

APRIL 12-13 // DETROIT // FORD FIELD

MANUFACTURING **IN** AMERICA **23**

SIEMENS

 **ELECTRO-MATIC**
a SunSource Company

COMMUNITY.

COLLABORATION.

INNOVATION.

ATTEND**MiA**.COM

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.

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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](https://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
- G** Gate G (St. Antoine) Southeast Entry & Overflow Parking
- T** 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.

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.

WEDNESDAY

APRIL 12



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

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



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

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



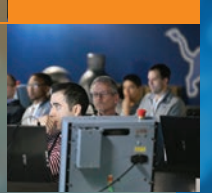
THURSDAY

APRIL 13



EXHIBITOR BOOTHS
PAGE 11
8:00A - 4:00P

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



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.



WEDNESDAY APRIL 12TH

THE 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

- 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.
- SINAMCS 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.



JAKE HALL



SHAWN TIERNEY

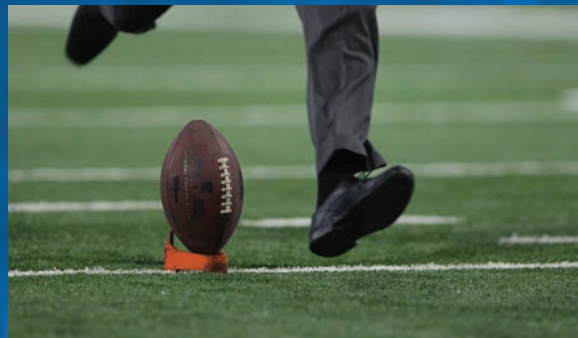
ACTIVITIES



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

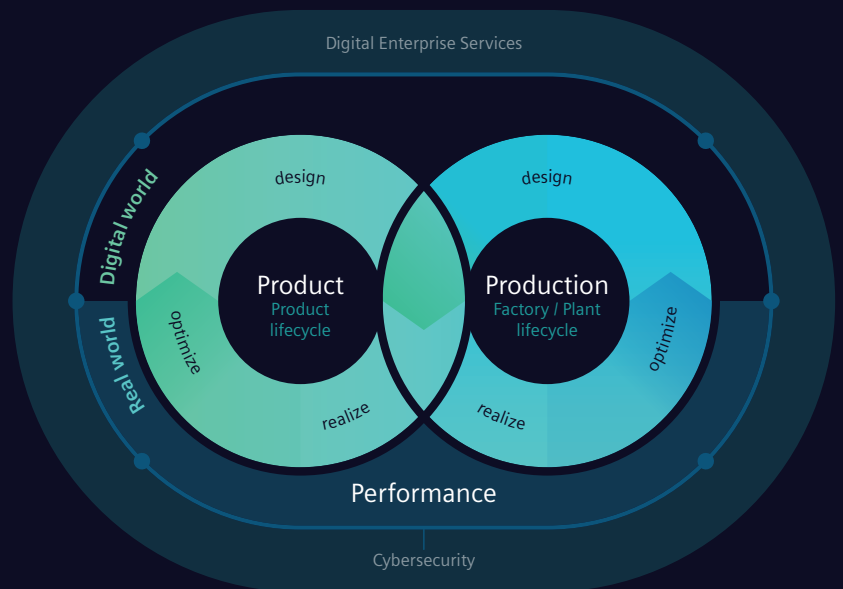
ALL DAY • BOTH DAYS • 2nd FLOOR of WEST ATRIUM

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**

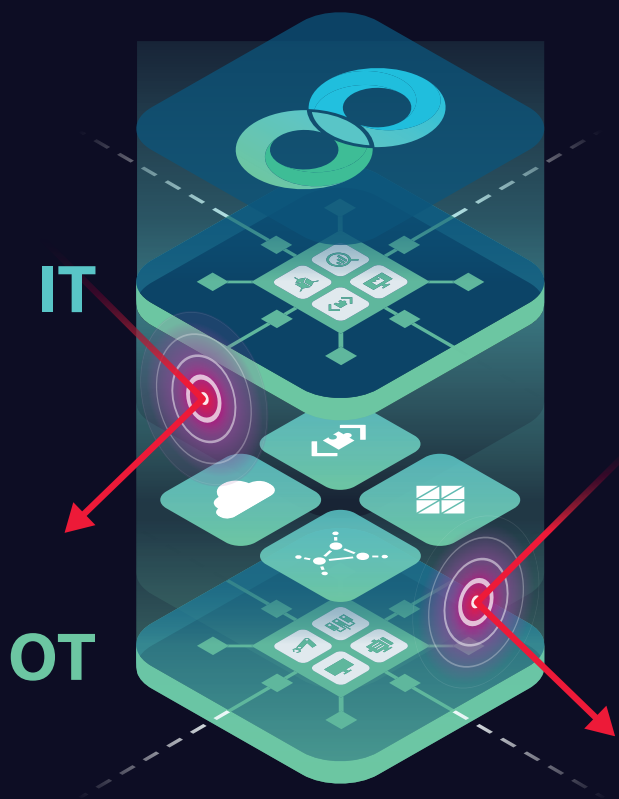
siemens.com/digital-enterprise



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 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.



