

INTERNATIONAL MANUFACTURING TECHNOLOGY SHOW

# **NEWS RELEASE**

# Hundreds of Leading Software Solutions for Manufacturing Converge at IMTS 2024

McLean, Va. (July 17, 2024) — The <u>Software Sector</u> at <u>IMTS 2024 – The International</u> <u>Manufacturing Technology Show</u>, which runs Sept. 9-14 at Chicago's McCormick Place, showcases solutions from more than 120 exhibitors demonstrating CAD-CAM software, controls, ERP, monitoring, data management, and other digital solutions to optimize machine and business performance. Major launches include Siemens' (<u>IMTS booth #133249</u>) North American debut of Machinum, a digitalization portfolio that brings together machine tool controls, digitalization software, and machine shop services, and Hexagon's (<u>IMTS booth #133210</u>) launch of new software suites and programs designed to empower machine shops of all sizes.

"The fast-growing Software Sector features advances in Al/machine learning, digital twin and simulation technology, better integration between applications, and connectivity between components," says Benjamin Moses, director of technology at AMT – The Association For Manufacturing Technology, which owns and produces IMTS. "Visitors can connect with exhibitors to experience how today's software and controls can help optimize production, provide faster responses to customer requests, and offer a better user experience."

Elements of Machinum from Siemens include more speed through adaptive feed rate control to reduce cycle times, agility through digitalization and software that seamlessly integrates CNC systems and a shop's internal communications, and more uptime through machine monitoring that anticipates potential issues before they escalate. So that visitors can experience the power of software in a fun and tangible way, Siemens will hold a golf-putting contest where the putter heads have been produced using its Sinumerik CNC control, Machinum portfolio, and digital twin simulation. Each day, visitors can enter to win one of two custom-machined putters.

Hexagon's new HxGN Production Machining Suite improves collaboration between departments to break down barriers to innovation while ensuring every part built goes out with the right

tolerances. Features include CAM for CNC programming, process simulation, shop floor production intelligence, and the ability to utilize AI and digital twin technology to optimize processes. The HxGN Mold & Die Suite is a suite of dedicated CAD-CAM engineering and automation tools that help these manufacturers increase efficiency and reduce costs. A new Machine Shop Excellence Learning Center and benchmark tools offer complementary value-add resources, paired with software offerings that help machine shops tackle workforce challenges, with features that empower workers, automate tasks, and better leverage existing talent. The benchmark tool can be leveraged free of charge and is designed to support machine shops as they transition from paper-based operations to digital innovation. It enables machine shops to evaluate their performance in seven key areas: quoting and planning, design and review, manufacturing preparation, manufacturing, shop floor measurement, inspection, and reporting and analytics.

## Strike It Rich With Data

"Depending on your experience level, implementing new software or controls can be daunting," says Moses. "I recommend starting a dialogue at IMTS, picking an easy win, and working to build trust. The good news is that today's digital technology enables you to get data faster and easier. You will quickly know when you're on the right path."

"Data is the new oil, so what data do you collect? How much of it is valuable? We're still working on that," says Corbin Embrey, CEO of Shamrock Precision USA. The company, a precision machining contract manufacturer, is now working with SolidCAM (<u>IMTS booth #339265</u>), which will demonstrate its iMachining Technology Wizard software that automatically calculates optimal cutting conditions for every segment of the tool path. With software, Shamrock can take data that used to reside in different silos, connect elements together, and collect machine data to determine if the machines are running optimally, such as for extending tool life when machining hard materials like nickel alloys (<u>learn more</u>).

Data collection and analytics can start simply with solutions from Caddis Systems (<u>IMTS booth</u> <u>#135947</u>), which will demonstrate a durable shop floor device and intuitive dashboard for realtime monitoring. Modular add-ons from Caddis allow users to customize the device with features like a thermocouple expansion, accelerometer expansion for vibration monitoring/analysis, and infrared temperature expansion for non-contact temperature monitoring.

## Software-Oriented Conferences

"Several of the exhibitors in the Software Sector are also delivering technical presentations at <u>The IMTS 2024 Conference</u>," notes Moses. "These technical sessions are a great way to dive into a topic, as well as to network with like-minded professionals."

Open Mind Technologies (<u>IMTS booth #133351</u>), together with Oak Ridge National Laboratory (ORNL), will present "HEAL-IT: Hybrid-Manufacturing Enabled Agility and Longevity of Industrial



Tools." The presentation will focus on a recent collaboration to repair a bottle mold using hybrid manufacturing and will take place on Wednesday, Sept. 11, at 11-11:55 a.m. in Room W192C. This hybrid system is also part of a demonstration featuring a robotic wide-area additive manufacturing (WAAM) system in AMT's Emerging Technology Center (ETC) (<u>IMTS booth</u> <u>#236700</u>).

