APRIL 12-13 // DETROIT // FORD FIELD

MANUFACTURING NAMERICA 23

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MANUFACTURING

COMMUNITY. COLLABORATION. INNOVATION.

Siemens and Electro-Matic invite you to join over 3,700 manufacturing executives, engineers and enthusiasts at Manufacturing in America 2023 in Detroit, MI inside Ford Field. Learn about the newest technologies, share best practices and ideas, and be a part of advancing the future of manufacturing.

#MiA23 will feature The Summit, over 100 technical learning seminars, and 50 exhibits focused on emerging automation, digitalization, controls, and drives technology with this evolving industry.

WHAT'S INSIDE

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FREE TO ATTEND, BUT REGISTRATION IS REQUIRED

Seminar spaces fill quickly on a first-come, first-serve basis so act fast to reserve your seats in the free technical seminars or workshops you wish to attend!

REGISTER ONLINE AT ATTENDMIA.com



PARKING

Parking passes for the Tigers (T) parking lot can be downloaded on **attendmia.com** to be printed or presented via the app to the parking lot attendant.

- B Gate B (Brush) Northwest Entry
 - Gate G (St. Antoine) Southeast Entry & Overflow Parking

Tigers Garage (Montcalm/Brush) Northwest Parking

The Gate G parking garage uses a digital screen kiosk to validate parking for MIA and a physical pass is not required.

G

HOTEL

Manufacturing in America has partnered with **Hollywood Casino at Greektown** for a discounted rate* for attendees that require accommodations.

*Limited Availability. Check **attendmia.com** for more information.



THURSDAY APRIL 13

EXHIBITOR BOOTHS



THE SUMMIT HALL OF LEGENDS 9:00A - 12:30P

TECHNICAL SEMINARS PAGE 31







EXHIBITOR BOOTHS PAGE 11 8:00A - 7:00P

NETWORKING RECEPTION WEST ATRIUM 4:00P - 7:00P



Throughout the event, Managers from all of the participating companies are available along with conference room space for one-on-one meetings. If you have specific project requirements that need to be reviewed please contact an Account Representative to schedule a meeting.





TECHNICAL SEMINARS PAGE 31 8:00A - 3:50P

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8:00A - 4:00P







WEDNESDAY APRIL 12TH

SUMMIT

Join Siemens and innovation thought leaders at our annual **Manufacturing in America Summit** to learn more about how you can realize your organization's digital transformation. Experience thought-provoking presentations, discussions, and best practice sharing with leading experts in manufacturing, economy, technology, and innovation. Our key focus for the MiA Summit is the digitalization ecosystem. Our speakers, including customers and industry experts, will discuss the impact of the growing industrial digital ecosystem of connected, data-driven and automated technologies.

KEYNOTE SPEAKERS



TOM KELLY / Automation Alley

Tom Kelly is a globally recognized expert on Industry 4.0 and its impact on business. As executive director and CEO of Automation Alley, a Michigan-based nonprofit Industry 4.0 knowledge center with a global outlook and a regional focus, Tom is often tapped to share his visionary leadership and expertise around digital transformation.

As executive director and CEO, Tom has been instrumental to the success of Automation Alley's Industry 4.0 initiatives, designed to help businesses jumpstart or accelerate a digital path to strategic success, including Integr8, the global Industry 4.0 conference; the 3D printing network Project DIAMOnD; and the formation of the World Economic Forum's U.S. Centre for Advanced Manufacturing. Tom serves as co-chair to the World Economic Forum's Global Network of Advanced Manufacturing Hubs and is a member of the Additive Manufacturing Coalition Steering Committee, Fraunhofer Technology Advisory Board and Michigan Manufacturing Technology Center Board.



CHRISTOPHER ALAN / Dasher Lawless

Christopher Alan is the Owner/President of Dasher Lawless Inc., a development company specializing in mixed-use and planned developments based in Los Angeles. Christopher has spent over thirty years in the building industry gaining vast experience in both development and investment. Mr. Alan also founded Dasher Lawless Automation and created the AUTOParkit System to become a technology leader in automated parking. Leveraging his building and planning experience, Christopher is dedicated to revolutionizing the parking industry to minimize its impacts on the environment.

Mr. Alan has been recognized for his contributions from the City of Los Angeles' Councilwoman Wendy Greuel, California State Assembly member Paul Krekorian, and Grant High School. He resides in the San Fernando Valley with his wife, Dorian, and his two sons, Dasher and Lawless.



TISHA LIVINGSTON / Infinite Acres

Tisha Livingston, CEO of Infinite Acres, a technology company with a green thumb— where she leads a team of indoor agriculture professionals, from engineers to plant physiologists, committed to changing the way the world eats by building a better way to grow. All 80 Acres farms run on the Infinite Acres technology—a unique, holistic platform that combines best-in-class software, hardware, and controls, enabling quick-learning feedback loops that drive market-leading crop optimization. As a result, the Infinite Acres' state-of-the-art technology makes it possible to grow high-quality and affordable fresh produce anywhere with fewer resources and zero pesticides.

Before being named Infinite Acres' CEO in June 2019, Tisha co-founded and held the 80 Acres Farms' position as President. Her strong record of growing revenues, reducing costs, and enhancing capital efficiencies led the Company to its current successes. In 2020, Tisha was elected as Vice-Chair of FarmTech Society (FTS), an international non-profit association that unites and supports the Controlled Environment Agriculture worldwide.



TECH ZONE

SIEMENS

Take advantage of this exclusive, hands-on opportunity to experience first-hand how the Siemens Digital Enterprise compliments Modernization for Smart Manufacturing. The Tech Zone is open all day on the 3rd floor Club level of Ford Field, where you can test-drive common engineering task on Siemens hardware and software products including: Factory Automation, Motion Control, Control Products, Industrial Networking, and Mindsphere.

FEATURING

MANUFACTURING

- AR & VR for the Digital Twin
- Circuit Protection & Controls
- Connectivity with Legacy Networks
- Digital Connectivity and Power
- New Way of Motion
- SINAMICS G115D: Distributed Drive System for Horizontal Motion Control Applications
- **SINAMICS G120**: The Modular Drive. Energy Efficient. Safe. Rugged.

- SINAMICS G120X: VFD for Pumps, Fans and Compressors
- SINAMICS S120
- SITRAIN[®]: Discover the Future of Learning Options
- Smart Manufacturing Demonstrator
- TIA University Workshops
- Virtual Training Solutions

INDUSTRY TECH ENTHUSIASTS LOUNGE

Meet and greet some of the world's most widely-followed automation enthusiasts at our new Industry Tech Enthusiasts Lounge, **located on the 3rd floor overlooking the West Atrium**. These online "all stars" are joining MiA 2023 to have a first-hand look at the industry's emerging technologies and concepts, and to network with YOU, the practitioners who put industrial automation and software to work every day.





COMMUNITY. COLLABORATION. INNOVATION.

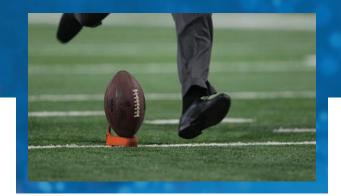
MANUFACTURING

ACTIVITES



NETWORKING RECEPTION 4:00P - 7:00P • WEDNESDAY • WEST ATRIUM

Join us Wednesday evening in the West Atrium for our annual Networking Reception *(sponsored by Rittal & EPLAN)* featuring live music from Acoustic Madness *(sponsored by Intec Automated)*. Beverages and hors d'oeuvres are provided.



FIELD GOAL KICKING 12:00P - 5:00P • BOTH DAYS • FORD FIELD TURF

Take your shot at as a wannabe-NFL kicker on the Ford Field turf! (Just be sure to stretch first.) Meet at the field entrance between Sections 103 and 104 on the Adams St. Concourse at the top of every hour.



FREE THROW SHOOTING ALL DAY • BOTH DAYS • 2nd FLOOR of WEST ATRIUM

Bring your best shots to our Free Throw Shooting Contest! This timed contest takes place over both days of the event and is located near the Electro-Matic Visual booth on the 2nd floor of the West Atrium.



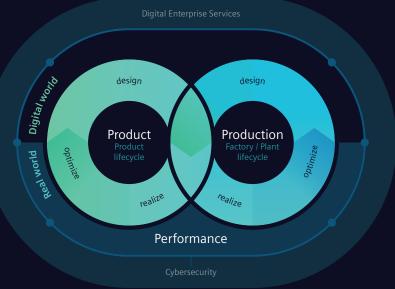
GOLF SIMULATOR ALL DAY • BOTH DAYS • 2nd FLOOR of WEST ATRIUM

Get back into the swing of things right at the start of the Michigan outdoor golf season with our indoor golf simulator located near the Electro-Matic Visual booth on the 2nd floor of the West Atrium.

SIEMENS

Accelerate your digital transformation to become a Digital Enterprise now

siemens.com/digital-enterprise



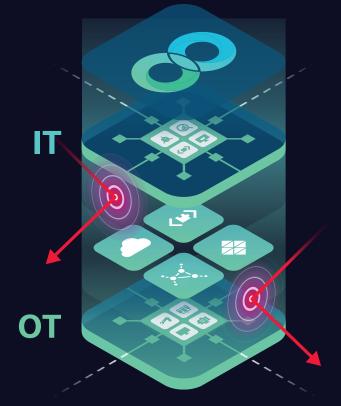
The industrial world is facing urgent challenges – especially sustainability. It's essential for companies to collect, understand and use the infinite amount of data created in the Industrial Internet of Things (IIoT). This paves the way for them to become Digital Enterprises that can use our finite resources more efficiently and make industry more sustainable.

If you can dream it, you can make it

Combining technologies from the digital and the real worlds through our comprehensive Digital Twin approach enables the integration of the entire product and production lifecycle. It allows you to design, simulate, test, optimize, and validate products, machines, lines, plants and factories in the digital world and make them faster and more efficient and sustainable. Thanks to multi-level cybersecurity concepts for industry, the use of data is comprehensively protected from the shop floor to the top floor of a company. All of this enables companies to exploit previously unrecognized potential and find solutions that seemed unimaginable not long ago.

SIEMENS

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Siemens Industrial IoT – The convergence of IT and OT

To become a Digital Enterprise, connecting Information Technology (IT) at the office and management level with Operational Technology (OT) at the field and plant level of production is essential. This IT/OT convergence enables to collect the huge amounts of data generated in the Industrial Internet of Things (IIoT), understand correlations and leverage potentials.

Supporting you to become a Digital Enterprise

Moreover, the service experts from Digital Enterprise Services are here to help you from the beginning to the end of their digital journey and focus on the individual needs of your Digital Enterprise.



Become a Digital Enterprise faster with Siemens Xcelerator

Siemens Xcelerator is our easy, flexible, and open digital business platform that helps our customers innovate faster and ultimately become Digital Enterprises. It comprises a curated, modular portfolio of software and IoT-enabled hardware; a growing ecosystem of partners; and a marketplace to explore, educate, share, and purchase.









Turning innovation into value for over 50 years

Electro-Matic's mission and commitment to providing a World-class product mix dictates that we only work with the best. Electro-Matic's select product mix is a result in a partnership with manufacturers who share a commitment to value-added distribution to deliver technologybased products, differentiated services and solutions to the industrial automation marketplace.

electro-matic.com

CELEBRATING OVER 25 YEARS WITH SIEMENS

Siemens	Datalogic	Helukabel	OnRobot	TE Connectivity
Rittal	Dunkermotoren	Hilscher	Reiku	Telegartner
Turck	Ewellix	Kyntronics	Robotiq	Telit
Festo	Firestone	Lapp	Robotunits	Transcoil
Fortress	Gast	Laser Marking Technologies	Satie System	Werma
Leuze electronic	Gems	Leeson	Sensopart	Wirecrafters
AlphaWire	Hammond Power Solutions	Littelfuse	Sheffer	Yamaichi
Anver Corporation	Harting	Nexans	Stober	Yaskawa
Conductix-Wampfler	HellermannTyton	Nook	Te.Co.	Zero-Max

A World-Class Product Mix



ELECTRO-MATIC 10

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Configured Solutions

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Electro-Matic provides value-added configured, modified and connectivity products, services and solutions for automation control applications. Our application engineers will work with you to provide a single part number solution that meets your automation and control system needs, regardless of the application. Electro-Matic's configured products are featured and supported not just in North America, but across five continents around the globe. From Brazil to Germany, from China to South Africa, Electro-Matic can build and support a completely customized solution optimized for your business.