ELECTRO-MATIC
a SunSource Company

**WE'RE
HIRING!**

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 technology-based products, differentiated services and solutions to the industrial automation marketplace.

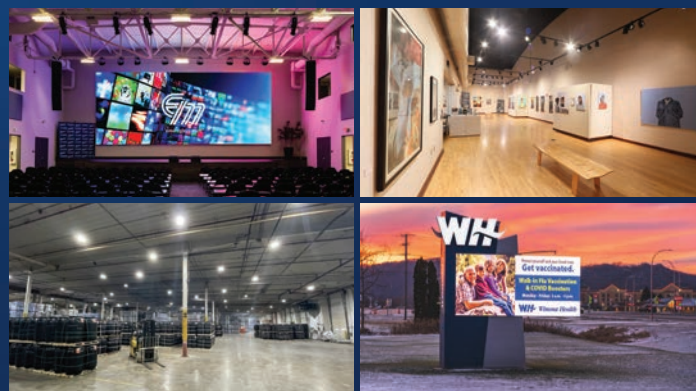
electro-matic.com

CELEBRATING OVER **25** YEARS WITH **SIEMENS**

A World-Class Product Mix

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





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.

electro-matic.com/solutions

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.

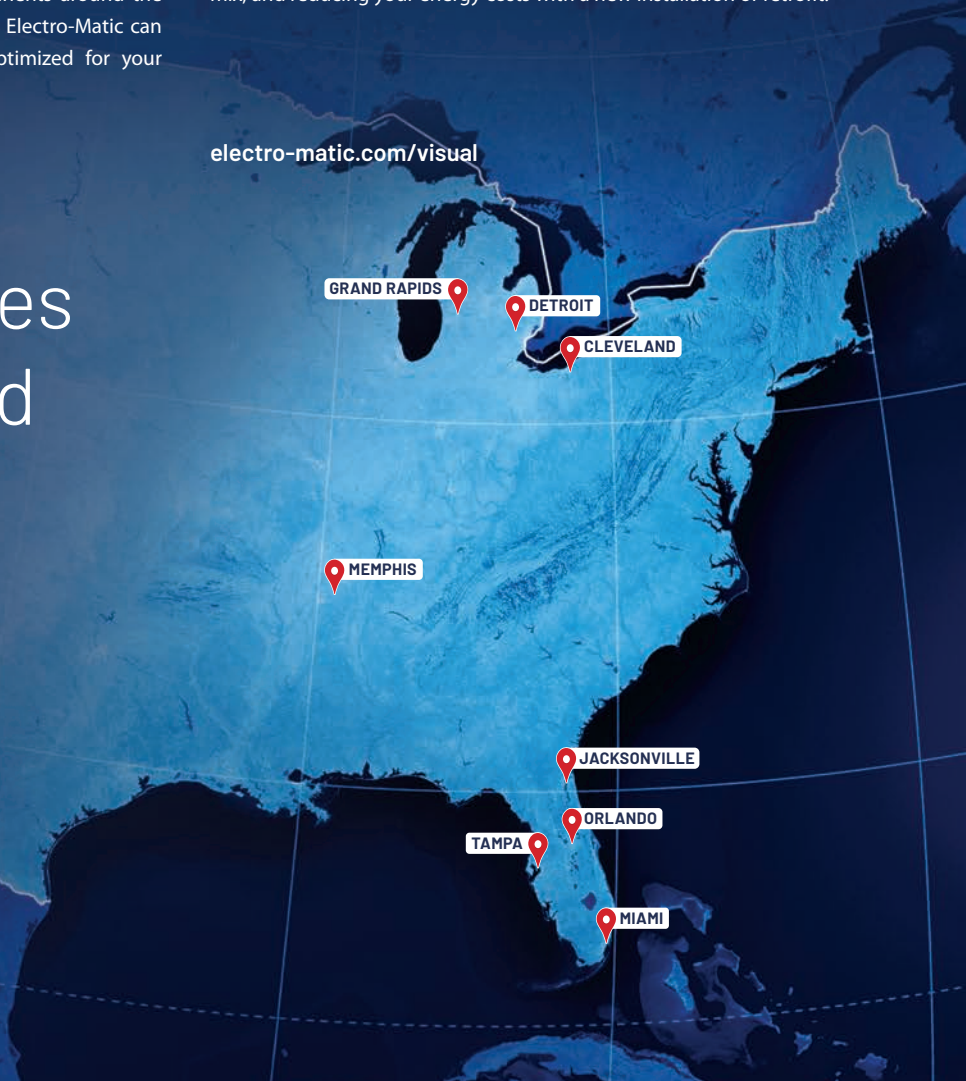
electro-matic.com/visual

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



EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

EXHIBITORS



WE'RE HIRING!

EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

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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FLUID POWER



FLUID PROCESS



FLUID CONVEYANCE



INDUSTRIAL AUTOMATION



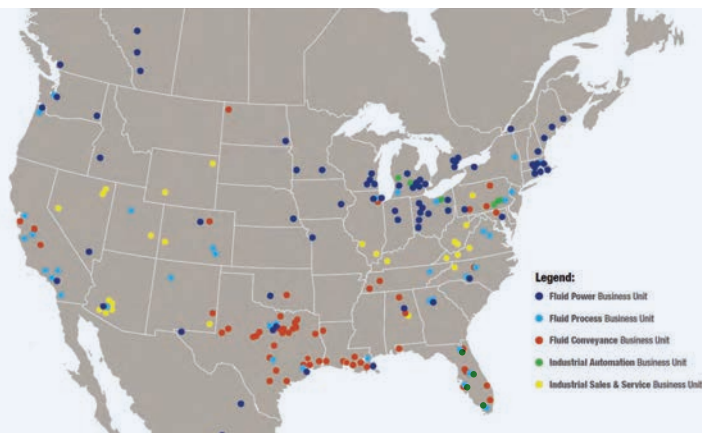
INDUSTRIAL SALES & SERVICE



SERVICE & REPAIR



OUR JOINING FORCES FOOTPRINT



NETWORKING RECEPTION SPONSOR



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.

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



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.

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WE'RE
HIRING!

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.

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

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WE'RE
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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.

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

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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

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.

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

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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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WE'RE
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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

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WE'RE
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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

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Smart People. Expert Solutions.®

WE'RE
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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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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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an Epicor solution

eFlex Systems - an Epicor Solution

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.

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

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BY TE CONNECTIVITY

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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MAKERS IN MOTION

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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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.

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

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WE'RE
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Fives DyAG Corp.

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.

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

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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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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.

