIANCE

- Strong voice on all issues impacting manufacturers
- Influential voice of manufacturing in Illinois
- Strongest business advocate at the Capitol
- Direct access to lawmakers and regulatory officials

### HR & WORKFORCE DEVELOPMENT

- Access to training grants
- Healthcare Advisory Board
- Free employee handbook review
- ICATT Apprenticeship program
- Annual statewide salary survey

### FACILITIES MANAGEMENT

- Energy cost reduction through Constellation Energy
- Sustainability resources
- Resources to maximize shop floor design

### ENVIRONMENTAL HEALTH & SAFETY

- Access to EH&S experts
- Free OSHA 10 hour class
- Regulatory updates through environmental group

### MARKETING & SALES

- Nationwide Manufacturers Marketplace
- Publishing opportunities weekly and quarterly
- Advertising Opportunities through publications and website
- Annual IMA Sponsorships

### SUPPLY CHAIN & PROCUREMENT

- Discounts on uniforms, energy, shipping, environmental services
- Access to the nationwide Manufacturing Marketplace

### FINANCE & ACCOUNTING

- Annual Tax Conference
- Network with statewide peers
- Tax updates through blogs and programs
- Access to grants when available

### MANUFACTURING & OPERATIONS

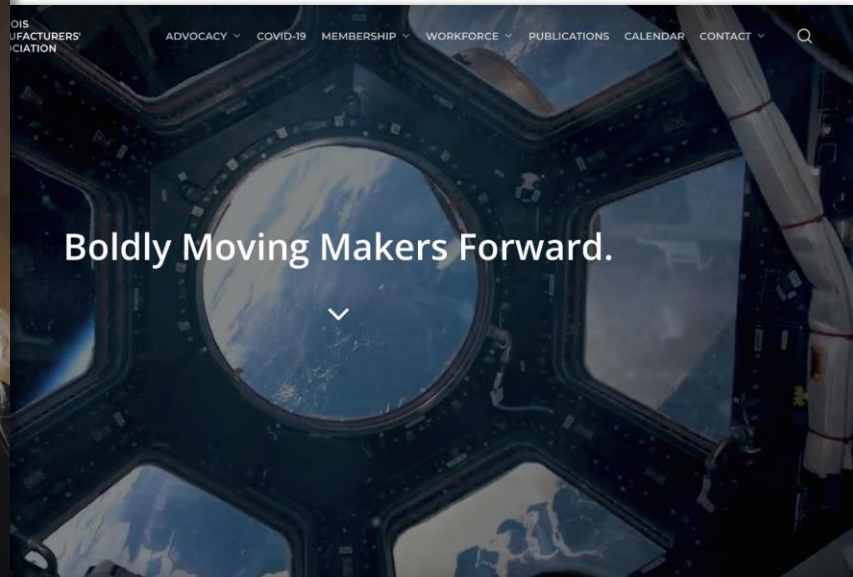
- Access to resources to advance processing
- Share best practices with statewide peers



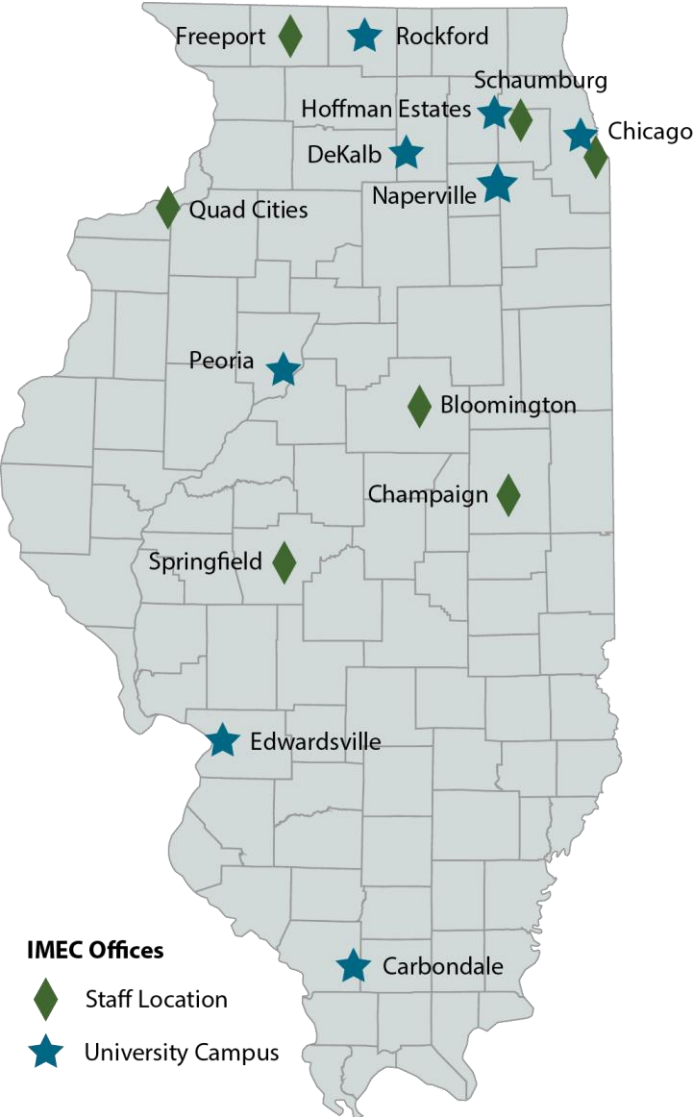
For more information about the Illinois Manufacturers' Association, please call (800) 875-4462 or email the IMA at [ima@ima-net.org](mailto:ima@ima-net.org).