Visual LED Signs & Lighting

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Electro-Matic Visual is a provider of innovative and energy-efficient LED Signs and LED Lighting to the commercial and industrial markets. Electro-Matic's turnkey approach to LED Lighting and Energy Solutions can help show you LED technology can improve your profits by improving production efficiencies, increasing top line sales, improving your profit margin mix, and reducing your energy costs with a new installation or retrofit.

electro-matic.com/solutions

Now with offices in **Memphis** and throughout **Florida**.

SHOP ONLINE

Electro-Matic's new Web Store features special and contract pricing levels, live inventory levels, and complete online and offline order history!

shop.electro-matic.com







What is the SunSource Advantage?

It's a group of highly trained associates, backed by industry leading systems and decades of product and application knowledge, working for you. As a national distributor with a local presence, SunSource fills a unique position as a full-service resource for you, our customer. We provide system-wide solutions for your toughest applications, bringing together products, technical knowledge, service and support. From assistance in the design phase, through start-up and operation, ongoing maintenance and post-sales support, along with component service and repair, SunSource is your partner and your competitive advantage. *The SunSource Advantage* is stronger and better than ever! We continue to expand our value-added services, improve our capabilities, and increase our product breadth, while strengthening our customer and supplier relationships along the way.

Our people, systems and capabilities make the difference and will get the Right Product to the Right Place at the Right Time to keep you running efficiently and trouble-free!

A Company of Companies

The foundation for SunSource's impressive reputation has been built by 'joining forces' with a select group of leading industrial distribution companies with complementary products, services and a solution-based approach. Our strategically architected platform is built to deliver deep application and industry expertise across the critical product categories that you rely on most to keep your business running.

It's our rich history and decades of experience that separate SunSource from a traditional parts-in-a-box distributor. Our companies share access to technical experts, talented support teams, lifecycle services, and an extensive product variety and inventory available across the organization. We're stronger together; enabling SunSource to deliver unmatched technical capabilities and solutions that you can rely on.



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SCHEDULE

FLOOR PLAN

SCHEDULE

SEMINARS

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Rittal

Innovative strength has been woven into the Rittal DNA since its foundation. In 1961, Rudolf Loh Elektrogerätebau was founded in Rittershausen by the entrepreneur Rudolf Loh, with one simple guiding principle: "Enclosures off the shelf, immediately." In its founding year it launched the world's first standard enclosure on the market. In 1969, the company was renamed Rittal, in honor of its roots in Rittershausen in Dietzhölztal. Within just a few years, Rittal enclosures had become established as a global standard, and have remained so to this day.



EPLAN

EPLAN connects software solutions from every engineering discipline, from preplanning and project planning to the design of switchgear and cable harnesses. Cloud-based applications enable you to collaborate across projects and create a standardized database right through to automated engineering. Further, our integrations and standard interfaces enable bi-directional data exchange with your ERP, PLM and PDM systems. This means that you will become more efficient when working on your EPLAN project because digital data flows seamlessly from one solution to another and is further enriched in every process step.

Abbie Davis · (937) 972-2803 · davis.a@rittal.us



80/20

80/20 is the premier provider of extruded aluminum T-slot products, solutions and services. We supply the broadest range of profiles and accessories to create and customize endless solutions to support your applications. Some of these applications include: safety & guarding enclosures, milling & drilling, robot pedestals & bases, industrial shelving, racks and carts, AGV modules, displays, machine frames, lean and workstations.



Applied Control Engineering, Inc.

Since 1991, ACE has developed solutions for every aspect of process control and automation systems for a variety of industries. We are a customer-focused company that listens to our customer's needs and provides the necessary services to get the job done on time and on budget. Our engineers offer an immense amount of relevant process, manufacturing, and controls experience making them valuable members of your project team.

Adam Pressler • (260) 248-8030 • apressler@8020inc.com

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Dave Erby • (302) 738-8800 • erbyd@ace-net.com



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APRIL 12 - 13 / FORD FIELD



Applied Manufacturing Technologies

Founded in 1989, Applied Manufacturing Technologies is an industry leader in automated end-of-line solutions, advanced material handling systems, and engineering support globally. More than 120 experienced and highly-trained controls and automation engineers with over 1,250 combined years of experience are engaged in automation projects across an array of industries.

ntegrating industrial automation since 1989



Conductix-Wampfler

Conductix-Wampfler is a Global leader in Energy & Data Transmission. From our Ergonomic workstations with air and power to our Conductor Rails, Inductive Power Transfer, Charging Contacts, Wireless Charging, Battery Storage and Emergency Fleet Stop. Combined with unsurpassed Sales and Service. We have what it takes to keep your vital business moving, safely, efficiently and dependably.

Andy Haugh • (859) 912-2597 • andy.haugh@conductix.com



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EXHIBITORS

FLOOR PLAN

Scott Nicol • (586) 690-3209 • snicol@appliedmfg.com



ATI Industrial Automation

ATI Industrial Automation is the world-leading engineering-based developer of robotic accessories and robot arm tooling, including Automatic Tool Changers, Multi-Axis Force/Torque Sensing Systems, Utility Couplers, Material Removal Tools, Robotic Collision Sensors, Manual Tool Changers, and Compliance Devices. Our robot end-effector products are found in thousands of successful applications around the world since 1989.

Carter Riley • (919) 772-0115 • carter.riley@novanta.com

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AUVESY-MDT

At AUVESY-MDT, we support industrial companies to increase transparency in their heterogeneous production systems on a data basis to avoid production downtime and significantly increase manufacturing efficiency and safety.



Copia Automation

Copia Automation delivers modern developer tools for industrial automation. Our Git-based source control solution for PLCs streamlines workflows for faster delivery, increased code quality, and maximum uptime. Further, our auto-backup solution provides up-to-date visibility into the code running on your factory floor and alerts you to any meaningful changes.

Alia Sanders • (978) 257-3722 • alia@copia.io

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CSIA - Control System Integrators Association

The Control System Integrators Association (CSIA) is a non-profit, professional association with a mission to advance the control system integration industry for the benefit of its members and their clients. Through business best practices, training and networking, CSIA strives to improve the business capabilities of its members.

Lisa Richter • (847) 420-8172 • industrydir@controlsys.org

Jessica Martin · jessica.martin@auvesy-mdt.com

OJATALOGIC



eFlex Systems, an Epicor solution, provides cloud-based or on-prem

Manufacturing Execution Systems (MES) technologies. The flexible, scalable

solution helps manufacturers increase productivity and quality by

modernizing production environments through digital work instructions,

advanced process control, and real-time visibility. Easily connect devices, sensors, and machines with people for digital process control, operator

guidance, faster training, product traceability and data insight.

eFlex Systems - an Epicor Solution

Jason Bullard · (734) 347-0218 · jason.bullard@epicor.com

Datalogic, Inc.

Datalogic is a global technology leader in the automatic data capture and factory automation markets, specialized in the designing and production of barcode readers, mobile computers, sensors for detection, measurement and safety, RFID, vision and laser marking systems. Datalogic offers a solution for nearly every barcode reading application. Whether your application requires image-based, single-plane, omni-direction, or line scan barcode reading capabilities, Datalogic has you covered.

Eric Updike • (262) 212-4658 • eric.updike@datalogic.com



Smart People. Expert Solutions.®

DMC, Inc.

DMC is a project-based engineering consulting firm. We deliver and implement complete automation solutions, software development, and custom hardware engineering using a variety of technologies and platforms. Since 1996, DMC has succeeded in helping over 1700 clients increase efficiency and productivity by delivering cutting-edge solutions for a broad spectrum of industries worldwide.

(312) 255-8757 • projects@dmcinfo.com

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ebmpapst

ebm-papst Inc.

In North America, our highly-skilled and experienced team of professionals is ready to tackle your most difficult air moving challenges and offer solutions that meet your needs. We serve all markets including Agriculture, Air-conditioning and Ventilation, Appliance, Automotive, Commercial Refrigeration, Heating, Industrial, Lighting, IT / Telecom, Medical, Transportation and more.

Craig Kavorik • (248) 633-5558 • craig.kovarik@us.ebmpapst.com

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Entrelec / AMES

TE Connectivity's ENTRELEC Electrical Solutions brand meets the demanding standards required of electrical specifiers, panel builders, and wholesale distributor partners. With a comprehensive portfolio of connection, identification & labeling, and cable & wire management products, we continue to expand on our portfolio for both inside and outside the control panel. With our purpose-driven, customer-first culture, we connect with our customers as a trusted partner and expert for our customers globally. Learn more at TE.com/entrelec

Bill Moser • (513) 515-4144 • billmoser@amengineeredsales.com

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WE'RE

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EWELLIX

Ewellix is the leading global manufacturer and supplier of linear motion solutions and digital technology. We design and customize linear motion product and actuators for a variety of industrial applications (automation, medical and mobile machinery) that help customers shift to electrified solutions. For over fifty years, we pushed the boundaries to find better solutions to manufacturing challenges. Today we have a new name, but our focus remains on being your preferred linear partner.

Mike Harazin • (267) 625-6019 • michael.harazin@ewellix.com

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EXHIBITORS

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Festo

Festo is a global leader in automation technology, and the world market leader in technical training and education. By establishing a link between industry and education, we are helping our customers all over the world to increase their productivity.



Fortress

Saving lives by providing the best safety solutions. Fortress designs and manufactures customized safety equipment, protecting people working in hazardous workplaces. Our interlocks control access into potentially hazardous areas, ensuring the area is safe before the employee can enter and keeping the employee safe while a task such as essential maintenance is being carried out.



Fives DyAG Corp.

Pete Amata · (440) 591-2654 · pete.amata@festo.com

Fives DyAG Corp. is an Automation Integrator and Engineering Services organization with over 20 years of experience providing turn-key system solutions for industrial automation customers. We are a dynamic team of educated, field-tested, & highly qualified engineers with extensive experience and knowledge in managing various industrial activities, including robotics, controls engineering, machine vision, custom or standardized software, & much more, positioning ourselves as field experts.

Industry can do it

Jacqueline Poss • (248) 986-8337 • jacqueline.poss@fivesgroup.com



Fori Automation

Fori Automation is a global supplier of welding, assembly, material handling and testing equipment for both automotive and non-automotive customers around the world. Headquartered in Shelby Twp., Michigan Fori has facilities located in Brazil, China, Germany, India, Korea and Mexico. Fori focuses on delivering cost effective highly engineering products and systems that can be designed and manufactured globally with localized sales, project management and service.

Meaghin Hornsby • (586) 247-2336 • mhornsby@foriauto.com



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Helukabel

HELUKABEL is your one-stop solution provider for cables, wires and cable accessories in the United States. Our wide range of UL/CSA-approved cables and wires includes flexible tray cables for stationary and flexing applications, high-flex robotic cables for continuous flexing applications, VFD/servo cable, and network bus cable. An extensive product portfolio containing over 33,000 line items can be used in a wide range of market segments and industrial applications.

Ursula Buol • (224) 242-8146 • ursula.buol@helukabel.com

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Hilscher NA, Inc.

Hilscher is a global supplier of industrial communication solutions. Our netX product family combines processors and software from a single source ideal for OEM integration. We use this same technology to provide a full range of Factory Automation gateways, protocol convertors and PC cards for Real-Time Ethernet and Fieldbus conversions in both master and slave configurations. Hilscher has also entered the IIoT market delivering factory floor data to multiple Cloud platforms by way of Edge.