Ryan McMasters • (859) 638-0030 • ryan.mcmasters@fortress-safety.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 converters 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 • vvowolowec@hilscher.com

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Kyntronics Inc.

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.

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

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WE'RE
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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 in-house UL Client Data Program and UL certified laboratory to ensure the highest quality. For more information, visit us online at www.e.lapp.com/us to browse our full range of products and so

Kat Atienza • (973) 524-1494 • kat.atienza@lapp.com

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WE'RE
HIRING!

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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WE'RE
HIRING!

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

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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

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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 AI. 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.

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

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WE'RE HIRING!

Magswitch Technology

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.

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

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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.

Tracy Russold • (517) 487-8555 • russold@mimfg.org

503



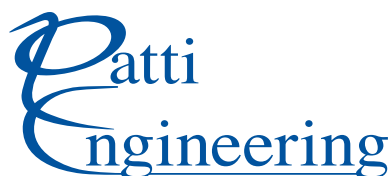
WE'RE HIRING!

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

305



WE'RE HIRING!

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

402



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.

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

101

WE'RE
HIRING!

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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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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Stober

Working with STÖBER 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. STÖBER 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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WE'RE
HIRING!

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

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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

103



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

302

WireCrafters

YASKAWA

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

106

Yaskawa America, Inc., Motoman Robotics Revision

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

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Centrepolis Accelerator at Lawrence Technological University

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.

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

501



WE'RE
HIRING!

SUNY Delhi

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

507



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

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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.

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

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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



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.



