Automation Fair® 2014
Pre-Show Program

November 19-20, 2014
Anaheim Convention Center
Anaheim, CA USA

Rockwell Automation
Automation Fair®
ANAHEIM ▶ 2014
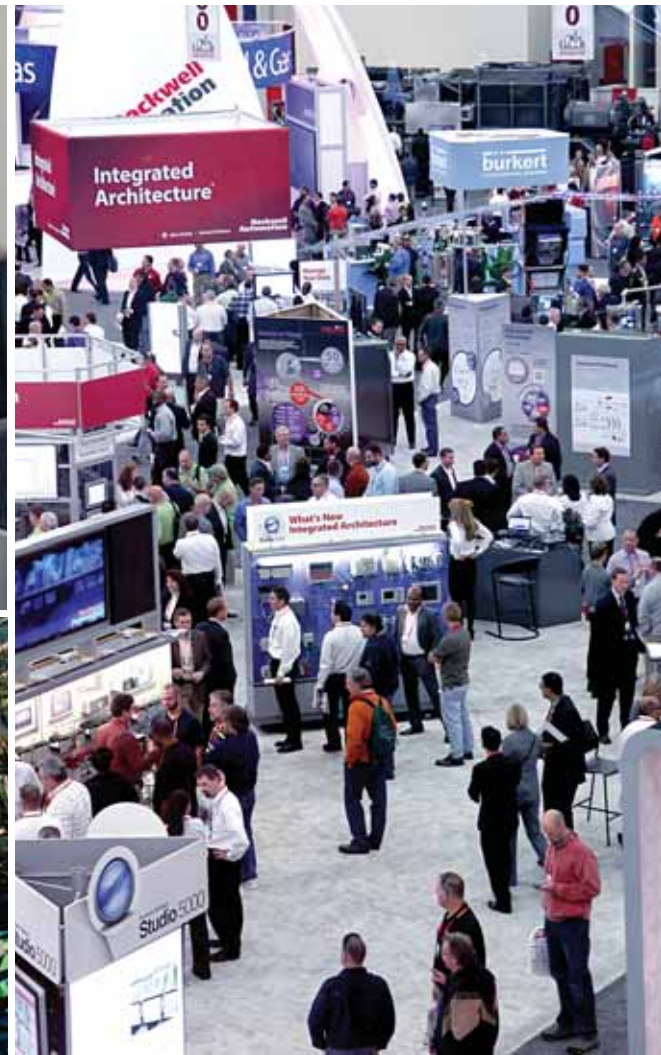
FOR MORE INFORMATION AND TO REGISTER VISIT WWW.AUTOMATIONFAIR.COM

LISTEN.
THINK.
SOLVE.®

AB Allen-Bradley · Rockwell Software

Rockwell Automation

THE CONNECTED ENTERPRISE

Today we're at an inflection point, driven by the convergence of integrated control and information technologies, and enhanced by the Internet of Things. We call this vision *The Connected Enterprise*. It's characterized by industrial operations that are more nimble and more sustainable, while driving greater productivity. It's helping companies differentiate themselves and improve their global competitiveness.

Please join us at Automation Fair® 2014 to see how *The Connected Enterprise* can help you achieve faster time to market, optimize your assets, lower your total cost of ownership, and improve enterprise risk management.

The Automation Fair® event offers a wealth of learning and networking opportunities:

• Visit more than 100 exhibits from Rockwell Automation and our PartnerNetwork™ members to see the newest and most advanced power, control and information solutions.

• Participate in industry forums, technical sessions and workshops about key automation and information issues and trends.

• Experience Rockwell Automation technology firsthand in our hands-on labs.

Please mark your calendar now for Automation Fair 2014, November 19-20, in Anaheim, California, at the Anaheim Convention Center.

I look forward to seeing you there!

Best regards,

Keith

Keith Nosbusch

HOW TO REGISTER

Online registration opens in early August. For detailed information on how to register, visit www.automationfair.com.