**BOLDLY MOVING MAKERS FORWARD**

## INTRODUCTION: IMA'S SARAH HARTWICK



# IMEC is your trusted partner.



Each year, IMEC collaborates with **more than 1500 Illinois manufacturers** to fine tune plans, implement business-building initiatives, and excel among competitors. With a **demonstrated return that exceeds 19:1**, we provide educational insights to hundreds more through events and workshops.

Our mission and sole measure of success is the **impact we make for you**. Work with IMEC to identify and achieve your goals.



Plan. Implement. Excel.

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# IMEC can support you with:

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- Dedicated experts
- Customized training
- On-site or virtual implementation
- Audits and assessments
- Industry-leading content and insights
- Multi-company training and events
- And much more!





# 2022 Client-Reported Impacts



4,471

Jobs Created and Retained



Exceeds

19:1

Return on Investment



1867

Companies Assisted



\$1,357,032

Average New and Retained Sales  
per client



\$73,969

Average Cost Savings  
per client

\$480,633,397

Aggregate Impact to the Illinois Economy



Plan. Implement. Excel.

## A Competitive Edge Through a Digital Makeover

### Sangamon Reclaimed

Springfield, IL | 9 employees | [sangamonreclaimed.com](http://sangamonreclaimed.com)

Sangamon Reclaimed changed ownership during the COVID-19 pandemic to a new entrepreneur, Amanda Compton. New to entrepreneurship and manufacturing, Amanda acquired a great local business, but her vision was to expand nationally. This requires an active and engaging ecommerce presence.

Amanda's timing in reaching out to the IMEC team was perfect, as IMEC had just launched its Grow Your Future program. This program provided small and mid-sized Illinois manufacturers with fully-funded projects designed to drive revenues and growth within their business.

IMEC partnered with B2Btail to complete the digital makeover. The new website and ecommerce platform puts Sangamon Reclaimed closer to their goal to scale nationally - and its ease of maintenance gives them a competitive edge for marketing and Search Engine Optimization.

#### Results

- Anticipated new and retained sales: \$11,000
- Anticipated cost savings: \$8,000
- New and retained jobs: 5

## Streamlining Processes and Improving Efficiency

### Bonnell Industries, Inc

Dixon, IL | 92 employees | [bonnell.com](http://bonnell.com)

Bonnell Industries has been a family owned, industry leader in the truck equipment industry in Northern Illinois for decades but struggled to embrace the concept of Lean Manufacturing.

IMEC technical experts introduced the basic concepts of Lean Manufacturing to the team, demonstrating tools and techniques and how to effectively implement them in their operations and processes.

As they learned the basic concepts and participated in the simulation, they were able to see first-hand the benefits of embracing lean and how they could transfer what they were learning to their roles at Bonnell, streamlining their processes, and improving productivity and efficiency.