Robostangs #548

Northville High School • Northville, Michigan

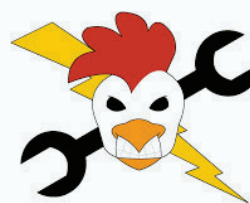
For 18 years, the Northville Robostangs have touched all aspects of learning. We encourage students to participate in various FIRST programs to all aspects of STEM education. Currently, our 77 members work towards spreading the message of FIRST within our community and beyond. We achieve this through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



Knight Riders #6099

Osborn High School • Detroit, Michigan

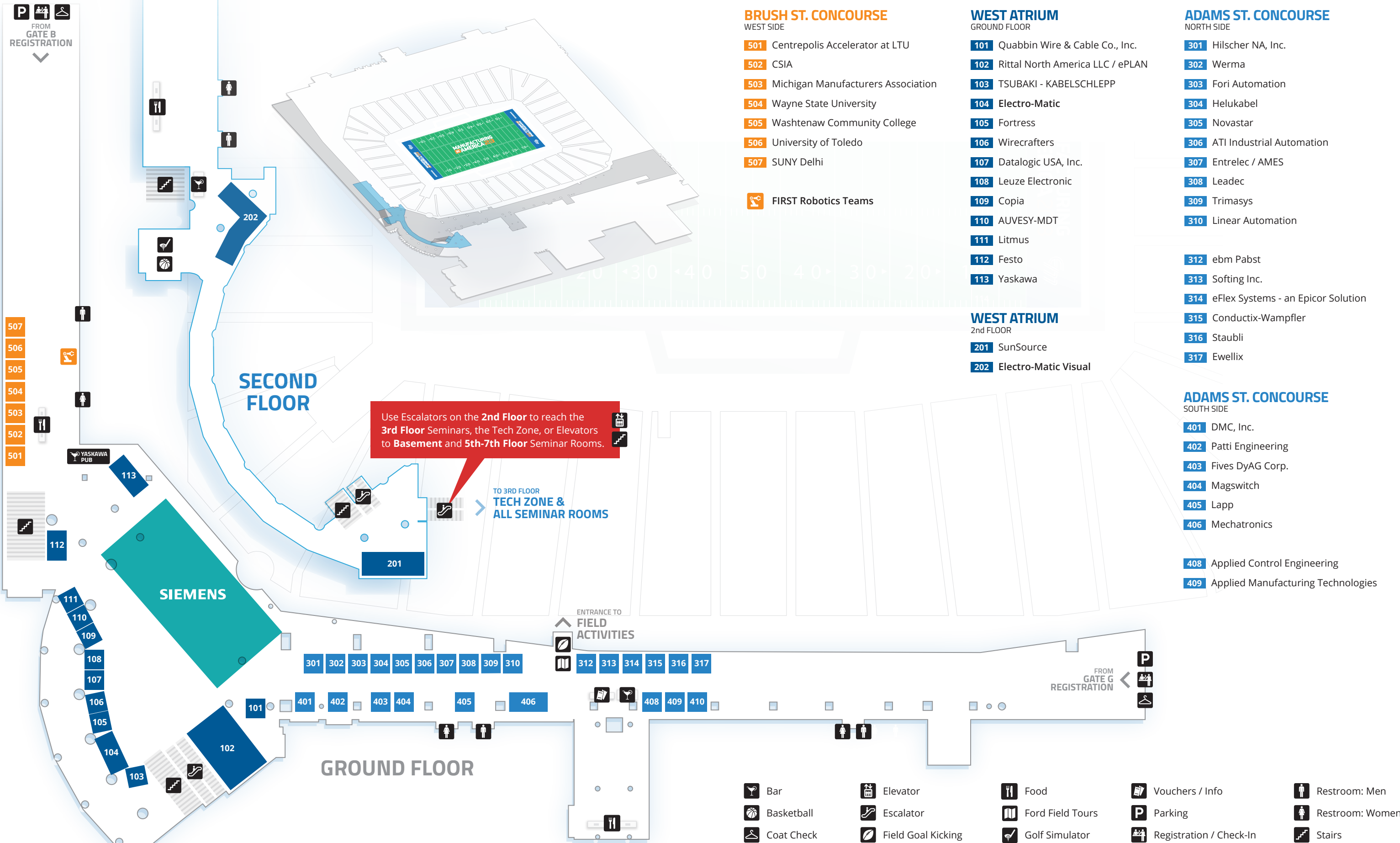
As a part of the FIRST in Michigan district, the Detroit Osborn Knight Riders were ranked the highest among all rookie teams in a statewide robotics competition in 2016. In this ultimate varsity sport where teams of high school students and their industry mentors design and build large-scale robots to 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.