If you register through your local distributor, you will receive an email bar code confirmation with instructions to pick up your badge at the show.

Need help with registration?

Call the Automation Fair event help line at 781.821.6733 or send an email to automationfair@thepulsenetwork.com.

ANAHEIM CONVENTION CENTER
Wednesday, November 19 – 8 a.m. to 5:30 p.m.
Thursday, November 20 – 8 a.m. to 4 p.m.

ROK EVENTS MOBILE

Automation Fair has a mobile app for you to get even more from the event.

• Customize your experience

• Browse schedules, speakers and sessions to create your daily schedule

• Network with other attendees by exchanging messages and arranging meetings

• Take session and overall event surveys

• View maps, event information and meal hours

• Join in the social media conversations and stay current on event news

Download the Rockwell Automation Mobile app to get the most from this year's Automation Fair Event.

Scan the QR code or search for the ROK Events app in your phone's app store.

INTERACTIVE PRINT

Download the Layar App on your iOS, Android or Blackberry device

Find and scan pages with the Layar Logo in this document

Discover and enjoy additional content

PROCESS SOLUTIONS USER GROUP (PSUG) 2014 ANNUAL MEETING

November 17-18, 2014
Anaheim Convention Center, Anaheim, CA

Join us for our annual Process Solutions User Group (PSUG) meeting just prior to Automation Fair 2014. It's a great way to exchange ideas with your peers, learn best practices and find solutions to your process application issues. Plus, the feedback you provide in the PSUG voting sessions helps determine the development priorities and technical roadmap for the PlantPAx Process Automation System. Create an entire Process Week of activities by attending PSUG and Automation Fair.

Fee and registration

The $499 fee covers all sessions, labs, food and refreshments during the event, and a spectacular networking event on Monday evening at the Marconi Automotive Museum.

For more information or to register, visit us at: http://psug.rockwellautomation.com.

This Two-day Event will Feature:

- 20+ educational sessions with PDH hours/certificates awarded
- PlantPAx® process automation system technology roadmap discussion
- Sessions to voice your prioritization on future developments to the PlantPAx system
- 24+ customers providing "best practices" in utilizing process solutions in various industry applications

AUTOMATION PERSPECTIVES 2014 GLOBAL MEDIA EVENT

November 18, 2014 – 8 a.m. to 1 p.m.
Anaheim Convention Center, Anaheim, CA

Automation Perspectives, the Rockwell Automation annual global media forum, explores leading news topics in the automation industry. The event allows members of the global trade media to hear first-hand about trends and issues facing manufacturers and producers across a variety of industries and geographies. Held prior to the opening of Automation Fair,® industry experts will discuss the benefits that a connected enterprise brings enterprise-wide and to machine builders. Media registration is scheduled to open in early August.

For more information on Automation Perspectives: www.automationfair.com/press

UNIVERSITY RELATIONS

Rockwell Automation provides value offering a broad range of partnering opportunities. The University Relations program is an extension of our partnerships, where relationships are built with selected universities that offer engineering, business and technology curriculum. Students gain exposure to Rockwell Automation technology and its application, helping them become better candidates for future jobs in industry. During Automation Fair, students get to see a wide variety of products and technology and attendees can learn more about the degree programs offered by many of the universities.

Current schools in the Rockwell Automation University Relations Program:

- **Case Western Reserve University**
- **Florida A&M University**
- **Georgia Institute of Technology**
- **Marquette University**
- **Milwaukee School of Engineering**
- **North Carolina A&T University**
- **Penn State University**
- **Purdue University**
- **Texas A&M University**
- **The Ohio State University**
- **University of Illinois – Urbana/Champaign**
- **University of Michigan – Ann Arbor**
- **University of Wisconsin – Madison**
- **University of Wisconsin – Milwaukee**

Stop by University Row at Automation Fair to visit our showcasing schools.