#### Results

- Anticipated new and retained sales: \$3,000,000
- Anticipated cost savings: \$2,200,000
- Anticipated new investment: \$60,000
- Jobs created or retained: 8

## Improved Productivity and Reduced Waste With Improved Satisfaction

### Aztec Plastic Company

Chicago, IL | 14 employees | [aztecpastic.com](http://aztecpastic.com)

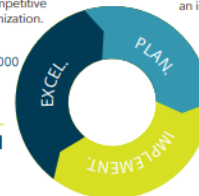
In an effort to set and maintain new standards that would eliminate wasted time, space, and inventory, and create an environment where employees can participate in continuous improvement activities, Aztec Plastic Company engaged Lean experts at IMEC.

After understanding what Aztec Plastic wanted to accomplish and assessing their workspace, IMEC conducted a Focused 5S Workplace Organization training and Kaizen that was conducted over 2.5 days with 6-10 Aztec Plastic team members.

With all the tools and tooling components readily available, employees are now able to complete their jobs more efficiently. As a result, Aztec Plastic Company is noticing improved productivity and reduced waste, while also seeing an increase in employee satisfaction!

#### Results

- Anticipated new and retained sales: \$1,100,000
- Anticipated cost savings: \$165,000
- Anticipated new investments: \$70,000
- New and retained jobs: 15



## Training and Processes Built for Employee Retention

### Mennie Machine Company

Mark, IL | 250 employees | [mennies.com](http://mennies.com)

Mennie Machine Company specializes in low to high volume contract machining and manufacturing. Finding new employees and retaining their current team is a huge focus for their organization.

Partnering with IMEC, they put together a program for coaching leadership for increased employee engagement as well as updating and revamping their new hire orientation process. The program continued to include a communication focus that equipped the organization to facilitate ongoing news, updates and collaboration through monthly newsletters and all team meetings. Seeing the impact these programs have had on company culture and engagement, Mennie Machine continues to build on the foundations that were a result of these projects.

#### Results

- Anticipated new and retained sales: \$30,000,000
- Anticipated new investment: \$476,000
- Jobs created or retained: 250



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info@IMEC.org  
888-806-4632  
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# EXPLORING MANUFACTURING MONTH.

*September 26, 2023*

## What is Manufacturing Day / Month?

- Celebrated in October
- Started in 2012
- Federal / State / Local agencies celebrate success of U.S. manufacturers
  - Events
  - Information
  - Promotions

Governor Chris Christie of New Jersey proclaimed the first official Manufacturing Day in 2012. President Barack Obama signed the Presidential Proclamation in 2014

# Awareness & Promotion:



**Highlights manufacturing's economic importance.**



**Showcases diverse career opportunities.**



**Attracts individuals to manufacturing careers.**

**WE**  **MANUFACTURING**



**BUILD YOUR TEAM.**

POWERFUL TRAINING SOLUTIONS FOR CAREER PATHWAYS IN MANUFACTURING



A circular diagram illustrating career pathways in manufacturing. It features four main stages: "Entry" (green circle with a person icon), "Career" (blue circle with a person icon), "Advancement" (blue circle with an upward arrow icon), and "Click Here!" (yellow circle with a document icon). The text "POWERFUL TRAINING SOLUTIONS FOR CAREER PATHWAYS IN MANUFACTURING" is written below the diagram.

# MANUFACTURING MONTH



# Education and Training:



**Provides insights into required skills and training.**



**Clarifies career pathways in manufacturing.**

# Exploring Careers

In  
Manufacturing



**Project Based Learning  
For Middle School (Grades 6-8)**

**Full Career Exploration Unit**

- PowerPoint Presentation
- Reading & Questions
- Vocabulary Puzzles
- Technology Based Project
- Creative Group Project
- Reflection Questions



Created by: Innovations in Technology

## BEST PRACTICES

# Employee Recognition Program



### Recognize employees in real time for maximum impact

Real time recognition shows you are consciously paying attention to efforts and acknowledging contributions.



### Run regular, fun campaigns to encourage participation

Organizations should think of fun ways to incorporate the company's style and design in their recognition campaigns.