MANUFACTURING IN AMERICA 23



7TH FLOOR

Seminar Rooms: Press Dining Room, South Press Alcove

6TH FLOOR

Seminar Room: Suite Pantry Lobby 6

5TH FLOOR

Seminar Room: Suite Pantry Lobby 5

3RD FLOOR

Tech Zone, Industry Tech Enthusiasts Lounge
Seminar Rooms: Hall Of Legends 1, Hall Of Legends 2, Hall Of Legends 3

2ND FLOOR

Exhibitor Booths

GROUND FLOOR

Exhibitor Booths, Field Access, Gate B Entry, Gate G Entry

BASEMENT

BASEMENT IS ACCESSIBLE BY ELEVATORS NEAR THE TECH ZONE ON THE 3RD FLOOR ONLY

Seminar Rooms: Assistant Coaches Locker Room, Lions Locker Room, Lions Post-Game Interview Room, Visitors Locker Room, Visitors Post-Game Interview Room

- BAR
- BASKETBALL
- COAT CHECK
- ELEVATOR
- ESCALATOR
- FIELD GOAL KICKING
- FOOD
- FORD FIELD TOURS
- GOLF SIMULATOR
- VOUCHERS / INFO
- PARKING
- REGISTRATION / CHECK-IN
- RESTROOM: MEN
- RESTROOM: WOMEN
- STAIRS

EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

	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
8:00A							
9:00A							
10:00A	MANUFACTURING IN AMERICA SUMMIT				Specifications for Smart Factories OP-05		Introduction to the Digital Thread DI-07
11:00A					Digital Enterprise - Factory Optimization OP-01	Advanced Power Supply System - Utilizing Profinet & Ethernet IP Communication PSU-01	Should We 3D Print This? AD-01
12:00P					Virtual Commissioning for Large Scale Systems DI-05	An Introduction to Servo Motor Tuning DR-04	Designing a Plant-Wide Network as Your OT Backbone OT-10
1:00P					Modernize & Integrate Your Automation & Drives OP-02	Asset Intelligence - More Than Uptime SM-01	Efficient Engineering with TIA Portal AE-01
2:00P					Machine Monitoring - Improve Production with Data OP-03	How to Extend the Lifetime of Your Equipment SM-02	Digitalization in Motion Control DI-04
3:00P					Lower Maintenance Tasking While Reducing Energy OP-04		
4:00P							

Seminar Title

Seminar Code

Siemens Seminar

Exhibitor Seminar

What's New in...

AA-00

12

Seat Limit

7TH FLOOR	BASEMENT						
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	
	What's New With Siemens Controls in 2023 WN-04		CNC Technology for Machine Tool Builders & Users OT-02				8:00A
WORKSHOP NEW G115D Distributed Drive Train for Mat Handling	What's New with SIMATIC SW-PLC-IO in 2023 WN-02	Siemens eXplore Centers: Visit Us! DI-06	SiMove - AGV Standards Made Easy OT-01		Enabling Engineering Efficiency in Industrial Control System Design EPL-1	WORKSHOP IO-Link Configuration Workshop	9:00A
	What's New with SIMATIC HMI in 2023 WN-01	OT/IT Integration DI-03	Your Shortcut to Robotics OT-08		Rittal & EPLAN: Better Together - How Partnering Together Creates Significant... RIT-4		10:00A
	What's New With Siemens Wireless in 2023 WN-03	Siemens Xcelerator- Dream it. Make It. DI-08	Power Distribution Techniques for UL508A Panels OT-06		Climate Control - The Critical Requirement EPL-2		11:00A
DR-01 12							12:00P
							1:00P
	SICAR - Framework for Auto Controls Architecture AU-01	UL 61800-5-1: A New UL Standard for VFD DR-02	The Rise of Servitization for Machine Builders OT-05		New Approaches to PLC Version Control & Device Backup COP-1		2:00P
	Turn-Key Power & Controls for the Auto Industry AU-02	Cloud-based SaaS Driving Decarbonization DI-09	Accelerate Your OT Network Security OT-03		Practical Implementation of Industry 4.0 Technology LTU-1		3:00P
	End of the Line AI for Automotive Manufacturing AU-03	Siemens Cooperates With Education Successes OT-09	RFID or RTLS - Where, When and How? OT-07		VFD Application Considerations LAP-1		4:00P

AD Additive

AE Automation Engineering

AU Automotive

DI Digitalization

DR Drives

OP Optimization & Modernization

SM Service & Maintenance

OT Operational Technology

WN What's New

PB Panel Building

AUV AUVESY-MDT

COP Copia Automation

DMC DMC, Inc.

EPL ePLAN

FOR Fortress

HIL Hilscher NA, Inc.

KYN Kyntronics

LAP Lapp

LEU Leuze Electronic

LTU Lawrence Tech Univ.