Victor Wolowec • (630) 390-4053 • vwolowec@hilscher.com

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Kyntronics Inc.

EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

Kyntronics has emerged as a leader in "new technology" actuators and actuation systems that provide a compelling alternative to traditional hydraulic cylinders and electro-mechanical actuators. Our SMART Electro-Hydraulic Actuators (SHA) combine the best features of hydraulic power density, with the precision of servo control technology resulting in an all-in-one actuation system that is both powerful, precise and energy efficient. Our exhibit will include live working demonstrations of the SHA.



Leuze electronic, Inc.

We are an international sensors and safety solutions company. Our high-tech product range includes switching and measuring sensors, identification systems, and data transmission and image processing solutions. As a Safety Expert, we are focused on components, services and solutions for safety at work. Target industries include intralogistics and the packaging industry, machine tools, the automotive industry, and lab automation.

Jennifer Mass · (248) 752-6712 · jennifer.mass@leuze.com

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Linear Automation

Linear is a Global supplier of press transfer automation, blank feed systems, and press-to-press automation. Linear is the world's leading supplier of this specialized automation, with a focus on optimizing metal stamping operations on every project. Our proven technology is designed to be the most reliable, robust, and flexible automation in the market. We build each system with the simple goal of never being the bottleneck in the stamping process.

Paul Stirrett • (519) 572-2369 • pstirrett@lineartransfer.com



Linmot

LinMot is a global supplier of tubular-style linear and linear-rotary servo motors for use in industrial applications. LinMot motors excel in a wide variety of capping, point-to-point, pick-and-place, and gantry applications in the food and beverage, automotive, and pharmaceutical sectors. These are completely electric and great alternative to pneumatics in applications. LinMot servo drives integrate seamlessly into all major control platforms.

Ryan Longstreth · (248) 330-4729 · ryan@mechatronicsllc.com



Ryan Longstreth · (248) 330-4729 · ryan@mechatronicsllc.com



LAPP North America

LAPP manufactures the highest quality cable, connectors, cable glands and industrial communication solutions to enhance factory automation and future-ready industrial manufacturing production systems and equipment. LAPP's state of the art manufacturing plant headquartered in Florham Park, N.J. includes an inhouse UL Client Data Program and UL certified laboratory to ensure the highest quality. For more information, visit LAPP online at www.e.lapp.com/us to browse our full range of products and solutions.



Leadec

Leadec is your premier manufacturing service partner providing professionally managed services to maximize productivity. We specialize in infrastructural facility management, production equipment maintenance, maintenance repair operations (MRO), technical cleaning and other customized on-site support services that keep your plants and equipment running smoothly.

Priscilla Shinn • (843) 469-6482 • priscilla.shinn@leadec-services.com

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LITMUS

Litmus

Litmus is the only Industrial IoT Edge platform that unifies data collection and machine analytics with enterprise integration and application enablement. We help Fortune 500 companies harness the power of their industrial data for condition-based monitoring, predictive maintenance, machine learning and Al. With more device drivers than anyone in the industry plus pre-built machine analytics, integrations, and applications - Litmus simplifies how companies deploy Industrial IoT at scale.



Michigan Manufacturers Association

To empower, inspire & support. To assist, challenge & grow. To advocate, strengthen & encourage. MMA has a proven track record & unwavering commitment to serve Michigan manufacturers through legislative advocacy, workforce development, education, training, networking, cost savings & more. As MMA members, manufacturers can tap into a professional network & resources to help grow businesses, address challenges, & create a sense of unity with other manufacturers.

Elizabeth Maciejewski · (517) 487-8542 · maciejewski@mimfg.org



Magswitch Technology

Damian Smektala · (416) 434-9181 · sales@litmus.io

Offering unique capabilities and significant improvements to end of arm tooling, Pick-and-Place, Body-in-White and many other applications. Powerful and lightweight tools in our automation line make it possible to implement magnets where they weren't previously applied. Magswitch can replace vacuum cups & traditional pin clamps which impact operating costs through high energy consumption and downtime. Magswitch is being deployed as a platform technology by major global OEMs & Tier One Suppliers.

Thomas Slawnyk · (248) 255-3231 · thomas@magswitch.com

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Mechatronics Solutions

A rep organization serving manufacturers of electromechanical components here in Michigan. We market and recommend our products to manufacturers, suppliers, and users of Industrial Machinery.



Novastar Solutions

Large Scale IT Asset Deployments | HP3D Printers | Test Equipment Calibration Services. For 25 years Novastar has been providing best-in-class tools and solutions to help the manufacturing sector.

Ryan Zemmer · (248) 804-5141 · rz@novastar.net



Patti Engineering

Patti Engineering is a CSIA Certified control systems integrator offering turnkey integration services: From designing and building new automation systems; to upgrading and retrofitting antiquated systems; to the design and implementation of asset tracking, artificial intelligence, and industry 4.0//IIOT. Our services include project management, electrical engineering, simulation, process improvements, software development, installation support, documentation, and training.

Patty Davis • (231) 620-9416 • pdavis@rivergatemarketing.com

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Ryan Longstreth · (248) 330-4729 · ryan@mechatronicsllc.com

Quabbin Wire & Cable Co., Inc.

At Quabbin Wire & Cable Co., Inc., our focus is on being the industry leader and manufacturing the best and most reliable cable on the market. Our advanced design, manufacturing, customer service and ISO 9001 quality system ensure that we provide world-class harsh environment data cable.



APRIL 12 - 13 / FORD FIELD

Softing Inc.

Softing provides solutions to help you GET CONNECTED. STAY CONNECTED.™ so you can optimize your facility. Softing can help you get your Siemens PLCs and CNC machines connected for monitoring asset health, quality monitoring, and performance metrics. Softing can help you stay connected with copper and fiber Ethernet cable testers and active network troubleshooting.

Alex Guerin • (630) 621-2457 • alex.guerin@softing.us

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SEMINARS

FLOOR PLAN

EXHIBITORS

Ted Brunk • (413) 668-4192 • tedb@quabbin.com

SIEMENS

Siemens Building Automation Solutions

Siemens offers fully-integrated, holistic solutions to help achieve optimum building performance. Siemens building automation can connect HVAC, lighting, shades, security, and more for any building type. Our selection of user interfaces, network managers, controllers, and field devices put you in command of all systems and equipment – remotely or onsite – to achieve desired energy efficiency, productivity, and well-being within a building.

Seth Wald • (847) 345-0143 • seth.wald@siemens.com

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Stäubli Corporation

Stäubli is a leading technological pioneer in the construction and development of robotic tool changing systems. Our customers benefit from our many years of expertise in all industry sectors, as well as our modular product concept, which offers three efficient solution paths: MPS COMPLETE offers preconfigured robotic tool changers for immediate use. MPS MODULAR allows the user to determine the configuration, while MPS CUSTOMIZED allows the construction of special, application-specific systems.

Denny Savage · (313) 549-4636 · d.savage@staubli.com

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SEMI Foundation

The SEMI Foundation is working in Michigan to bring new workforce training opportunities to employers in the microelectronics and semiconductor industries through our SCAN (Semiconductor Career and Apprenticeship Network) Michigan program. Our team is here to assist your organization with your talent development challenges and to prepare your workforce with the skills needed for tomorrow's advanced manufacturing careers. Chat with us to learn about our apprenticeship program and other trainings.



Stober

Working with STOBER allows you take advantage of the ultimate breadth of knowledge and breadth of products. From gear units to motors to rack and pinion, we have the range you need for your application. STOBER backs up our precise products with outstanding support – 24/7 service, 365 days a year. Plus, we build and ship our products in one day from our Maysville, Kentucky facility.

Ryan Longstreth · (248) 330-4729 · ryan@mechatronicsllc.com

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MANUFACTURING MAMERICA 23

Patrick Gillen • (440) 463-7503 • pgillen@semi.org



Trimasys Control Solutions Inc.

Trimasys is part of the portfolio of companies ventured by Enemtech Capital, based out of Houston, TX and offices in Troy, MI & Irvine, CA in USA. Our core competence is Industrial Automation dealing with: 1. Electrical Engineering & Design - AutoCAD, EPLAN, AutoCAD Electrical, 2. Control System Programming - Rockwell / Siemens / Schneider & ABB, 3. SCADA - WinCC / Factory Talk / Wonderware / Ignition, 4. Panel manufacturing facilities in USA & India, 5. Startup & Commissioning Support.

Giridhar Rallabandi · (248) 667-1836 · giridhar.rallabandi@trimasyscontrol.com 309



Tsubaki

U.S. Tsubaki is a leading manufacturer and supplier of high-quality motion control and power transmission products including a large variety of roller chains, conveyor chains, sprockets, KabelSchlepp cable & hose carrier systems, ATRA-FLEX couplings, clutches and backstops, and power transmission components. With several state-of-the-art manufacturing facilities and service centers in the Americas, along with highly trained technical field resources, U.S. we provided industry-leading service.

Karolina Moskal • (163) 052-3432 • karolinamoskal@ustsubaki.com





WERMA, USA

Intelligent Signaling technology. Clever solutions that simply work – this has been our goal at WERMA for decades, and customers from all over the world confirm our success day after day. We are setting the standards for modern signal technology - and are also defining their future: for more than twenty years with modular signal towers as the industry standard, and with networked, intelligent system solutions today.

Mike Moore • (315) 632-8621 • michael.moore@werma.com

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WireCrafters

Our RapidGuard[™] II Machine Guarding was designed by a special team of WireCrafters engineers commissioned to think differently in order to solve common operational issues in the industrial and material handling industries.. RapidGuard® II features a unique lift-off design that allows for the removal of the guards (panels) while the fixing system (hardware) remains attached to the guards (post), in compliance with RIA TR R15.406. The installation time is 50% faster than most competing products.

David Fishburn • (502) 396-7344 • dfishburn@wirecrafters.com





Yaskawa America, Inc., Motoman Robotics Division

Founded in 1989, the Motoman Robotics Division of Yaskawa America, Inc. is a leading robotics company in the Americas. With nearly 500,000 Motoman® robots installed globally, Yaskawa provides automation products and solutions for virtually every industry and robotic application; including arc welding, assembly, coating, dispensing, material handling, material cutting, material removal, packaging, palletizing and spot welding.

Peter Tarbell • (937) 301-2923 • peter.tarbell@motoman.com

FLOOR PLAN

SCHEDULE

INARS

FXHIBITORS



Centrepolis Accelerator at Lawrence Technological

The Industry 4.0 Accelerator is the first of its kind in the United States. Powered by Centrepolis at Lawrence Tech University and Lean Rocket Lab in

Jackson Backed by a \$1.3M strategic Industry 4.0 investment fund In

partnership with Michigan's top OEM's and downstream suppliers.



Washtenaw Community College

Reach your goals. Whatever your goals may be, Washtenaw Community College can help you reach them. Whether you're starting college to earn your degree, advance or start your career, earning your GED or looking for classes to enrich your life, we have a place for you.

Scott Phillips · (734) 787-7509 · sphillips@ltu.edu



SUNY Delhi

University

Mechatronics gives you the skills to design, build, and troubleshoot smart industrial systems. Our cutting-edge program equips you with an incredible breadth of skills in the high-demand fields of innovative automation and manufacturing, preparing you to step directly into high-paying jobs in a variety of industries. As the first Mechatronics bachelor's degree in the nation, we truly set you up for success.

Dennis B Aikens · (607) 746-4355 · aikensdb@delhi.edu



University of Toledo

Our College of Engineering stands out from other universities. We are one of only eight programs in the U.S. that requires co-ops for engineering science undergraduates. Our students graduate with a year's worth of paid industry experience. Many find jobs before they graduate. All of our bachelor's degrees are accredited by ABET. We also offer traditional engineering master's degree and Ph.D. programs, as well as graduate certificates and a part-time online master's program for working professionals.