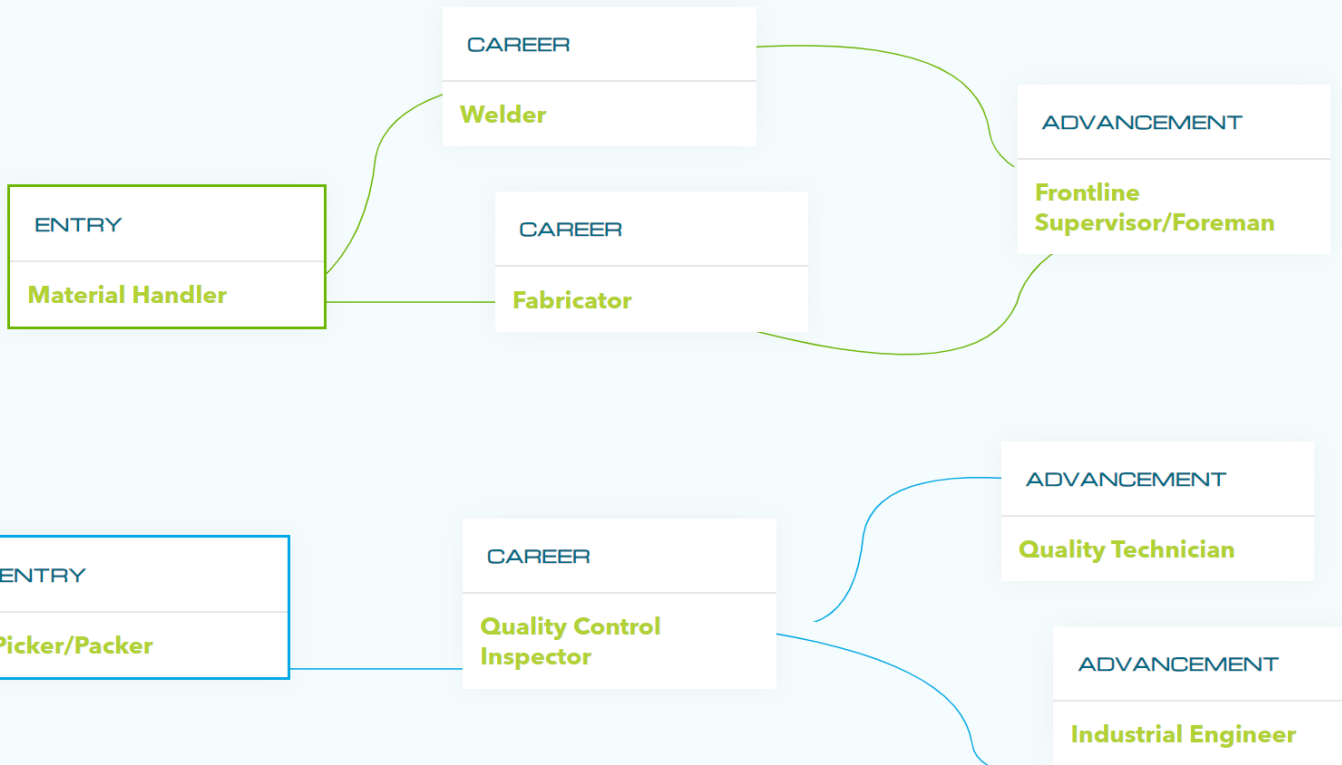
### Make recognition frequent

Frequent recognition builds a strong culture of appreciation and increases the use of the platform.



### Tie recognition to specific behaviors

Whether they are large or small, tying recognition to specific actions reinforces desirable behavior.



# Community Engagement:

**Fosters local pride  
and support for  
manufacturers.**

**Strengthens  
community ties to  
the industry.**





# Collaboration:



**ENCOURAGES PARTNERSHIPS BETWEEN  
INDUSTRY AND EDUCATION.**



**ALIGNS TRAINING WITH INDUSTRY  
NEEDS.**



**GREATER PEORIA**  
Economic Development Council



**Career  
Spark**



**Junior  
Achievement™**  
of Central Illinois



ADVANCED  
MANUFACTURING,  
ENGINEERING &  
LOGISTICS



AGRICULTURE,  
FOOD &  
NATURAL  
RESOURCES



ARCHITECTURE,  
ENGINEERING &  
CONSTRUCTION



ARTS,  
TECHNOLOGY &  
COMMUNICATIONS



BUSINESS  
&  
FINANCE



EDUCATION  
&  
TRAINING



GOVERNMENT,  
LAW & PUBLIC  
SERVICE



HEALTH  
&  
LIFE SCIENCES

Exhibit  
Hall

Auditorium

Lounge

**CATERPILLAR**



**UNION PACIFIC  
FOUNDATION**

2 CAREER



# Addressing the Skills Gap:



**Helps bridge shortages in skilled manufacturing workers.**



**Strengthens the overall workforce.**

## The skills gap is widening

Over the next decade nearly 3 ½ million manufacturing jobs will likely be needed and

2015 **2 Million** 2025  
are expected to go unfilled due to the skill gap

### The implications are significant

Every job in manufacturing creates another 2.5 new jobs in local goods and services.