PE Patti Engineering

SOF Softing

RIT Rittal

EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

	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
8:00A		What's New With Siemens Controls in 2023	CNC Technology for Machine Tool Builders & Users				
9:00A		WN-04	OT-02				
10:00A	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		OP-05	AUV-1	DI-09
11:00A	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?
	DI-03	WN-01	OT-08		OP-01	PSU-01	AD-01
12:00P	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
	OT-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		OP-02	SM-01	AE-01
2:00P	Digital Roadmap for Smart Manufacturing	Turn-Key Power & Controls for the Auto Industry	Accelerate Your OT Network Security		Machine Monitoring - Improve Production with Data	How to Extend the Lifetime of Your Equipment	Best Practices for Applying Actuators to Optimize Performance...
	DI-02	AU-02	OT-03		OP-03	SM-02	KYN-1
3:00P	Siemens Cooperates With Education Successes	End of Line AI 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
	OT-09	AU-03	OT-07		OP-04		OT-10
4:00P							

Seminar Title

Seminar Code

Siemens Seminar

Exhibitor Seminar

What's New in...

AA-00

12

Seat Limit

EXHIBITORS

FLOOR PLAN

SCHEDULE

SEMINARS

7TH FLOOR	BASEMENT						
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	
							8:00A
							9:00A
WORKSHOP Getting the Most From Your S120 Drives				Digitalization: A Practical Guide	The Automotive Industry in 2023	WORKSHOP IO-Link Configuration Workshop	9:00A
				PE-1	RIT-1		10:00A
				What's New in ISO 14119? Trapped Key Systems are Included in the...	Choosing the Right Industrial Enclosures For Your Food and Beverage Facility		10:00A
DR-03	12			FOR-1	RIT-2	AE-02	11:00A
				Future-proofing Multi-Vendor, Multi-Protocol Network Connectivity on...	Where Are We Going At The Edge - A Look Ahead		11:00A
				HIL-1	RIT-3		12:00P
							1:00P
WORKSHOP NEW G115D Distributed Drive Train for Mat Handling				Unpacking PackML: More Than Just Packaging Machines	The Principles of Machine Safety	WORKSHOP Motion Control: from Simulation to Real World	1:00P
				DMC-1	LEU-1		2:00P
				Test, Prove, and Troubleshoot Your Critical Control System Ethernet...	New Approaches to PLC Version Control & Device Backup		2:00P
				SOF-1	COP-1	AE-03	3:00P
					Grants for Manufacturers Everywhere - Follow the \$		3:00P
DR-01	12				LTU-2		4:00P
							4:00P

AD Additive

AE Automation Engineering

AU Automotive

DI Digitalization

DR Drives

OP Optimization & Modernization

SM Service & Maintenance

OT Operational Technology

WN What's New

PB Panel Building

AUV AUVESY-MDT

COP Copia Automation

DMC DMC, Inc.

EPL ePLAN

FOR Fortress

HIL Hilscher NA, Inc.

KYN Kyntronics

LAP Lapp

LEU Leuze Electronic

LTU Lawrence Tech Univ.

PE Patti Engineering

SOF Softing

RIT Rittal

SEMINARS



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.**

SEMINAR CODE	SEAT LIMIT VOUCHER REQUIRED	DAY / TIME(S) / ROOM	
		WED 9:00 - 10:50 PHOTO ROOM	THU 9:00 - 10:50 PHOTO ROOM
AE-02	12		

IO-Link Configuration Workshop

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 I/O Racks, IO Back-Boxes, and reduce installation cost and labor. Enhance

AD-01

WED 10:00 - 10:50
SOUTH PRESS ALCOVE

THU 10:00 - 10:50
SOUTH PRESS ALCOVE

Should We 3D Print This?

Zachary Gray, *Siemens*

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

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

WED 1:00 - 1:50
SOUTH PRESS ALCOVE

THU 1:00 - 1:50
SOUTH PRESS ALCOVE

Efficient Engineering with TIA Portal

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



WED 9:00 - 10:50
PHOTO ROOM

THU 9:00 - 10:50
PHOTO ROOM

IO-Link Configuration Workshop

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.

AE-03



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.

AU-01

WED 1:00 - 1:50
LIONS LOCKER ROOM

THU 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.

AU-02

WED 2:00 - 2:50
LIONS LOCKER ROOM

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

Turn-Key Power & Controls for the Auto Industry

Jim Sulla, *Electro-Matic*
Matt Leight, *Siemens*

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.

AU-03

WED 3:00 - 3:50
LIONS LOCKER ROOM

THU 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 as 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.