William Evans · (419) 343-3681 · william.evans@utoledo.edu

Alan R. Lecz · (734) 717-6994 · alecz@wccnet.edu



Wayne State University College of Engineering, Division of Engineering Technology

Wayne State University is a premier research university in the heart of Detroit. The Division of Engineering Technology at Wayne State University was founded in 1973 and offers both undergraduate (upper-division: junior and senior level) and graduate programs. It stresses the application of current technology to typical industrial problems.

Andrew McKinney • (313) 577-0802 • gg4035@wayne.edu

504



SCHEDULE





Hybrid Hornets #5150

Kearsley High School • Flint, Michigan

We are a FIRST robotics team based out of Kearsley High School in Flint, Michigan, that was started in 2014. Our team is made up of 16 high school students and 7 mentors.



The Fighting Pi #1718

Macomb Academy of Arts & Science · Armada, Michigan

The Fighting Pi is a FIRST Robotics Competition team based in Armada Michigan. Created in 2006, the Fighting Pi has continued to grow and expand over the last 16 years. The Fighting Pi's mission is to grow future leaders for the advancement of FIRST and STEM in our community, state, nation, and world. As a team, our goal is to spread the message of FIRST by educating all students in the fields of math, science, engineering, and technology, providing real life experiences and opportunities to further their knowledge and skills.



Robostangs #548

Northville High School • Northville, Michigan

For 18 years, the Northville Robostangs have touched all aspects of learning. We encourage students to participate in various FIRST programs to all aspects of STEM education. Currently, our 77 members work towards spreading the message of FIRST within our community and beyond. We achieve this through our four pillars: Education, Commitment, Innovation, and Impact - with Unity as our foundation.



Knight Riders #6099

Osborn High School • Detroit, Michigan

As a part of the FIRST in Michigan district, the Detroit Osborn Knight Riders were ranked the highest among all rookie teams in a statewide robotics competition in 2016. In this ultimate varsity sport where teams of high school students and their industry mentors design and build large-scale robots to battle in fierce 3-on-3 competitions, the Knight Riders continue to prove their competitiveness in all of their events, and are always working to CREATE. ENGINEER. INSPIRE.



ThunderChickens #217

Utica Community Schools • Sterling Heights, Michigan

From their 22 years as a team, ThunderChickens have been recognized in our district, county, state, nationally and internationally for their achievements. In 2018, they were finalists of the World Championship competition that was held in Detroit. In 2019 they competed again in Detroit against over 400 teams from around the world and won the World Championship! As a team, ThunderChickens provide a unique learning experience to all students and help them create a greater understanding in multiple aspects of career development including Leadership, Time Management, and Engineering.

EVENT FLOORPI 23

EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

APRIL 12 - 13 / FORD FIELD

COMMUNITY. COLLABORATION. INNOVATION



MANUFACTURING MAMERICA 23

COMMUNITY. COLLABORATION. INNOVATION.

MDA 23 ATTENDMIA.COM

EVENT FLOORPLAN 24

TRIUM OR	ADAMS ST. CONCOURSE
bbin Wire & Cable Co., Inc.	301 Hilscher NA, Inc.
/ ePLAN	302 Werma
aki	303 Fori Automation
ro-Matic	304 Helukabel
ess	305 Novastar
crafters	306 ATI Industrial Automation
logic USA, Inc.	307 Entrelec / AMES
e Electronic	308 Leadec
a	309 Trimasys
us ESY-MDT	310 Linear Automation
	312 ebm Pabst
awa	313 Softing Inc.
	314 eFlex Systems - an Epicor Solution
FRIUM	315 Conductix-Wampfler
	316 Staubli
ource	317 Ewellix
ro-Matic Visual	
ens Building Automation	ADAMS ST. CONCOURSE
	401 DMC, Inc.
	402 Patti Engineering
	403 Fives DyAG Corp.
	404 Magswitch
	405 Lapp
	406 Mechatronics
	408 Applied Control Engineering
	409 Applied Manufacturing Technologies
P	

P Parking

Registration / Check-In



MANUFACTURING MAMERICA 23

Restroom: Men Restroom: Women

EVENT FLOORPLAN

25

EXHIBITORS

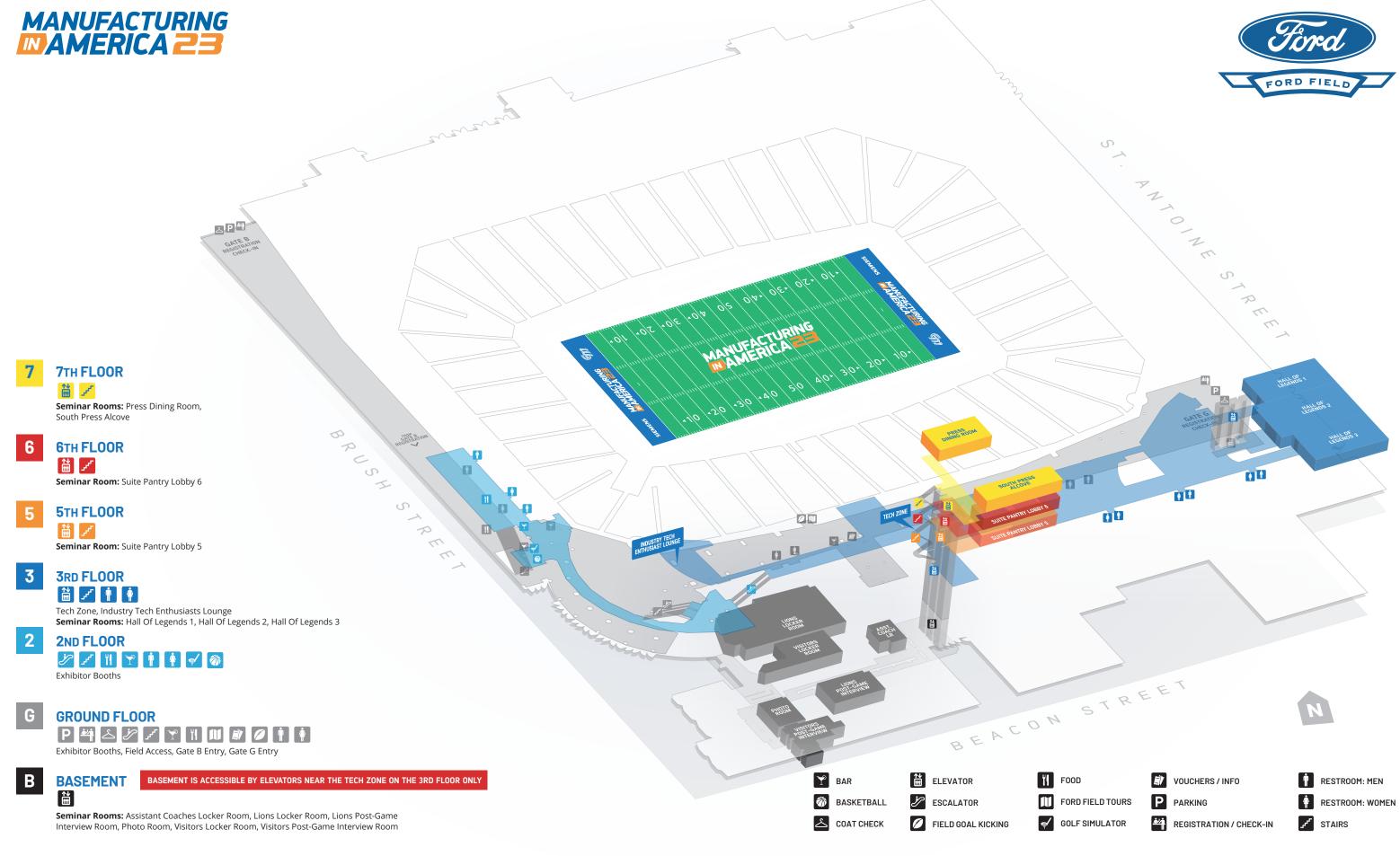
PLAN

FLOOR

SCHEDULE

SEMINARS

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EVENT FLOORPLAN 26



MANUFACTURING MAMERICA 23

FLOOR PLAN

HEDULE

SEMINARS

WEDNESDAY SCHEDULE

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EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

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APRIL 12 - 13 / FORD FIELD

COMMUNITY. COLLABORATION. INNOVATION

		3RD FLOOR		4TH FLOOR	5TH FLOOR	6TH FLOOR	7тн FLOOR	7TH FLOOR			
	HALL OF LEGENDS 1	HALL OF Legends 2	HALL OF LEGENDS 3	SUITE PANTRY Lobby 4	SUITE PANTRY LOBBY 5	SUITE PANTRY LOBBY 6	SOUTH PRESS Alcove	PRESS DINING ROOM	LIONS LOCKER ROOM	VISITORS Locker Room	LION POST G INTERV ROO
3:00A									What's New With Siemens Controls in 2023		CNC Techn for Machin Builders &
):00a									WN-04		0T-02
UUA					Specifications for Smart Factories		Introduction to the Digital Thread	WORKSHOP NEW G115D Distributed Drive Train for Mat	What's New with SIMATIC SW-PLC-IO in 2023	Siemens eXplore Centers: Visit Us!	SiMove - A Standards Easy
					0P-05		DI-07	Handling	WN-02	DI-06	OT-01
:00A	MANUFAC	TURING IN AMERIC	CA SUMMIT		Digital Enterprise - Factory Optimization	Advanced Power Supply System - Utilizing Profinet & Ethernet IP Communication	Should We 3D Print This?		What's New with SIMATIC HMI in 2023	OT/IT Integration	Your Short Robotics
I:00A					0P-01	PSU-01	AD-01		WN-01	DI-03	0T-08
UUA					Virtual Commissioning for Large Scale Systems	An Introduction to Servo Motor Tuning	Designing a Plant-Wide Network as Your OT Backbone		What's New With Siemens Wireless in 2023	Siemens Xcelerator- Dream it. Make It.	Power Distributio Techniques UL508A Par
:00p					DI-05	DR-04	OT-10	DR-01 & 12	WN-03	DI-08	OT-06
)Op					Modernize & Integrate Your Automation & Drives	Asset Intelligence - More Than Uptime	Efficient Engineering with TIA Portal		SICAR - Framework for Auto Controls Architecture	UL 61800-5-1: A New UL Standard for VFD	The Rise of Servitizatic Machine Bi
					0P-02	SM-01	AE-01		AU-01	DR-02	OT-05
:00p					Machine Monitoring - Improve Production with Data	How to Extend the Lifetime of Your Equipment	Digitalization in Motion Control		Turn-Key Power & Controls for the Auto Industry	Cloud-based SaaS	
:00p					0P-03	SM-02	DI-04		AU-02	DI-09	OT-03
bor					Lower Maintenance Tasking While Reducing Energy				End of the Line Al for Automotive Manufacturing	Siemens Cooperates With Education Successes	RFID or RTI Where, Wh How?
4:00P					0P-04				AU-03	OT-09	OT-07
Seminar Title Seminar Code emens Seminar hibitor Seminar	What's New in	locit						AD Additive AE Automation Engin AU Automotive D Digitalization		ization & Modernization re & Maintenance	WN What PB Part