COLLABORATING FOR BUSINESS SUCCESS

When you choose Rockwell Automation, you also tap into the power of our PartnerNetwork™ program – a framework of well-managed relationships based on your needs. Our program provides you with access to a local, regional and global network of best-in-class companies, including authorized Allen-Bradley Distributors, system integrators, OEMs, strategic alliances, Encompass™ reference products and licensed developers.

The keystone of our PartnerNetwork is the commitment each member company has to help streamline your supply chain, simplify project implementation and receive the best value from your automation investment. Customers who utilize the PartnerNetwork have consistently shared that they experience these three core values: simplify, collaborate, innovate. These values translate into automated solutions that are clearly differentiated from any other supplier.

**Rockwell Automation
PartnerNetwork™**

Visit more than 100 partners from our PartnerNetwork at Automation Fair. They will be displaying their latest products and solutions.

PARTICIPATING PARTNERNETWORK EXHIBITORS*

Acme Electric
AEA srl (LOCCIONI Group)
Advanced Micro Controls Inc.
Ametek
Apex Dynamics Inc.
Applied Control Engineering, Inc.
Arteche PQ Inc.
Autodesk
Badger Meter
Banks Integration Group
Barry-Wehmiller Design Group
Belden
Block USA, Inc.
Bonitron
Brady Corporation
Burkert Fluid Control Systems
Bussman by Eaton
(Formerly Cooper Bussman)
Cisco Systems
Concept Systems Inc.
Control Station, Inc.
Crouse-Hinds by Eaton
Cybertrol Engineering
Dalian Daxiang Electric
(Dalian Rubber & Plastic Machinery)
Data-Linc Group
Datalogic Automation
DENSO Robotics
DS Smith Packaging Systems
Elwood Corporation –
High Performance Motors Group
Endress+Hauser

EN Engineering LLC
EPLAN Software & Service
eRPortal Software Group, LLC
ESE, Inc.
ESTeem Wirelss Modems
E-Technologies Group
Exlar Corporation
FANUC
FLIR Systems
Fluke Corporation
General Cable
Grace Engineered Products Inc.
Hammond Power Solutions Inc.
Hardy Process Solutions
Helm Instrument Co. Inc.
Hermary Opto Electronics, Inc.
HMS Industrial Networks AB
Hubbell Electrical Systems
Imperx, Inc.
Industrial Electric Mfg.
item North America
Itoh Denki USA, Inc.
Kepware Technologies
KTR
Leviton Mfg Co.
LinMot USA, Inc.
LinTech
Littelfuse Inc.
Marathon Motors
MathWorks
Matrix Technologies, Inc.
Melfi Technologies Inc.

Mersen
Mesta Electronics Inc.
Metso Automation, Inc.
Mettler-Toledo
Molex
Motorola
MTE Corporation
MTS Systems Corp, Sensor Division
MYNAH Technologies LLC
Nidec-Shimpo Corporation
NJM Packaging
Nook Industries
Numatics, Inc.
Online Development Inc. (OLDI)
Outbound Technologies
Owl Computing Technologies Inc.
Panduit
Parker Hannifin Filtration & Separation Division
Parker Pneumatic Divison
Pentair Equipment Protection (Hoffman®)
Pepperl+Fuchs Inc.
Phoenix Digital Corporation
Point Eight Power
POSITAL FRABA Inc.
Post Glover Resistors
Powerit Soutions
ProSoft Technology
RACO Manufacturing & Engineering Co.
RF IDeas, Inc.
Rice Lake Weighing Systems
River Consulting

Ross Controls
RoviSys Company
Roxtec Inc.
Samson Controls, Inc.
Schaffner Group
Schweitzer Engineering Laboratories Inc.
SeQent
SMC Corporation of America
Southwire Company
Spectrum Controls, Inc.
Stahlin Non-Metallic Enclosures
STOBER Drives Inc.
Stone Technologies
Stratus Technologies
Systems Interface
TCI, LLC
Teledyne DALSA
Thermo Systems, LLC
Tissue Machinery Company SpA
Tolomatic, Inc.
Ultra Electronics
VPG – BLH Nobel
Wachter Inc.
Weiss North American
WIN-911 Software
WITTENSTEIN, Inc.
Wulftec/M.J. Maillis
Yaskawa Motoman Robotics
Zeppelin Systems USA, Inc.