DI-02

THU 2:00 - 2:50
HALL OF LEGENDS 1

Digital Roadmap for Smart Manufacturing

Suresh Rama, *Siemens*

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 operations while preparing for tomorrow's innovations!

DI-03

WED 10:00 - 10:50
VISITORS LOCKER ROOMTHU 10:00 - 10:50
HALL OF LEGENDS 1

OT/IT Integration

Chris Liu & Luis Narvaez, *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 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 well as to gain sustainability.

DI-04

WED 2:00 - 2:50
SOUTH PRESS ALCOVE

Digitalization in Motion Control

Craig Nelson & Kevin Wu, *Siemens*

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

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

DI-06

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.

DI-07

WED 9:00 - 9:50
SOUTH PRESS ALCOVE

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

WED 11:00 - 11:50
VISITORS LOCKER ROOMTHU 9:00 - 9:50
HALL OF LEGENDS 1

Siemens Xcelerator – Dream it. Make it.

Mathias Oppelt, *Siemens*

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.

DI-09

WED 2:00 - 2:50
VISITORS LOCKER ROOMTHU 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.

DR-01



WED 9:00 - 11:50
PRESS DINING ROOM

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

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

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

An Introduction to Servo Motor Tuning

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.

OP-01

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

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

Digital Enterprise – Factory Optimization

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.

OP-03

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

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

Machine Monitoring - Improve Production with Data

John Burns, *Siemens*

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.

OP-04

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

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

THU 9:00 - 9:50
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.

OT-01

WED 9:00 - 9:50
LIONS POST GAME INT. ROOMTHU 9:00 - 9:50
HALL OF LEGENDS 3

SiMove - AGV Standards Made Easy

Greg Harris, *Siemens*

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
LIONS POST GAME INT. ROOMTHU 8:00 - 8:50
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

WED 2:00 - 2:50
LIONS POST GAME INT. ROOMTHU 2:00 - 2:50
HALL OF LEGENDS 3

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.

OT-04

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

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.

OT-05

WED 1:00 - 1:50
LIONS POST GAME INT. ROOMTHU 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. ROOMTHU 11:00 - 11:50
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.

OT-07

WED 3:00 - 3:50
LIONS POST GAME INT. ROOMTHU 3:00 - 3:50
HALL OF LEGENDS 3

RFID or RTLS - Where, When and How?

Jeff Snyder, *Siemens*

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.

OT-08

WED 10:00 - 10:50
LIONS POST GAME INT. ROOMTHU 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 ROOMTHU 3:00 - 3:50
HALL OF LEGENDS 1

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.

OT-10

WED 11:00 - 11:50
SOUTH PRESS ALCOVE

THU 3:00 - 3:50
SOUTH PRESS ALCOVE

Designing a Plant-wide Network as Your OT Backbone

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

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

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 (PROFenergy). 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

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

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

Asset Intelligence - More Than Uptime

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

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

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

How to Extend the Lifetime of your Equipment

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.

WN-01

WED 10:00 - 10:50
LIONS LOCKER ROOM

THU 10:00 - 10:50
HALL OF LEGENDS 2

What's New with SIMATIC HMI in 2023

Alan Cone, *Siemens*

Join the Factory Automation team for an overview of the latest and greatest SIMATIC HMI product and technology innovations that directly impact your applications, including a sneak preview into the future roadmap for upcoming product releases and product strategy moving forward! Learn how these latest innovations can help improve your applications; reduce your engineering time and increase your productivity in the coming years.

WN-02

WED 9:00 - 9:50
LIONS LOCKER ROOM

THU 9:00 - 9:50
HALL OF LEGENDS 2

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 productivity in the coming years.

WN-03

WED 11:00 - 11:50
LIONS LOCKER ROOM

THU 11:00 - 11:50
HALL OF LEGENDS 2

What's New with Siemens Wireless in 2023

Cole Holland & Joel Green, *Siemens*

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.

WN-04

WED 8:00 - 8:50
LIONS LOCKER ROOM

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

What's New with Siemens Controls in 2023

Jim 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.

AUV-1

THU 9:00 - 9:50
SUITE PANTRY LOBBY 6**Presentation by Auvesy-MDT**

AUVESY-MDT

COP-1

WED 1:00 - 1:50
ASSISTANT COACH LOCKER ROOMTHU 2:00 - 2:50
ASSISTANT COACH LOCKER ROOM**New Approaches to PLC Version Control and Device Backup**Adam Gluck, *Copia Automation*

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**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.