MANUFACTURING MAMERICA 23

APRIL 12TH 28

EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

	BASE	MENT			
VISITORS CKER ROOM	LIONS Post game Interview Room	VISITORS POST GAME INTERVIEW ROOM	ASSISTANT Coach Locker Room	PHOTO ROOM	
	CNC Technology for Machine Tool Builders & Users				8:00A
	0T-02				
ens eXplore ers: Visit Us!	SiMove - AGV Standards Made Easy		Enabling Engineering Efficiency in Industrial Control System Design	WORKSHOP IO-Link Configuration Workshop	9:004
6	0T-01		EPL-1		10:00
Γ Integration	Your Shortcut to Robotics		Rittal & EPLAN: Better Together - How Partnering Together Creates Significant		
3	0T-08		RIT-4	AE-02 🛔 12	11:00/
ens erator- m it. Make	Power Distribution Techniques for UL508A Panels		Climate Control - The Critical Requirement		
8	OT-06		EPL-2		12:00
1800-5-1: A LD Standard	The Rise of Servitization for		New Approaches to PLC Version		1:00р
FD	Machine Builders		Control & Device Backup		
	OT-05		COP-1		2:00P
d-based SaaS ng rbonization	Accelerate Your OT Network Security		Practical Implementation of Industry 4.0 Technology		
9	OT-03		LTU-1		3:00P
ens erates With ation esses	RFID or RTLS - Where, When and How?		VFD Application Considerations		
9	0T-07		LAP-1		4:00P
	WN What's New	DMC DMC	, Inc. KYN	Kyntronics	PE Patti Engineering
Modernization	PB Panel Building			Lapp	SOF Softing
tenance	AUV AUVESY-MDT	FOR Fort		Leuze Electronic	RIT Rittal
tenance chnology	AUV AUVESY-MDT			Leuze Electronic Lawrence Tech Univ.	RIT Rittal

THURSDAY SCHEDULE

APRIL 12 - 13 / FORD FIELD

COMMUNITY. COLLABORATION. INNOVATION

		3RD FLOOR		4TH FLOOR	5TH FLOOR	6TH FLOOR	7TH FLOOR
	HALL OF LEGENDS 1	HALL OF LEGENDS 2	HALL OF LEGENDS 3	SUITE PANTRY LOBBY 4	SUITE PANTRY LOBBY 5	SUITE PANTRY LOBBY 6	SOUTH PRESS ALCOVE
:00a		What's New With Siemens Controls in 2023	CNC Technology for Machine Tool Builders & Users				
		WN-04	OT-02				
:00a	Siemens Xcelerator- Dream it. Make It.	What's New with SIMATIC SW-PLC-IO in 2023	SiMove - AGV Standards Made Easy		Specifications for Smart Factories	Presentation by Auvesy-MDT	Cloud-based SaaS Driving Decarbonization
	DI-08	WN-02	OT-01		0P-05	AUV-1	DI-09
:00a	OT/IT Integration	What's New with SIMATIC HMI in 2023	Your Shortcut to Robotics		Digital Enterprise - Factory Optimization	Advanced Power Supply System - Utilizing Profinet & Ethernet IP Communication	Should We 3D Print This?
1:00a	DI-03	WN-01	OT-08		0P-01	PSU-01	AD-01
1:004	Macro-Economic Trends: Supply Chain Issues, Inflation and More	What's New With Siemens Wireless in 2023	Power Distribution Techniques for UL508A Panels		Virtual Commissioning for Large Scale Systems	An Introduction to Servo Motor Tuning	Preparing for Repeatable Additive Production
2:00p	0T-04	WN-03	OT-06		DI-05	DR-04	AD-02
1:00p	Digital Roadmap for The Smart Supply Chain	SICAR - Framework for Auto Controls Architecture	The Rise of Servitization for Machine Builders		Modernize & Integrate Your Automation & Drives	Asset Intelligence - More Than Uptime	Efficient Engineering with TIA Portal
	DI-01	AU-01	OT-05		0P-02	SM-01	AE-01
2:00p	Digital Roadmap for Smart Manufacturing	Turn-Key Power & Controls for the Auto Industry	Accelerate Your		Machine Monitoring - Improve Production with Data	How to Extend the Lifetime of Your Equipment	Best Practices for Applying Actuators to Optimize Performance
5:00p	DI-02	AU-02	OT-03		0P-03	SM-02	KYN-1
3:00P	Siemens Cooperates With Education Successes	End of Line Al for Automotive Manufacturing	RFID or RTLS - Where, When and How?		Lower Maintenance Tasking While Reducing Energy		Designing a Plant-wide Network as Your OT Backbone
+:00p	OT-09	AU-03	OT-07		0P-04		OT-10
1:009							

7TH FLOOR			BASE	MENT			
PRESS DINING ROOM	LIONS Locker Room	VISITORS Locker Room	LIONS POST GAME INTERVIEW ROOM	VISITORS Post game Interview Room	ASSISTANT COACH LOCKER ROOM	PHOTO ROOM	8:00
							8:00
WORKSHOP Getting the Most From Your S120 Drives				Digitalization: A Practical Guide	The Automotive Industry in 2023	WORKSHOP IO-Link Configuration Workshop	9:00
				PE-1 What's New in ISO 14119? Trapped Key Systems are Included in the	RIT-1 Choosing the Right Industrial Enclosures For Your Food and Beverage Facility		10:0
DR-03 & 12				FOR-1 Future-proofing Multi-Vendor, Multi-Protocol Network Connectivity on.	Going At The Edge - A Look Ahead	AE-02 & 12	11:00
				HIL-1	RIT-3		12:0
WORKSHOP NEW G115D Distributed Drive Frain for Mat				Unpacking PackML: More Than Just Packaging Machines	The Principles of Machine Safety	WORKSHOP Motion Control: from Simulation to Real World	1:00
Handling				DMC-1 Test, Prove, and Troubleshoot Your Critical Control System Ethernet	LEU-1 New Approaches to PLC Version Control & Device Backup		2:00
				S0F-1	COP-1 Grants for Manufacturers Everywhere - Follow the \$	AE-03	3:00
DR-01 & 12					LTU-2		4:00
AD Additive AE Automation Engine	DR Drives	; ization & Modernization	WN What's New PB Panel Building	DMC DM EPL eP		Kyntronics Lapp	PE Patti Engineerii SOF Softing
AU Automotive		e & Maintenance	AUV AUVESY-MDT	FOR FO		Leuze Electronic	RIT Rittal

MANUFACTURING MAMERICA 23

APRIL 13TH 30

MANUFACTURING MAMERICA 23

EXHIBITORS FLOOR PLAN

SCHEDULE

SEMINARS



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DON'T FORGET! WORKSHOP REGISTRATION & VOUCHER NOTICE

Registration for workshops does not guarantee a spot. Attendees must check in at the separate Hands-On Voucher/Information desk located on the Adams St. Concourse next to **Section 104**. **Check in for workshops opens one hour prior to the class start time.** Vouchers will be handed out on a first come, first served basis. You must be pre-registered for the workshop to be able to receive a voucher. **Visit attendmia.com to register.**

SEAT LIMIT

AE-02

SEMINAR

CODE

DAY / TIME(S) / ROOM

. ТНU 9:00 - 10:50 РНОТО ROOM

IO-Link Configuration Workshop Mark Berger, Siemens

WED 9:00 - 10:50 PHOTO ROOM

Siemens has applied the principles of IO-Link to many devices which are traditionally mounted inside the main enclosure. Experience Hands-On TIA Portal IO Link setup of Motor Starters, Voltage and Current Monitors, and 3SU Pilot Devices including our RFID Selector Switch. Understand how using IO-Link can eliminate and simplify IO wiring, eliminate IO Modules in your PLC

Should We 3D Print This?

WED 10:00 - 10:50 SOUTH PRESS ALCOVE

Zachary Gray, Siemens

AD-01

You all have heard of 3D printing or Additive Manufacturing and amazing stories on how it's used. But why should you use it, how do you use it, and the biggest question of all, "can we make money with it?" Siemens is helping the Additive Manufacturing industry industrialize Additive Manufacturing through digitalization. Lending our decades of experience bringing emerging technologies to scaled production, we have built an ecosystem to guide customers on their journey.

AD-02

THU 11:00 - 11:50 SOUTH PRESS ALCOVE

THU 10:00 - 10:50

SOUTH PRESS ALCOVE

Preparing for Repeatable Additive Production

Chris Weber, Siemens

It's time we treat Additive like the rest of traditional manufacturing. In this session we will discuss managing the entire end-to-end additive production process to enable repeatable production. We will talk about design optimization, Manufacturing Planning and validation, formulation management of new materials, materials management, and MES/MOM.

AE-01

1:00 - 1:50 SOUTH PRESS ALCOVE

Efficient Engineering with TIA Portal

WED 1:00 - 1:50 SOUTH PRESS ALCOVE

John DeTellem, Siemens

Reduce complexity to master future challenges and opportunities. Efficient Engineering workflows with Standardization is crucial to reduce complexity. Join us for a live demonstration and walk thru of the all-in-one automation engineering framework the TIA Portal, and experience a system centric approach. Consistent, reliable diagnostics generated from system architecture and control standards, libraries, and full-on simulation of PLCs, Safety, Motion, and HMI.

AE-02

THU 9:00 - 10:50 PHOTO ROOM

IO-Link Configuration Workshop

WED 9:00 - 10:50 PHOTO ROOM

Mark Berger, Siemens

Siemens has applied the principles of IO-Link to many devices which are traditionally mounted inside the main enclosure. Experience Hands-On TIA Portal IO Link setup of Motor Starters, Voltage and Current Monitors, and 3SU Pilot Devices including our RFID Selector Switch. Understand how using IO-Link can eliminate and simplify IO wiring, eliminate IO Modules in your PLC or Remote IO Rack, substantially reduce installed cost and labor, all while improving diagnostics and reducing downtime.



THU 1:00 - 2:50 PHOTO ROOM

Motion Control: from Simulation to Real World Kevin Wu & Craig Nelson, Company and APC Engineer

Engineering for the SIMATIC S7-1500T CPU and SIMATIC Micro-drives can be performed using TIA Portal. Parameterization of motion control functions is performed via technology objects (TO). TOs give PLC programmers an easy

view of more complex functions, enable configuration via input screens, save time, and reduce the rate of error thanks to the use of PLC simulation tools. Attendees will go through a handling application with Delta Picker from digital simulation to actual machine download.



1.00 - 1.50 HALL OF LEGENDS 2

SICAR - Framework for Auto Controls Architecture Ben Kisley, Siemens

The SiCar standard has been developed as a flexible structure to help commonize your logic, HMI screen look and feel, and hardware architecture. We will cover the structure and gains you will see including templates for faster commissioning, standardized parts lists and common architecture--all owned by you.



THU 2:00 - 2:50 HALL OF LEGENDS 2

Turn-Key Power & Controls for the Auto Industry Jim Sulla, Electro-Matic Matt Leight, Siemens

LIONS LOCKER ROOM

Requests for power and control solutions in one configured panel - with one part number - are rapidly becoming customer preference. This session will show use cases and how we co-develop standard systems with clients to create unique but flexible systems to accelerate design and system start-ups for both integrators and customers.



3.00 - 3.50 HALL OF LEGENDS 2

End of Line AI for Automotive Manufacturing

Elizabeth Bullard, Ford Digital Engineering Steve Nykerk, Siemens Advanta Automotive Services

Leveraging machine vision high-end cameras and artificial intelligence provides the ability to identify defective parts and reduce manual inspection costs. This seminar and discussion will share examples of many different types and approaches of AI use cases as well a specific stamping example from Ford Motor Company.

DI-01

THU 1:00 - 1:50 HALL OF LEGENDS 1

Digital Roadmap for the Smart Supply Chain Brad Rosenhamer, Siemens

Does the lifecycle of logistics, planning, and optimizing the whole value chain support multi-sourcing strategies to reduce risk? Yes! Join this session to learn how manufacturing can use highly configurable products with flexible resources for optimized inventory velocity, and also learn how receiving inspection, warehousing, in-plant logistics, automation, and production flow control for optimal consumption of materials can help through the manufacturing process.

EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

SEMINA

Digital Roadmap for Smart Manufacturing

operations while preparing for tomorrow's innovations!