For every \$1 invested in manufacturing, another \$1.37 in additional value is created in other sectors.



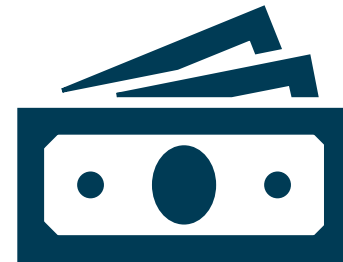
By 2025 the skills gap is expected to grow to **2 million**

In 2011, **600K** jobs were unfilled due to the skills gap

# Economic Growth:



**Contributes to job creation and innovation.**



**Supports long-term economic prosperity.**



U.S. Manufacturers Added  
**19,000 JOBS**

*in January 2023*

Total U.S. Mfg. Employment

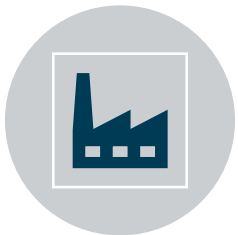
**12.9 M jobs**

Mfg. Job Openings

**730,000**

*Source: U.S. Dept of Labor*

# Innovation and Technology:



**Showcases advanced technologies in manufacturing.**



**Appeals to tech-savvy individuals.**



# SMARTFORCE MANUFACTURING TECHNOLOGY CAREERS

As we move further into the digital age, existing roles and duties have evolved and new roles and duties have developed to aid in the implementation of the more complex machines and powerful system/software tools. These are some of the integral roles and duties of the manufacturing smartforce.

## CAM PROGRAMMER

CAM programmers **set up, program, and adjust CNC manufacturing software** to produce the optimal output.



## CNC MACHINE OPERATOR

The essential role of a CNC operator is to **operate the computer numerical controlled (CNC) machines**, e.g. a milling machine, lathe, grinder, etc., and often work alongside an integrated robot to load and unload parts.



## ROBOTICS TECHNICIAN

Robotics technicians **install, service, maintain, troubleshoot, and repair** robots and automated production systems.



## MANUFACTURING ENGINEER

Manufacturing engineers **design and manage the manufacturing systems of production** that turn raw materials into discrete part production.



## CYBERSECURITY TECHNICIAN

Cybersecurity technicians **network traffic, record computer forensics, conduct data preservation, and investigate** for network breaches and/or unauthorized data access.



## QUALITY CONTROL ENGINEER/TECHNICIAN

QC engineers and technicians **oversee the manufacturing of products and are involved in every stage of making a product, from development to final packaging, to ensure quality.**



## FIELD SERVICE TECHNICIANS/ENGINEERS AND INDUSTRIAL MAINTENANCE TECHNICIANS

Field service technicians and engineers **install, maintain, and repair** the mechanical and electronic functions of manufacturing technology equipment and tools. Often, they **travel from site to site for preventative maintenance** and to solve problems that may arise.



## ADDITIVE MANUFACTURING MACHINE OPERATOR

Additive manufacturing machine operators **independently set up additive manufacturing machines, monitor the build process** as assigned by AM designers and AM materials technicians, and **unload completed work.**



## SMART SYSTEMS INTEGRATION TECHNICIAN

SSITs **integrate equipment with connectivity technologies** to monitor and adapt system behavior, **program devices and data visualization tools**, document system designs, and verify that networked equipment systems **meet virtual and physical requirements.**