* list complete as of July 22, 2014

ACCELERATING YOUR CONNECTED ENTERPRISE JOURNEY WITH ROCKWELL AUTOMATION

Information is the key to competitiveness in all industries. For decades, we've focused our technologies and partnerships on enabling the right information at the right time across processes, facilities, suppliers and consumers to help our customers make better, more profitable decisions.

We call it the connected enterprise. It's a continuous journey accelerated recently by enabling technologies, including the Internet of Things.

Improved connections between operations technology and information technology within manufacturing and industrial operations are leading to unprecedented enterprise wide collaboration and value reaped.

Manufacturing is poised to change more dramatically in the next five years than in the past two decades. It's more critical than ever to properly operationalize your journey with the tools, technologies and solutions that turn information into working data capital.

Are you ready? Discover the Connected Enterprise at Automation Fair.

ROCKWELL AUTOMATION EXHIBITS

Energy Management	**Information Software**	**Safety Solutions**
Essential Components	**Integrated Architecture**	**Solutions & Services**
Industrial IP Advantage	**Intelligent Motor Control**	
Industry Solutions	**Process Solutions**	

BOOTH OVERVIEWS

Energy Management   *Booth 370*

The optimization of energy resources in a production environment is something that not every organization has properly explored. When done right, the implementation of a strategic energy resource management plan can result in significant cost savings. The Energy Management booth introduces you to the planning, techniques and technology you'll need to help improve the profitability of your organization.

Essential Components   *Booth 1144*

Get the right components, at the right price, right when you need them. Allen-Bradley industrial components from Rockwell Automation provide the highest quality at a fair price, with intuitive product selection and fast delivery. Allen-Bradley components have been used by customers for more than 100 years and include Power, Connectivity, Logic, Sensing and Switching, Operator Interface and Safety products.

BOOTH OVERVIEWS

Industrial IP Advantage   *Booth 758*

Learn how Internet Protocol (IP) is the future of industrial network connectivity and hear from experts about the latest trends of security, Internet of Things, and mobility with the Industrial IP Advantage – a community sponsored by Cisco, Panduit, and Rockwell Automation, with ODVA. Explore the latest educational offerings, technical resources and real machines displaying the advantages of standard Internet Protocol in industrial applications.

Heavy Industries Pavilion   *Booth 686*

In the power and process-intensive heavy industries, you must maximize your resources and every investment you make. Rockwell Automation solutions for heavy industries drive value throughout your enterprise, and visiting this booth will help you discover how implementing these solutions and services helps make your plant smart, safe, sustainable and secure.

Information Software   *Booth 558*

See how Rockwell Software enables a Connected Enterprise by turning data into decision-making information for increased productivity and profitability – from HMI to Manufacturing Intelligence and MES.
Access all this valuable information when and where you need it with mobile HMI and EMI Apps for any mobile device – timely, secure and actionable.

Integrated Architecture   *Booth 544*

Learn how the convergence of control and information is delivering the connected industrial enterprise with smarter technology, enhanced productivity and a more secure environment.
Experience first-hand the value of new control and information products, see real machines, and interact with digital demos. Also, take the opportunity to talk to the subject matter experts on security, automation design productivity and motion control.

Intelligent Motor Control   *Booth 844*

Immediate access to information can be the key to your success. And when you combine Intelligent Motor Control solutions with the Integrated Architecture system – a new level of intelligence is possible. Visit the Intelligent Motor Control booth to learn how you can extend your architecture down to the device level and gain higher availability, energy savings, and help protect personnel and assets.