WED 10:00 - 10:50 VISITORS LOCKER ROOM

How do you start and accelerate your digitalization journey from planning to

execution and develop a comprehensive digitalization strategy for smart

manufacturing? Join this session to learn about creating an intelligent

production environment through connectivity, visualization, and data

analytics, as well as enabling digital planning, smart logistics, real time data

collection and automated close loop feedback. Revolutionizing today's

manufacturers do not realize is that the high number of different systems in

the production environment can create data silos. See how Siemens can help

with the integration of OT/IT to achieve maximum traceability and flexibility as

11:10 2:00 - 2:50

HALL OF LEGENDS 1

THU 10:00 - 10:50 HALL OF LEGENDS 1

EXHIBITORS

DI-02

DI-03

OT/IT Integration

Chris Liu & Luis Narvaez, Siemens

Suresh Rama, Siemens

Decisions are made based on data. Transparency is key for state-of-the-art technology and production. But most of the data within a factory is lost due to poor connectivity between the different levels of OT & IT. However, what many

SCHEDULE

WED 2:00 - 2:50 SOUTH PRESS ALCOVE DI-04

Digitalization in Motion Control

Craig Nelson & Kevin Wu, Siemens

well as to gain sustainability.

A look at how digitalization is evolving solutions for Motion Control with capabilities such as Digital Twin and edge computing. This session will cover high level manufacturing topics from an intermediate perspective based on common applications for Motion Control in robotics and other common applications. A mixture of discussions will strengthen the core understanding of how innovative digitalization techniques for Motion Control are supercharging machine designs and manufacturing concepts.

DI-05

THU 11:00 - 11:50 SUITE PANTRY LOBBY 5 WED 11:00 - 11:50 SUITE PANTRY LOBBY 5

Virtual Commissioning for Large Scale Systems Colm Gavin, Siemens

When commissioning large scale systems such as automotive production lines, high-bay warehouses, or distribution centers, how can you reduce the on-site commissioning time and ensure a smooth, safe, and reliable startup? How can you validate the control logic across multiple PLCs, drives and other electrical components before deployment? Join this session to hear how Siemens digital twin and virtual commissioning solutions can address customer challenges for startup of large-scale systems.

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WED 9:00 - 9:50 VISITORS LOCKER ROOM

Siemens eXplore Centers: Visit Us!

Ray Crowe & Keith Ferguson, Siemens

Discover the possibilities of a digital tomorrow with a visit to one of the eXplore Live Centers. Immerse yourself in the combination of digital and real worlds to build a strategy for your digitalization. Experience the opportunities digitalization offers firsthand in a tailored environment where you can interact with our experts and participate in workshops that addresses your challenges and discuss applicable use cases.

WED 9:00 - 9:50 SOUTH PRESS ALCOVE DI-07

Introduction to the Digital Thread Davide Picciotto, Siemens

Digital Threads are the map for the digital journey based on specific business workflows. In this seminar you will learn how the Digital Threads connect tasks and processes spanning the product and production lifecycles to solve the real world challenges. It provides digitalized processes and revolutionizes the way products are developed, produced, and optimized. With the Digital Threads Siemens Xcelerator enables manufacturing companies to become true digital enterprises with speed and at scale.

DI-08

THU 9:00 - 9:50 HALL OF LEGENDS 1

Siemens Xcelerator – Dream it. Make it. Mathias Oppelt, Siemens

WED 11:00 - 11:50 VISITORS LOCKER ROOM

Siemens understands that every company is facing its own, unique digital transformation. That's why we've created Siemens Xcelerator with interoperable, open, flexible, "as-a-Service", and cybersecure portfolio built to accelerate your digital transformation. If you are involved in guiding your company's digital transformation journey, join this session to learn how Siemens Xcelerator helps industrial companies by understanding their specific needs in a customer-centric innovation approach.

WED 2:00 - 2:50 VISITORS LOCKER ROOM DI-09

THU 9:00 - 9:50 SOUTH PRESS ALCOVE

Cloud-based SaaS Driving Decarbonization Francis Vatakencherry, Siemens

In this seminar you will learn how Siemens Xcelerator leverages Cloud as the foundation to drive business outcomes with solutions addressing a portfolio of use-cases driving OT/IT convergence and Sustainability. This includes Energy transparency that helps companies take action to keep energy usage and costs under control to reduce energy costs, avoid penalties, prevent energy fluctuations, and sustainably lower CO2 emissions driving strong Sustainability metrics.



THU 1:00 - 3:50 PRESS DINING ROOM

NEW G115D Distributed Drive Train for Mat Handling Rafael Larcher & Craig Henry, *Siemens*

The workshop will provide interactive/hands-on experience on product selection and commissioning, along with diagnostics and maintenance related functions for the NEW SINAMICS G115D distributed drive/motor system. It is designed with specialized features to address conveyor technology applications in the mat handling, automotive, airport, and food & beverage industries. Application examples are conveyors, sorting systems, warehouse and distribution logistics, parcel distribution.

DR-02

WED 1:00 - 1:50 VISITORS LOCKER ROOM

UL 61800-5-1: A New UL Standard for VFD

Nikunj Shah, Siemens

An old UL standard, UL508C for LV drives was obsolete and withdrawn by UL on Feb 1, 2020, and replaced with a newer standard UL61800-5-1, which was originally published in Jun 2012. The withdrawal of UL508C has greatly impacted the industry and raised many questions among drive users. This seminar provides an expert's perspective on what you need to know if you are a drive user, machine, panel or system builder, or an OEM, and also highlights strong benefits of using UL61800-5-1 certified drives.

DR-03

THU 9:00 - 10:50 PRESS DINING ROOM

Getting the Most from Your S120 Drives

Rudy Hauser & Craig Nelson, Siemens

The SINAMICS S120 Multi-Axis Drive System has been installed more than five million times globally across a wide range of applications. Yet not everyone is getting the most from this highly capable system. This workshop will provide key insights and "how-to" advice to help you get more from your investment, even in the toughest applications!

DR-04

THU 11:00 - 11:50 SUITE PANTRY LOBBY 6

An Introduction to Servo Motor Tuning

WED 11:00 - 11:50 SUITE PANTRY LOBBY 6

Brock Gale, Siemens

This seminar will cover how Siemens Servos are controlled and how they can be successfully tuned. We will start with one button tuning of the speed control loop in startdrive, what changes one button tuning makes to the system, how to use that data to tune a position control loop, and finish with a quick look at mechatronics tuning.

0P-01

THU 10:00 - 10:50 SUITE PANTRY LOBBY 5

Digital Enterprise – Factory Optimization

WED 10:00 - 10:50 SUITE PANTRY LOBBY 5

Steffen Klawitter, Siemens

Digital Factory Optimization unleashes the power of the digital twin to eliminate bottlenecks, optimize equipment, and streamline throughput in new facilities, expansions, or retrofits. This is done through the incredible power of simulation based on artificial intelligence. Join us to see how one digital twin can triple your benefits through optimization, testing of controls programs virtually, and determining optimum performance for the highest possible production.

OP-02 WED 1:00 - 1:50 SUITE PANTRY LOBBY 5 THU 1:00 - 1:50 SUITE PANTRY LOBBY 5

Modernize & Integrate your Automation & Drives Jim Wilmot & Jackie Stokes, Siemens

Join our session to learn how simple it is to integrate Siemens automation and drives into your existing plant, or to modernize the entire facility in steps, using state-of-the-art Siemens equipment that plays well in the sandbox with others. Siemens has solutions to enable a complete migration, in addition to new innovations that allow you to easily migrate select critical assets - like drives, IO, and HMI - on an existing legacy network with existing PLCs.

0P-03

THU 2:00 - 2:50 SUITE PANTRY LOBBY 5

Machine Monitoring – Improve Production with Data John Burns, Siemens

WED 2:00 - 2:50 SUITE PANTRY LOBBY 5

WED 3:00 - 3:50 SUITE PANTRY LOBBY 5

This seminar will first discuss the financial importance of collecting operational data into your automation platform to improve production and reduce downtime. We will show attendees different solutions Siemens can provide to collect key performance and diagnostic data such as current, voltage, power, power factor, runtime, cycle count and other analog signals.

0P-04

THU 3:00 - 3:50 SUITE PANTRY LOBBY 5

Lower Maintenance Tasking While Reducing Energy Andrew Tattersall, *Siemens*

Explore various use cases and see how Siemens Smart Infrastructure tailored solutions were used to fix operations problems. Learn how a recent customer implemented asset performance services, including the connection of CMMS (computer maintenance management system) data with live building data to reduce their operational costs through maintenance – ensuring an overall reduction in energy by 40%. The data collection provided the operator with full transparency of the process.

OP-05 WED 9:00 - 9:50 SUITE PANTRY LOBBY 5 SUITE PANTRY LOBBY 5

Specifications for Smart Factories

Michael Schroeder & Ford Cheeseman, Siemens

Turn your factory into a digital enterprise by aligning your operations around a single source of truth – a Digital Enterprise Functional Specification. In this session, you will discover how the specification framework turns the complexity of digitalization into a competitive advantage that works to achieve your organizational goals. We will explore application in the areas of cybersecurity and industrial communications, then expand into complete digital transformation.

SEMINARS



FLOOR PLAN

SCHEDULE

SEMINARS

WED 9:00 - 9:50 LIONS POST GAME INT. ROOM

SiMove - AGV Standards Made Easy

Greg Harris, Siemens

0T-01

The AGV/AGC market offers many automation solutions across suppliers, including proprietary "black-boxes." A standardized, off-the-shelf control and motion solution that brings common hardware, software, logic and connectivity, regardless of vehicle vendor, brings multiple advantages. We will discuss what this can look like, how it is developed for your needs, and benefits to your "Flexible Factory."

OT-02

WED 8:00 - 8:50 110 8:00 - 8:50 LIONS POST GAME INT. ROOM HALL OF LEGENDS 3

11:10 9:00 - 9:50

HALL OF LEGENDS 3

CNC Technology for Machine Tool Builders and Users Tiansu Jing, Siemens

Everyone talks about digital twin as a concept. But how can a machine builder or a machine tool end user really use it in their daily work? No matter which role you are in, a machine builder or a machine user, from this seminar, you will learn how you can benefit from the digital twin technology and what makes the digital twin technology practical in the real world for both machine tool builders and machine tool end users.

OT-03



Accelerate Your OT Network Security

Chuck Tommey, Siemens

Demystify the process of taking a network from insecure or "lightly" secured to the current state of the art in OT Cybersecurity. We will layout the natural implementation progression of cyber-protections for an Operational Technology (OT) network as prescribed by the IEC 62443 and NIST SP 800-82 standards. We will show why a dedicated OT Cybersecurity Program is essential to obtain and maintain security in an OT environment. Find out how to get started and then accelerate your OT cyber journey.

0T-04

THU 11:00 - 11:50 HALL OF LEGENDS 1

THU 2:00 - 2:50 HALL OF LEGENDS 3

Macro-Economic Trends | Supply Chain Issues, Inflation and More | How Financing Can Alleviate These Pressures

Abid Kabani, Siemens

Supply chain issues, increasing inflation, and volatility in the rate environment are just a few of the many factors that are contributing to a growing sense of uncertainty throughout the U.S. market. As businesses try to assess the overall economic environment and forecast for the future, acquiring the equipment and technology needed to grow is becoming an increasing challenge. Join Abid Kabani as he discusses how financing can be a crucial method towards alleviating and mitigating these growing economic risks and pressures.

-05	WED 1:00 - 1:50
	LIONS POST GAME INT. ROOM

THU 1:00 - 1:50 HALL OF LEGENDS 3

The Rise of Servitization for Machine Builders Josh Angel, Siemens

75% of machine builders and operators expect services to make up a significantly bigger part of their revenue in the next 3-5 years, with revenue from "advanced service contracts" expected to more than double by 2024. This discussion will explore how digital business transformation improves lifecycle relationships and enables growth in services revenue and margin.

OT-06	WED 11:00 - 11:50 LIONS POST GAME INT. ROOM	THU 11:00 - 11:5 HALL OF LEGENDS 3

Power Distribution Techniques for UL508A Panels

Jim Sirois, Siemens

Explore different methods to streamline panel design reducing engineering, wiring, and panel space while creating a more flexible solution which can easily accommodate late engineering changes and field implementation.

