



HOW TO . . .

Resources & Guidance to Achieve Industry 4.0 Success

Get Smart Manufacturing Skills

Experts predict the global smart manufacturing market will reach nearly \$400 billion by 2025 (source: Grand View Research). New tech is everywhere, and many manufacturers struggle with adoption, as well as upskilling their workforce.

New to *Smart Manufacturing* magazine in 2024 is a recurring column designed to help small- and mid-sized manufacturers access the tools, resources and expertise needed to drive digital transformation forward. In future issues, you'll hear from industry experts who

share prescriptive guidance on key smart manufacturing topics, including how to:

- Integrate and deploy cobots
- Achieve smart manufacturing certification
- Decide if a social media strategy is right for your shop
- Prepare for a cybersecurity assessment
- Integrate multiple layers of systems on the shop floor

To launch this series, *Smart Manufacturing* is outlining a host of resources to access critical connections and information.

Manufacturing Extension Partnerships (MEPs)

For more than 30 years, the Hollings Manufacturing Extension Partnership (MEP), based at the National Institute of Standards and Technology (NIST), has equipped small- and medium-sized manufacturers with the resources needed to grow and thrive. MEPs are national networks of workforce programs and trainings, with centers in all 50 states and Puerto Rico. In 2022 alone, MEP centers interacted with more than 33,500 manufacturers, leading to \$18.8



Deb Volzer, Director of Government & Workforce Partnerships for SME, at SOUTHTEC 2023 discussing The Manufacturing Imperative—Workforce Pipeline Challenge (MI-WPC). The program combines the industry and workforce expertise of SME with the educational programs and innovations of a select group of U.S. community and technical colleges. The initiative builds awareness of careers in manufacturing, optimizes workforce systems, and accelerates the education and skill development needed to place individuals in jobs making family-sustaining wages. (Photo credit: David Butler II)

billion in sales, \$2.5 billion in cost savings, \$6.4 billion in new client investments, and helped create or retain more than 116,700 jobs. For every one dollar of federal investment in FY 2022, the MEP national network generated \$35.80 in new sales growth for manufacturers. For every \$1,353 of federal investment, the network created or retained one manufacturing job.

Through its collaborations at the federal, state and local level, MEP centers work with manufacturers to develop new products, expand and diversify markets, adopt new technology and enhance value within supply chains. The MEP program serves as a bridge to other organizations and federal research labs that share a passion for enhancing the manufacturing community.

Engaging with your local MEP is a great first step to your smart manufacturing journey. [Visit https://www.nist.gov/mep](https://www.nist.gov/mep) for additional information.

Local Colleges

In 2023, SME announced an initiative in partnership with community and technical colleges to address the manufacturing industry's workforce shortage and skills gap. The three-year pilot program has a goal of attracting 1,000 individuals each year at each of the initial 25 participating community and technical colleges. One of the participating schools, Greenville Technical College in South Carolina, hosted a session at SOUTHTEC 2023 highlighting the college's

Center for Manufacturing Innovation (CMI), a 10,000-sq-ft facility that gives students necessary tools to succeed in advanced manufacturing careers and provides employers the skilled workforce required for commercial success.



Raymond L. James, Assistant Dean, School of Advanced Manufacturing and Transportation Technology, Greenville Technical College. (Photo credit: David Butler II)

The campus doubles the capacity of advanced manufacturing training for Greenville Technical College, and the innovative curriculum features integrated project-based learning experiences on real-world projects. [Visit https://www.cmigreenville.com/](https://www.cmigreenville.com/) for more information and to take a virtual tour.

By partnering with a community college in your area, you can create a talent pipeline of qualified employment candidates.

Training at Tooling U-SME

From foundational learning in measurement and math to ad-

vanced concepts in technology and design, Tooling U-SME supplies manufacturers, high schools and technical colleges with in-house and online training resources that are translatable to both certificate programs and associate degrees.

Students can choose from dozens of instructor-led programs, and have 24/7 access to nearly 600 online courses covering everything from safety and maintenance to machining and additive manufacturing.

Currently there are more than 50 courses focused on smart manufacturing, ranging in difficulty level from beginner to advanced and covering topics such as data collection, cybersecurity and the Industrial Internet of Things. [Visit https://learn.toolingu.com/free-trial](https://learn.toolingu.com/free-trial) for more information and to get a free trial. 📶

**TRANSFORM YOUR
WORKFORCE**

TOOLINGU | sme

info@toolingu.com or 866.706.8665