A visit to the ETC will also benefit those who want to learn about MTConnect, an open-source interoperability standard that establishes a common language for equipment and devices from different manufacturers to interact on the factory floor. AMT supported the development of the MTConnect standard so that industry could gain real-time data to make informed decisions, and members of the MTConnect institute will be in the ETC to answer questions. A documentary film in the ETC will focus on creating a model-based engineering environment for OEMs, suppliers, and SMEs using standards, including MTConnect. Live presentations and Q&A sessions offer visitors a chance to connect and share ideas.

Open Mind Technologies, a leading developer of CAD-CAM software solutions, will highlight its updated hyperMILL<sup>®</sup> 2024 CAD-CAM software in its Software Sector exhibit. New capabilities include CAM Plan, which simplifies various programming tasks and identifies possible sources of error. Predefined workflow steps safely guide users through the preparation and programming process; the geometries and features required are automatically created, and potential errors, such as double surfaces or gaps between model patches, are flagged for removal.

CGTech (<u>IMTS booth #133340</u>), known for its Vericut simulation, optimization, and composite software, will present "Closing the Gap between Simulation and the Shop Floor" on Thursday, Sept. 12, at 2:15-3:10 p.m. in Room W192C. The presentation will discuss how data retrieved from a machine tool can be used proactively to identify and prevent problems and what information can be retrieved and analyzed from the machine pre-, during, and post-machining.

In its booth, CGTech will demonstrate Vericut 9.5. This newest version now includes a heat map to display tool wear patterns, a new post-check investigative tool to review archived data directly from the NC machine, and the ability to receive email or Microsoft Teams notifications when a simulation is completed.

"When it comes to optimizing overall operating efficiency, you need good CAD-CAM software and controls, and the best place to find the technology that fits your operation is at IMTS," says Moses.

<u>Register</u> to attend IMTS 2024, review the <u>conferences at IMTS</u>, and <u>plan your visit</u>. Use AMT's <u>Global Housing Solutions</u> for the best hotel booking experience and room and price guarantees.



### Image Information



### JPG: SINUMERIK\_ONE\_Siemens

**Caption:** Siemens' Sinumerik One comes with the Run MyVirtual Machine (shown) software, combining digital twin technology, powerful hardware, and integrated IT security, making it a forward-looking CNC.

#### Social Media

Conversations within the IMTS community are continuing on social media:

X (formerly Twitter): <u>@IMTSchicago</u> or #IMTS LinkedIn: <u>linkedin.com/showcase/10632805</u> Facebook: <u>facebook.com/IMTS.show</u> Instagram: <u>instagram.com/IMTSchicago</u>

#### **Media Notes**

Download the IMTS 2024 logo and photos: <u>IMTS.com/media</u> View the IMTS 2024 floor plan: <u>IMTS.com/floorplan</u> Watch the IMTS YouTube channel: <u>youtube.com/IMTSvideos</u>

## About IMTS – The International Manufacturing Technology Show

IMTS – The International Manufacturing Technology Show is where the creators, builders, sellers, and drivers of manufacturing technology come to connect and be inspired. Attendees



discover advanced manufacturing solutions that include innovations in CNC machining, automation, robotics, additive, software, inspection, and transformative digital technologies that drive our future forward. Powered by AMT – The Association For Manufacturing Technology, IMTS is the largest manufacturing technology show and marketplace in the Western Hemisphere. With more than 1.2 million square feet of exhibit space, the show attracts visitors from more than 110 countries. IMTS 2022 had 86,307 registrants, featured 1,816 exhibiting companies, saw over 7,600 people attend educational events, and included a Student Summit that introduced the next generation to manufacturing. Be the change at IMTS 2024, Sept. 9-14, 2024. Inspiring the Extraordinary. IMTS.com.

### About AMT – The Association For Manufacturing Technology

AMT – The Association For Manufacturing Technology represents U.S.-based providers of manufacturing technology – the advanced machinery, devices, and digital equipment that U.S. manufacturing relies on to be productive, innovative, and competitive. Located in McLean, Virginia, near the nation's capital, AMT acts as the industry's voice to speed the pace of innovation, increase global competitiveness, and develop manufacturing's advanced workforce of tomorrow. With extensive expertise in industry data and intelligence, as well as a full complement of international business operations, AMT offers its members an unparalleled level of support. AMT also produces IMTS – The International Manufacturing Technology Show, the premier manufacturing technology event in North America. AMTonline.org.