0T-07 LIONS POST GAME INT. ROOM HALL OF LEGENDS 3

RFID or RTLS - Where, When and How? Jeff Snyder, Siemens

WED 10:00 - 10:50 LIONS POST GAME INT. ROOM

Manufacturers have led the way in pioneering manufacturing automation to compete effectively in today's global marketplace. They use identification and locating technology to automatically synchronize production flow, maximize the utilization of valuable resources and minimize human errors to reduce costly delays. Implementing RFID and/or RTLS can provide more detailed control and improve operating efficiency throughout the entire supply chain and manufacturing processes.

0Т-08

THU 10:00 - 10:50 HALL OF LEGENDS 3

Your Shortcut to Robotics

Kevin Wu, Siemens

Robots can benefit companies in every sector, however, integrating them into an automation environment presents many challenges. The SIMATIC Robot Integrator and SIMATIC Kinematic technology now makes the benefits of robotics readily available to all users, you just need to know your way around the TIA Portal. Save on engineering costs and benefit from a single engineering environment for machines and robots.

OT-09 WED 3:00 - 3:50 VISITORS LOCKER ROOM

THU 3:00 - 3:50

Siemens Cooperates with Education Successes Amanda Beaton, Siemens

Hear how Siemens works with schools across the country to provide hands-on training opportunities in advanced manufacturing, mechatronics, and digitalization for students in high school, community college and university. Instructors from SCE Partner schools will present success stories from several programs utilizing Siemens Automation technologies successfully in the classroom.

FMINARS 36

THU 10:00 - 10:50

0T-10

THU 3:00 - 3:50 SOUTH PRESS ALCOVE

Designing a Plant-wide Network as Your OT Backbone

WED 11:00 - 11:50 SOUTH PRESS ALCOVE

WED 10:00 - 10:50 SUITE PANTRY LOBBY 6

Ford Cheeseman, Siemens

A modern industrial network is essential for manufacturers and industrial companies. Using the latest networking technologies and harnessing the power of connectivity, you can accelerate your digitalization goals. This seminar will help you design or modernize your network through easy-to-understand concepts. This will include IT and OT network integration, secure segmentation, and establishing the OT network as your operational backbone. This seminar is intended for anyone involved in network design decisions and is applicable for both non-technical and technical roles.

PSU-01

THU 10:00 - 10:50 SUITE PANTRY LOBBY 6

Advanced Power Supply System - Utilizing ProfiNet & Ethernet IP Communication

Name Siemens

We'll show how you can utilize The PSU8600 Power Supply System via Profinet and Ethernet IP protocols for your digitalization and Industry 4.0 needs. This innovative power supply system can be fully integrated into Totally Integrated Automation (TIA Portal). The system is useful in networked automation applications with either Ethernet IP or PROFINET interface. This SITOP Power Supply System not only offers diagnostics options, it also supports other Profinet functions like energy management (PROFlenergy). The modular system can be expanded to 36 outputs, multiple voltage outputs and provides buffer and DC UPS modules for protection against power failures.

SM-01

THU 1:00 - 1:50 SUITE PANTRY LOBBY 6

Asset Intelligence - More Than Uptime

WED 1:00 - 1:50 SUITE PANTRY LOBBY 6

Alexander Hill, Siemens

Automated analytics is often the first step for industrial digitalization projects with the main goal of downtime reduction. Did you know that the same data can also be used to improve product quality, enable safer operations, improve maintenance precision and even improve corporate sustainability? Join us to learn how our Senseye solutions improve production and management KPIs by analyzing and predicting machine and maintainer behavior using AI - and you do not have to be data scientist!

SM-02

2.00 - 2.20 SUITE PANTRY LOBBY 6

How to Extend the Lifetime of your Equipment

WED 2:00 - 2:50 SUITE PANTRY LOBBY 6

Eyad Muammar, Siemens

Do you have equipment that is difficult to maintain? Has downtime become a huge burden because you don't have the right spare parts on hand? Are you looking for the best way to modernize your existing equipment? Join us and learn how you can leverage the Siemens Digital Enterprise Services team to optimize your current assets and create a plan for the future of your plant. From developing a critical spare parts strategy to creating a migration plan together, Siemens is your success partner.

		LIONS LOCKER ROOM	HALL OF LEGENDS 2					
	What's New with SIMATIC HMI in 2023 Alan Cone, Siemens							
al e is h n, al n	SIMATIC HMI applications, i product relea latest innova	product and technology including a sneak preview ases and product strateg ations can help impro	an overview of the latest and greatest innovations that directly impact your into the future roadmap for upcoming gy moving forward! Learn how these ve your applications; reduce your oductivity in the coming years.					
	WN-02	WED 9:00 - 9:50 LIONS LOCKER ROOM	THU 9:00 - 9:50 HALL OF LEGENDS 2					

WED 10:00 - 10:50

WN_01

What's New with SIMATIC SW-PLC-IO in 2023 Jim Wilmot, Siemens

Join the SIMATIC PLC/IO/Motion team for an overview of the latest and greatest SIMATIC product and technology innovations that directly impact your applications. Siemens recently released V18 of the TIA Portal containing lots of impactful new SW features, hardware innovations, and FW updates that you'll want to hear about. Come find out how these latest innovations can help

improve your applications, reduce your engineering time and increase your

WED 11:00 - 11:50 LIONS LOCKER ROOM THU 11:00 - 11:50 HALL OF LEGENDS 2 WN-03

What's New with Siemens Wireless in 2023

Cole Holland & Joel Green, Siemens

productivity in the coming years.

As Industrial Internet of Things (IIoT) and edge devices become more prevalent in the industrial space, wireless connectivity is becoming more of a necessity. Whether you are looking for a solution for your plant floor, outside your plant or even an option to span multiple miles, developing the right wireless solution can be complex and daunting. Join Siemens as we help you navigate our wireless offerings including Industrial 5G, Wi-Fi 6, Cellular and Private Broadband Wireless.

WED 8:00 - 8:50 LIONS LOCKER ROOM WN-04

THU 8:00 - 8:50 HALL OF LEGENDS 2

What's New with Siemens Controls in 2023 lim Sirois, Siemens

Learn about the latest in Siemens Industrial Controls for 2023. See what's happening with exciting and new controls products including 8WD6 IO-Link Signal Columns DC Load Monitoring Relays and new 3TX Safety Coupling Relays. Also, learn how new Safety Input 3RT Contactors with low current draw streamlines electrical design.



EXHIBITORS

SEMINARS

AUV-1		0:00 - 9:50 ANTRY LOBBY 6
Present AUVESY-MDT	tation by Auvesy-MDT	

New Approaches to PLC Version Control and Device Backup

WED 1:00 - 1:50 ASSISTANT COACH LOCKER ROOM

Adam Gluck, Copia Automation

COP-1

Traditional software has been transformed using modern DevOps practices, accelerating team productivity, improving code quality, and maximizing uptime. These same practices are now being adopted in industrial automation and delivering the same benefits. In this session, we will discuss and demonstrate how Git-based version control can effectively manage PLC and control programs, ensuring that all changes are tracked and quickly reviewed during development and how the tools can be used to automatically back up control devices and alert teams to changes on the factory floor.

DMC-1

THU 1:00 - 1:50 VISITORS POST GAME INT. ROOM

THU 2:00 - 2:50

ASSISTANT COACH LOCKER ROOM

Unpacking PackML: More Than Just Packaging Machines

Aaron Shoemaker, DMC, Inc.

DMC has applied the OMAC PACKML standard to a variety of discrete manufacturing applications using Siemens technologies and tools. A PACKML implementation has a wide range of benefits throughout the equipment lifecycle, starting with faster software development and shorter debug times for the OEM and leading to operational consistency and reduced maintenance costs for the end user. PACKML includes a state model for standardized, robust programming that is easy to troubleshoot as well as PackTags that provide standard communication interfaces both to other machines as well as higher level systems. This presentation will provide an overview of the PACKML standard and its benefits to both OEMs and end users, a review of tools provided by Siemens for its implementation and case studies of DMC projects showcasing successful PACKML implementations.

> WED 9:00 - 9:50 ASSISTANT COACH LOCKER ROOM

Enabling Engineering Efficiency in Industrial Control System Design

Sean Mulherrin, EPLAN

EPL-1

EPLAN is the global leader of electrical and fluid control system design software that is hyper focused on industrial systems. With efficient engineering tools for 2D and 3D, EPLAN designs use component manufacturing data that is ready and available inside the data portal. From front end engineering solutions to advanced harness designs, EPLAN utilizes existing data to remove repetitive engineering activities, increasing throughput and effective change management.

EPL-2 WED 11:00 - 11:50 ASSISTANT COACH LOCKER ROOM

Climate Control – The Critical Requirement Herb Villa, EPLAN

Overview of climate control products & capacities and recommendations for operational deployments. Especially for the enclosure/cabinet(s) supporting mission critical operational or network components and appliances. As more advanced control products are installed in the industrial environment, increased processor performance and usage will create more heat. We have always known this heat must be removed. But as we install and support more of these systems, even greater thermal loads are created. Loads that can no longer be managed by just a simple fan system. In this session, the various climate control systems and capabilities will be reviewed. In addition to common fan systems, new air conditioner products will be introduced as well as row and room based solutions to support higher density installations. System designed to support installations at The Edge in any space not dedicated to IT equipment (factory floor, distribution center, off shore oil platform, etc.). As well as higher capacity systems to support remote IT spaces.

FOR-1

VISITORS POST GAME INT. ROOM

What's New in ISO 14119?

Jenny Tuertscher, Fortress

This presentation will provide attendees with an understanding of Trapped Key Systems. These versatile systems can be used in most environments to enforce a process, to control access, and to prevent unexpected start-up. Application of Trapped Key Systems have long been used and will be included as interlock devices in the new revision of ISO 14119. In some cases, personnel authentication and authorization system can be used along with Trapped Key Systems to make sure the right person is doing the right task at the right time. Safeguarding supportive systems, as defined in ISO/TR 22053 will be discussed as an approach to provide personnel authentication and authorization for automation related tasks. Specific examples will be shared on potential approaches for implementing safeguarding supportive systems and Trapped Key Systems.

FLOOR PLAN

SEMINARS

APRIL 12 - 13 / FORD FIELD

MINARS 38

HIL-1

THU 11:00 - 11:50 VISITORS POST GAME INT. ROOM

Future-proofing Multi-Vendor, Multi-Protocol Network Connectivity on the Factory Floor and up to the Cloud

Victor Wolowec, Hilscher NA, Inc.

Profinet, Ethernet/IP, Ethercat, Modbus, TSN, Profibus, DeviceNet, etc. Whether you think the protocol wars are over or are just gearing up for another round, Hilscher has you covered. Starting with our full range of embedded chips and modules to our expanding line of PC Cards for Industrial Computers, we can make your products fit any communication need. Our Protocol Convertors offer the industry's widest range of native protocol conversions. This seminar will present what Hilscher has now and also our newest line of IIoT and IO-Link solutions.

KYN-1

THU 2:00 - 2:50 SOUTH PRESS ALCOVE

Best Practices for Applying Actuators to Optimize Performance, Efficiency, and Overall Cost in **Automated Machinerv**

Carl Richter, Kyntronics

The performance bar continues to be raised for machine designs and automated equipment. With that come demands for increased productivity, less waste, energy efficiency, better ergonomics and reduced maintenance costs. This seminar will explore the advantages and disadvantages of different actuator technologies including hydraulic, electro-mechanical and SMART electro-hydraulic along with their impact on Sustainable Manufacturing initiatives. Specific operating cost comparisons and Total Cost of Ownership considerations will also be explored.

WED 3:00 - 3:50 ASSISTANT COACH LOCKER ROOM LAP-1

VFD Application Considerations

Scott Steuer, Lapp

Cable design and selection process, shielding considerations, grounding suggestions and troubleshooting installations.