EPL-1

WED 9:00 - 9:50
ASSISTANT COACH LOCKER ROOM**Enabling Engineering Efficiency in Industrial Control System Design**Sean Mulherrin, *EPLAN*

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

THU 10:00 - 10:50
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.

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 Machinery

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.

LAP-1

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

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
ASSISTANT COACH LOCKER ROOM

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

Practical Implementation of Industry 4.0 Technology

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

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

Joel 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.

RIT-2

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

Choosing the Right Industrial Enclosures for Your Food and Beverage Facility

Stan Vanlandingham, *Rittal*

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.

RIT-4

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.

SOF-1

THU 2:00 - 2:50
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.

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
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www.appliedmfg.com

ATI Industrial Automation

1031 Goodworth Dr.
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Conductix-Wampfler

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www.conductix.us

Copia Automation

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www.copia.io

CSIA - Control System Integrators Association

111 W Jackson Blvd.
Evanston, IL 60201
(847) 686-2245
www.controls.org

Datalogic, Inc.

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www.datalogic.com

DMC, Inc.

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www.dmcinfo.com

ebm-papst Inc.

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www.ebmpapst.com/us

eFlex Systems - an Epicor Solution

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www.eflexsystems.com

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Festo

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festo.com

Fives DyAG Corp.

23400 Halsted Rd.
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(248) 726-8300
www.fivesgroup.com/smart-automation-solutions

Fori Automation

13231 23 Mile Rd.
Shelby Township, MI 48315
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www.foriauto.com

Fortress

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Leuze electronic, Inc.

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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.pattienigneeri

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

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.wccnet.edu

Wayne State University

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

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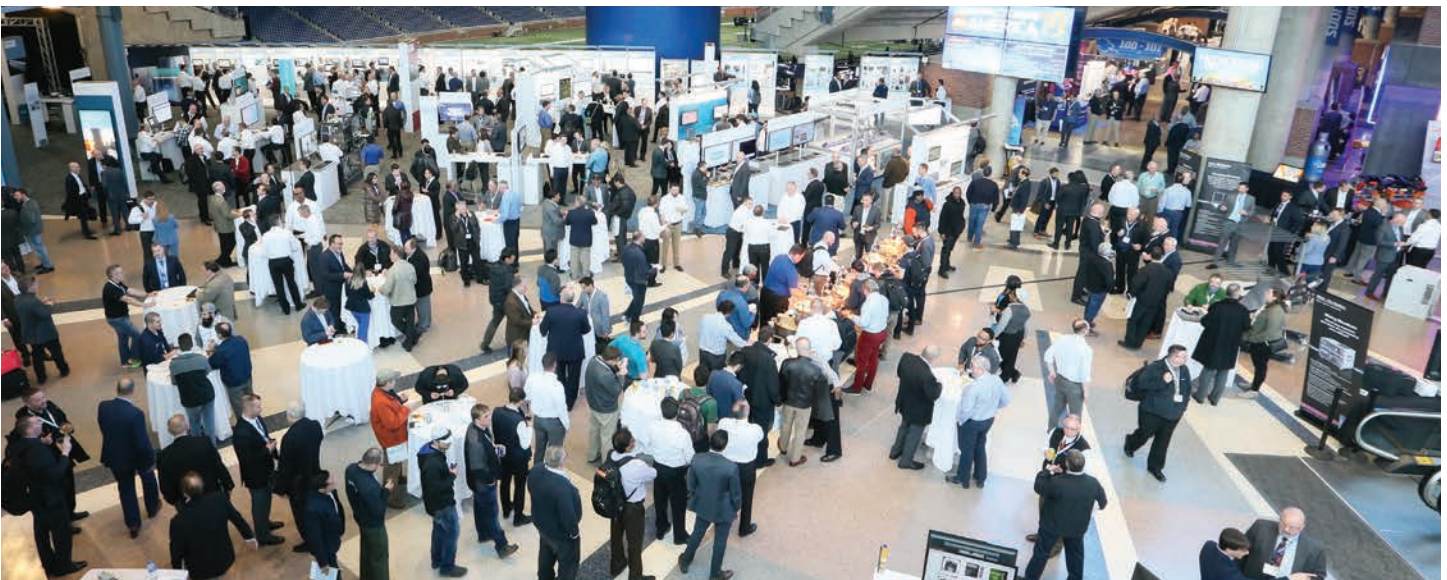
1266 Oakbrook Dr., Suite A
Norcross, GA 30093
(470) 361-0600
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WireCrafters

6208 Strawberry Ln.
Louisville, KY 40214
(800) 626-1816
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