THE WORKFORCE  
**TODAY**

**634,000**  
U.S. MANUFACTURERS

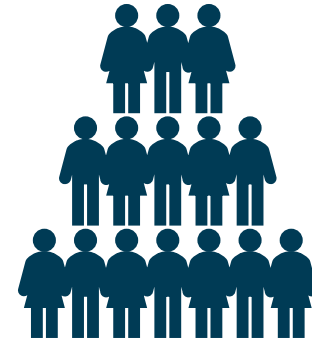
**768,000**  
OPEN MANUFACTURING JOBS

**15,000**  
OPEN MANUFACTURING ROBOTICS JOBS

# Sustainability and Diversity:



**Promotes eco-friendly practices  
in manufacturing.**



**Encourages diversity and  
inclusivity in the workforce.**

# ENVIRONMENT



# SOCIAL



# GOVERNANCE



**But Where Can I  
Start?**



**IMA** ILLINOIS MANUFACTURERS' ASSOCIATION

**IMEC** Plan. Implement. Excel.

# PRESENT

BOLDLY MOVING MAKERS FORWARD

A smaller graphic of a bus with 'MAKERS ON THE MOVE' branding. The bus features logos for IMEC, IMA, and various sponsors including Comcast Business, Termax, and others. The side of the bus is decorated with a blue and white pattern.

# Makers on the Move

October 6-13



# Join Us on the Tour!

## • October 6:

- Boeing (Mascoutah)
- Southern Illinois University (Carbondale)
- 17<sup>th</sup> Street BBQ (Murphysboro)

## • October 7:

- Eastern Illinois University (Charleston)

## • October 9:

- Mel-O-Cream (Springfield)
- Nestle (Jacksonville)
- Peoria Production Solutions (Peoria)
- Rust Belt (East Moline)

## • October 10:

- Parr Instrument Company (Moline)
- Woodstock Courthouse (Woodstock)
- AFC Materials Group (Lake in the Hills)
- Sew Hop'd Brewery (Huntley)

## • October 11:

- PCI Pharma Services (Rockford)
- Termax (Deer Park)
- Freudenberg Household Products (Aurora)

## • October 12:

- Centerpoint Intermodal (Joliet)
- Lion Electric (Channahon)
- Demgy (Elk Grove Village)
- Home Run Inn (Chicago)

## • October 13:

- UESCO (Alsip)
- National Safety Apparel (Chicago)



# MFG Day Resources



- [Webinars](#)
- [Marketing Toolkit](#)
- [Action Partner Toolkit](#)
- [Government Official Toolkit](#)
- [Merchandise](#)



Submit

## Tell Us Why You Chose a Career in Manufacturing

Please take a moment and let us know how a career in manufacturing has impacted you. Help inspire a new generation of workforce to take advantage of the opportunities available in manufacturing!

First name\*  Last name\*

Job Role\*  Company name\*  City\*

Email\*

Why manufacturing?\*

In 1-2 sentences, please share why you chose a career in manufacturing.

I give permission to use my quote to inspire the future manufacturing workforce.\*

Submit



# Share Your Teams Stories

- Post Quotes on Social Media
- Take Pictures and Tag Partners
- Plan an Open House for your Team
- Ask Local Schools to go Present to Future Makers

# Tips for Hosting an Event

- 5-part webinar series
  - Getting Started
  - Planning Your Event
  - Sponsorship Opportunities
  - Making the Most of Your Event
  - Getting the Word Out



<https://www.imec.org/resources/manufacturing-day/>

# Manufacturing Day Tool Kit



- Join thousands of other hosts in showcasing modern manufacturing careers and technologies
- Highlight the benefits manufacturing offers your community and nation



## [Download this toolkit](#) for ideas and tips to help you:

- Determine your event type
- Connect with local partners
  - Register your event
  - Create a plan
- Invite your community
  - Get the word out

# Focus on Workforce

- Webinar Series

MON

2

October 2 @ 11:30 am - 12:30 pm

**ELEVATE YOUR WORKFORCE: Create Onboarding Excellence From Day One**

TUE

17

October 17 @ 11:30 am - 12:30 pm

**ELEVATE YOUR WORKFORCE: Incorporating DEI Into Your Retention Strategies**

TUE

24

October 24 @ 11:30 am - 12:30 pm

**ELEVATE YOUR WORKFORCE: Integrating Learning and Development Into Organizational DNA**

There are many ways to show support for MFG Day! Whether it's hosting an event, attending an event, or promoting MFG Day through your social media channels, stay involved and help us showcase the best that the manufacturing industry has to offer.

## MFG Day Event Formats



**Plant Tours**



**Community Events & Expos**



**Educational Fairs**



**Classroom Visits**



**Company Family Day**



**Celebrations**

## How to Get Involved

1

**Host an Event**

2

**Attend an Event**

3

**Invite Your Community**

4

**Spread the Word**



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Questions?