LEU-1

THU 1:00 - 1:50 ASSISTANT COACH LOCKER ROOM

The Principles of Machine Safety Rod Karch, Kyntronics

• US Regulatory Requirements

- Safety Standards
- Risk Assessment and Risk Reduction
- Safety Performance Level
- Machine Safety Cycle and Safety Services
- Safety Solutions

LTU-1	WED 2:00 - 2:50
	ACCICTANT COACIL

THU 9.00 - 9.50 VISITORS POST GAME INT. ROOM

Practical Implementation of Industry 4.0 Technology

STANT COACH LOCKER ROOM

Scott Phillips, Industry 4.0 Accelerator. Centrepolis Accelerator at Lawrence Technological University

The Industry 4.0 Accelerator is hosting a session about practical utilization of Industry 4.0 technologies to improve manufacturing operational efficiencies. We will share examples from unique companies with solutions that are easy to implement for any manufacturer to improve throughout, quality and operational efficiency and learn about the details on the Industry 4.0 Accelerator featuring a few of our tech clients.

LTU-2

THU 3:00 - 3:50 ASSISTANT COACH LOCKER ROOM

Grants for Manufacturers Everywhere - Follow the \$

Dan Radomski, Industry 4.0 Accelerator. Centrepolis Accelerator at Lawrence Technological University

Grants, grants, grants! There is an unprecedented amount of funding available to manufacturers to improve their operational efficiencies. This includes funding to support assessments and implementations of industry 4.0, energy efficiency, emission and waste reduction, as well as manufacturing tax credits. The session will help manufacturers understand the different programs that are available to them, qualification requirements and how to apply.

PE-1

THU 9:00 - 9:50 VISITORS POST GAME INT. ROOM

Digitalization: A Practical Guide

Sam Hoff, Patti Engineering

Sam Hoff and his team of digital experts at Patti Engineering review practical applications for digitalization in manufacturing. Topics include Edge/Cloud, Track/Trace/RTLS, Digital Twins, Robotics, and Data Analytics. The team will discuss the most impactful steps you can take and how to make a plan - no matter where in the process your facility is now.

RIT-1

THU 9:00 - 9:50 ASSISTANT COACH LOCKER ROOM

The Automotive Industry in 2023 loel Ferasol, Rittal

While it's no surprise this year's outlook report contains some sobering forecasts as the world continues to deal with the COVID-19 pandemic, there are indeed some bright spots in terms of production levels, sales, and exciting developments for OEMs, panel builders, machine builders, systems integrators, and other players in the industrial automation space relative to their work in the automotive industry.

FLOOR PLAN

SCHEDULE

SEMINARS

SEMINARS

Choosing the Right Industrial Enclosures for Your Food and Beverage Facility

Stan Vanlandingham, Rittal

RIT-2

The ideal enclosure for high-hygiene, frequent washdown environments does exist, and making the right selection can save you time and money while preventing unnecessary downtime. During this webinar, you will learn: 1) The sanitation standards and hygienic design principles that guide manufacturers of enclosures for high-hygiene environments, 2) Hygienic design features to look for when specifying an enclosure, and 3) How choosing the right enclosure can save you time and money in the long run.

RIT-3

THU 11:00 - 11:50 ASSISTANT COACH LOCKER ROOM

Where Are We Going At The Edge – A Look Ahead Herb Villa, *Rittal*

Even before COVID-19, we were talking about The Edge. And watching more and more applications deployed in the Industrial environment: Edge Computing, Edge Applications, Edge as a Service, the Edge Data Center, Cloud Edge. And on and on. And certainly, The Edge has lived up to it's potential, even as we fight a host of ongoing disruptors resulting from the global pandemic. But where do we go from here? And what is next at The Edge? This presentation will not look into some mystical crystal ball. No specific predictions for the future Edge. Or introduce another new term for what The Edge can do. Rather, current trends and their impact on The Edge will be reviewed. And critically – a sense of what we should be looking for from The Edge as we move past the current global megatrend on to the next one.



WED 10:00 - 10:50 ASSISTANT COACH LOCKER ROOM

Rittal & EPLAN: Better Together – How Partnering Together Creates Significant Competitive Advantage for You

Brian Jung & Kruno Kutnohorski, Rittal/EPLAN

Rittal & EPLAN are strong partners for sustainable panel building and switchgear manufacturing, but working together creates an unparalleled level of value to enable your business to thrive and grow.

S0F-1

VISITORS POST GAME INT. ROOM

Test, Prove, and Troubleshoot Your Critical Control System Ethernet Cables and Ethernet Networks Alex Guerin, Softing

The Ethernet network for your DCS, PLC, or Ethernet field devices is the most critical network in your plant. You have a mix of fiber, copper, WiFi, and POE. You have performance needs, reliability needs, and constant moves, adds, and changes. To complicate things, unlike a business network, you have a dirty environment, moving and shaking machines, and EMI from large machines, moving machines, and even moving cables. Learn how to easily troubleshoot Ethernet cables, connectors, EMI issues, duplicate IPs, and even bit errors.

MANUFACTURING MAMERICA 23

SCHEDULE

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80/20

1701 South 400 East Columbia City, IN 46725 (260) 248-8030 8020.net

Applied Control Engineering, Inc.

700 Creek View Rd. Newark, DE 19713 (800) 231-8101 www.ace-net.com

Applied Manufacturing Technologies

219 Kay Industrial Dr. Lake Orion, MI 48359 (248) 409-2051 www.appliedmfg.com

ATI Industrial Automation

1031 Goodworth Dr. Apex, NC 27539 (919) 772-0115 www.ati-ia.com

AUVESY-MDT

3480 Preston Ridge Rd., Suite 450 Alpharetta, GA 30005 (678) 297-1000 auvesy-mdt.com/en/

Centrepolis Accelerator at Lawrence Technological University 21415 Civic Center Dr., Suite 100 Southfield, MI 48076 (248) 204-2452 www.centrepolisaccelerator.com

Conductix-Wampfler

10102 F St. Omaha, NE 68127 (800) 521-4888 www.conductix.us

Copia Automation

20 W 22nd St., Suite 906 New York, NY 10010 (646) 389-0222 www.copia.io

CSIA - Control System Integrators Association 111 W Jackson Blvd. Evanston, IL 60201 (847) 686-2245 www.controlsys.org

Datalogic, Inc.

959 Terry St. Eugene, OR 97402 (541) 683-5700 www.datalogic.com

DMC, Inc.

2222 N Elston Ave., Suite 200 Chicago, IL 60614 (312) 255-8757 www.dmcinfo.com

ebm-papst Inc.

100 Hyde Rd. Farmington, CT 06032 (860) 674-1515 www.ebmpapst.com/us

eFlex Systems - an Epicor Solution

210 W. Tienken Rd. Rochester Hills, MI 48306 (833) 463-3539 www.eflexsystems.com

Entrelec / AMES / TE Connectivity Corp.

1050 Westlakes Dr. Berwyn, PA 19312 (513) 515-4144 www.te.com/entrelec

EPLAN

425 N. Martingale Rd., Suite 470 Schaumburg, IL 60173 (847) 240-4667 www.eplanusa.com

EWELLIX

3800 Sierra Cir., Suite 310 Center Valley, PA 18034 (800) 313-4753 www.ewellix.com

Festo

1377 Motor Pkwy., Suite 310 Islandia, NY 11749 (800) 993-3786 festo.com

Fives DyAG Corp.

23400 Halsted Rd. Farmington Hills, MI 48335 (248) 426-8300 www.fivesgroup.com/smart-automation-solutions

Fori Automation 13231 23 Mile Rd. Shelby Township, MI 48315 (586) 247-2336 www.foriauto.com

Fortress 1455 Jamike Ave., Suite 100 Erlanger, KY 41018 (859) 578 2390 www.fortress-safety.com

Helukabel 1201 Wesemann Dr. West Dundee, IL 60118 (847) 930-5118 www.helukabel.us/

Hilscher NA, Inc. 2525 Cabot Dr., Suite 200 Lisle, IL 60532 (630) 505-5301 www.hilscher.com

Kyntronics Inc. 6565 Davis Industrial Pkwy. Solon, OH 44139 (440) 497-4092 www.kyntronics.com

LAPP North America 29 Hanover Rd. Florham Park, NI 0793

Florham Park, NJ 07932 (800) 774-3539 e.lapp.com/us

Leadec

9395 Kenwood Rd., Suite 200 Cincinnati, OH 45242 (513) 731-3590 usa.leadec-services.com

DIRECTORY

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Leuze electronic, Inc. 55395 Lyon Industrial Dr. New Hudson, MI 48165 (248) 486-4466 www.leuze.com/en-us

Linear Automation

61 Rawson Ave. Barrie, ON, Canada L4N 6E5 (705) 735-0000 www.lineartransfer.com

Linmot

N1922 State Rd. 120, Unit 1 Lake Geneva, WI 53147 (248) 330-4729 linmot.com

Litmus

2350 Mission College Blvd. Santa Clara, CA 95054 (416) 434-9181 www.litmus.io

Magswitch Technology 29445 Beck Rd., Suite A-108 Wixom, MI 48393 (248) 318-1746 magswitch.com

Michigan Manufacturers Association 620 S Capitol Ave. Lansing, MI 48933 (517) 487-8555 www.mimfg.org

Novastar Solutions 35200 Plymouth Rd. Livonia, MI 48150 (734) 453-8003 www.novastar.net

Patti Engineering 2110 E Walton Blvd., Suite A Auburn Hills, MI 48326 (248) 364-3200 www.pattiengineeri

Quabbin Wire & Cable Co., Inc. 10 Maple St. Ware, MA 01082 (413) 967-6281 www.quabbin.com

Rittal 425 N Martingale Rd., Suite 400 Schaumburg, IL 60173 (800) 477-4000 www.rittal.com

SEMI Foundation 673 S Milpitas Blvd. Milpitas, CA 95035 (408) 943-6900 www.semifoundation.org

Softing Inc.

7209 Chapman Hwy. Knoxville, TN 37920 (865) 251-5252 industrial.softing.com/us

Staubli Corporation

201 Parkway West Duncan, SC 29334 (864) 433-1980 www.staubli.com

Stober

1781 Downing Dr. Maysville, KY 41056 (606) 759-3600 www.stober.com

SUNY Delhi

545 Delhi Dr. Dehli, NY 13753 (607) 746-4355 www.delhi.edu

Trimasys Control Solutions Inc.

77 Sugar Creek Center Blvd., Suite 650 Sugar Land, TX 77478 (248) 486-4466 www.trimasyscontrol.com

Tsubaki

301 E Marquardt Dr. Wheeling, IL 60090 (847) 459-9500 www.ustsubaki.com

University of Toledo

2801 W Bancroft St. Toledo, OH 43606 (419) 530-3349 www.toledo.edu

Washtenaw Community College

4800 E Huron River Dr. Ann Arbor, MI 48105 (734) 677-5472 www.wcccnet.edu

Wayne State University

4855 4th St. Detroit, MI 48201 313-577-0800 engineering.wayne.edu/engineering-technology

WERMA, USA

1266 Oakbrook Dr., Suite A Norcross, GA 30093 (470) 361-0600 www.werma.com/us

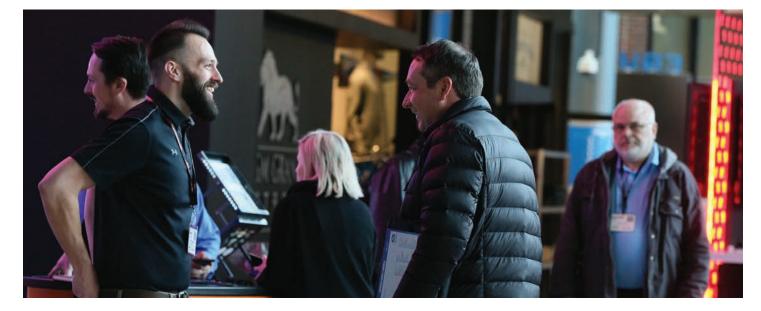
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