

Talent, tech take center stage for three days of immersive experiences and connections



SOUTHTEC Brings Smart to the Southeast

Amy Bryson
Contributing Lead Editor

SOUTHTEC 2023, an SME event for small- to medium-size manufacturers (SMMs) and large original equipment manufacturers (OEMs), took Greenville, S.C. by storm in late October with a host of immersive experiences for thousands of attendees who share a passion for science, technology, engineering, math—and, of course, manufacturing and learning.

SOUTHTEC is part of the Manufacturing Technology (MT) Series—four regional

events conducted bi-annually to bring hundreds of decision makers from global suppliers, distributors and equipment builders, across a diverse group of industries, together with leaders in advanced manufacturing technology. The events are sponsored by SME and AMT — The Association For Manufacturing Technology.

“Small- and medium-sized manufacturers are such a critical component of the industry’s ecosystem, and they’re dealing with increased competition every day,” SME Executive Director and CEO Bob Willig, said

Bob Willig, CEO of SME, kicked off the three-day event on the main stage, proclaiming that “manufacturing is the driving force of prosperity.” (All images provided by Butler Photography)

at the event. “That’s why an event like SOUTHTEC is so important.”

During the three-day conference, panelists and keynote presenters underscored the deep digital divide in U.S. manufacturing—with 98% of all U.S. manufacturers defined as small businesses, the majority have 20 or fewer employees. SOUTHTEC delivered information and enabled connections to move the needle on areas that impact manufacturers the most, including workforce development and Industry 4.0 adoption.

At SOUTHTEC, attendees were able to:

- Meet face-to-face with hundreds of industry suppliers to get a hands-on experience of the latest manufacturing technologies and advancements.
- Build their expertise through numerous keynotes and educational presentations to stay ahead of manufacturing trends.
- Learn how others use Smart Manufacturing technologies and hear real-world case studies that demonstrate return on investment.



John Dyck, CESMII CEO (far left), announced International Manufacturing-X (IM-X), a partnership designed to build a global, federated, decentralized and collaborative data ecosystem to scale smart manufacturing.

- Discover how Southeast manufacturers, educators, associations and students collaborate to ensure the workforce talent is skill-ready on day one for sustaining manufacturing careers.

Day 1—Oct. 24

The first day of SOUTHTEC focused on talent. Kicking off the event, SME’s Willig declared that “manufacturing is the driving force of prosperity.” With an

estimated 2.7 million manufacturing jobs expected to go unfilled in the next 10 years, SOUTHTEC addressed challenges to overcome the labor shortage and bridge the talent gap.

During the keynote presentation “How Education Is Transforming to Meet Industry Needs,” leaders from Greenville Technical College shared their insights on shaping futures with innovative education that fills the workforce pipeline. They told the story of how Greenville Technical College became a beacon of excellence in online learning and diversity, providing students with skills that not only secure good jobs but also propel sustaining careers.



Tooling U-SME hosted a Workforce Day where manufacturers, educators and workforce experts shared immersive experiences and advice on myriad training topics.



Modern Makers panelists. (Left to Right: Tymeeka Middleton, director of education and workforce development, CyManII (the Cyber Manufacturing Innovation Institute); Rodrigo Perez, mechanical engineer, MxD; Fatima Majid, robotics instructor, LIFT; and John Louka, application engineer, CESMII)

At the heart of this transformation lies the college's School of Advanced Manufacturing and Transportation Technology, a two-year institution focused on CNC, welding, automotive technology and mechatronics technology programs. The Bachelor of Applied Science in advanced manufacturing technology program prepares graduates for technical and managerial leadership roles.

Manufacturing in the Southeast

The 42,000 manufacturing companies located in the Southeast region of the United States sustain two and a half million manufacturing jobs and generate \$434 billion in annual manufacturing output. Industries prominent in the region include aerospace, automotive, consulting/engineering, electronics/computers, fabricated metal/stamping, industrial and commercial machinery, plastics and financial services. South Carolina's automotive industry alone employs 74,000 people and has a \$27 billion economic impact, according to the state's commerce department. ☞

Tooling U-SME (the workforce development division of SME), also offered recruitment and retention strategies, including real-world examples that showcased companies that successfully deployed innovative solutions to overcome. Attendees heard from thought leaders, educators and manufacturers during a full schedule of presentations and panel discussions. In partnership with CESMII — The Smart Manufacturing Institute, Tooling U-SME launched a “Fundamentals of Smart Manufacturing” learning curriculum for building awareness and educating the workforce around smart manufacturing processes and technologies. The program is designed to accelerate smart manufacturing adoption by U.S. manufacturers through enhanced education and skills training.

ing.

Sponsored by the National Institute of Standards and Technology and the U.S. Department of Energy (DOE), the curriculum includes 35 training modules that cover topics such as an introduction of smart manufacturing, data organization, system connectivity, automation, cybersecurity and decision-making insights.

Day 2—Oct. 25

On the second day, John Dyck, CEO of CESMII, announced the establishment of the International Manufacturing-X Council (IM-X) at the 2023 Annual CESMII Member Meeting hosted at SOUTHTEC's Smart Manufacturing Experience, with sessions focused on technological improvements for more productive, sustainable and resilient processes. Speakers included members of the SMART Manufacturing Executive Council, the Department of Energy, and international representatives from Plattform Industrie 4.0.

“IM-X bridges the gap between small- and mid-sized manufacturers and large organizations to build a global, federated, decentralized and collaborative data ecosystem to scale smart manufacturing,” Dyck said in



Raymond James, assistant dean for Greenville Technical College's School of Advanced Manufacturing and Transportation Technology, during a keynote focused on "How Education Is Transforming to Meet Industry Needs."

a keynote presentation. "Americans have an independent mindset," he added. "We need to lead by example and reframe that mindset to prioritize the exchange of ideas, information and data to create more value across the global manufacturing community."

Day 3—Oct. 26

The third day was all about the Modern Makers—individuals who embody Manufacturing USA's mission to secure the future of U.S. manufacturing through innovation, education and collaboration. The Manufacturing USA network includes 17 manufacturing innovation institutes, each with a different technology niche. The institutes are part of an ecosystem of collaboration among their government sponsors (the DOE along with its counterpart departments of Defense and Com-

merce), research and academic institutions, and private-sector member companies.

The Modern Makers shared their personal journeys and gave dozens of local students a fresh perspective on the industry through a spirited Q&A session. During a panel discussion, Modern Maker Fatima Majid, robotics instructor at DoD-backed LIFT, shared that she decided to pursue a teaching career when her daughter was in school because the schedule allowed her to spend more time with her daughter and the opportunity to carry the STEM torch forward for middle school students.

"Every day, I would fit in a presentation where I introduced my students to a black scientist," she said. "I wanted to show them that you can be an athlete, an entertainer, a scholar and a scientist. You can do it all!" 📶

AD INDEX

5G Technologies USA Ltd, **41**
 Axiom Manufacturing Systems LLC, **43**
 CAPTURE 3D Inc, **3**
 CyManII, **11**
 ECI Software Solutions, **33**
 Falconry Inc, **55**
 Flow Software, **57**
 Hurco North America, **Cover 4**
 LIFT, **27**
 MxD, **15**
 Phoenix Contact USA Inc, **51**
 Prototyping Solutions, **49**
 RAPID + TCT, **24**
 Sandvik Coromant Co, **Cover 2**
 SAS Institute Inc, **5**
 SME Membership, **16**
 ThinkIQ, **35**
 Tulip Interfaces Inc, **39**

TRANSFORM YOUR
WORKFORCE

 TOOLINGU | 

info@toolingu.com or 866.706.8665