Process Solutions   *Booth 480*

Looking to improve your productivity and yield? Discover how a modern DCS – the PlantPAx system – can help. Using common automation technology, PlantPAx enables plant-wide optimization through seamless integration to automation systems used in the balance of your plant. This allows real-time information to flow across your enterprise for improved operations and better decision making. Rethink what to expect from your DCS.

Safety Solutions   *Booth 510*

Machinery • Process • Electrical
Rockwell Automation expertise, experience and the broadest technology offering in industry have established us as the world leader in industrial safety, helping reduce injuries and costs while improving productivity with functional safety solutions for process, machinery, and electrical safety applications.

Solutions & Services   *Booth 880*

Rockwell Automation understands that a profitable, safe and sustainable operation is your goal. Across industries and processes, our global solutions and services teams deliver repeatable, scalable and maintainable solutions – tailored to you and the unique challenges you face every day. From conceptualization and design, through engineering and installation, to post-commissioning support, we offer world-wide talent with industry- and technology-specific expertise to help you meet or exceed your business goals.

FORUMS

Engineering and Consultants Forum (EPC)

Wednesday, November 19
3:30 p.m. – 5:30 p.m.

Attend the Engineering and Consultants (EPC) Forum to learn about the latest process and power control technologies and how to apply these to your projects. See how you can reduce design time, speed site commissioning and lower overall project risk by designing in Rockwell Automation power and process control solutions.

Food & Beverage

Wednesday, November 19
1:30 p.m. – 3:30 p.m.

Consumers want more choices. At the same time, regulations have gotten tighter and operations have become more complex and expensive. Join us to learn how others have managed through regulatory issues like serialization and food safety. Also, learn how new line optimization techniques have helped others improve productivity and efficiency.

Machine & Equipment Builder Forum (OEM)

Thursday, November 20
9:00 a.m. – 11:00 a.m.

It's hard to keep up, and it's going to get harder. Global safety standards and security risks are more complex than ever, and in many cases, experienced engineers are nearing retirement with fewer qualified workers to take their place. Join this year's Forum to learn how others have worked through these challenges.

Mining

Thursday, November 20
9:00 a.m. – 11:30 a.m.

Safety, project cost containment, mine wide optimization, and integration of existing and new technologies are just a few of the industry drivers currently facing the mining sector. Rockwell Automation, our customers, and our partners will be presenting and displaying innovative solutions that address these challenges. Please join us at Automation Fair 2014 to learn how Rockwell Automation and our partners can assist in solving your automation needs.

Oil & Gas

Wednesday, November 19
9:00 a.m. – 11:30 a.m.

From exploration and production to processing, refining and transportation, the oil and gas industry is experiencing a tremendous amount of growth as well as significant challenges. This forum provides an opportunity to hear how petroleum companies are using advanced automation and information technology to meet their operational challenges and maximize the growth opportunities in the industry.

Power and Energy Management

Wednesday, November 19
9:00 a.m. – 11:30 a.m.

Regardless of the challenges facing industry when generating and consuming electricity, it's always beneficial to hear how your peers are reacting. The Power and Energy Management forum provides that opportunity, providing insight into how advanced automation and information solutions are helping meet those challenges while providing a positive impact on your bottom line.

Safety (End User focus)

Thursday, November 20
9:00 a.m. – 11:30 a.m.

As the world's largest safety system provider, Rockwell Automation has a clear focus on helping you improve both safety and productivity. Best-in-class manufacturers – the Top 20% – have 5%-7% higher OEE, 2%-4% less unscheduled downtime, and less than half the injury rate of average performers. Learn how these high performers focus on three key elements of manufacturing performance to enhance business performance.

Safety (OEM focus)

Wednesday, November 19
1:30 p.m. – 4:00 p.m.

The challenges you face are enormous – global safety standards and directives; product and legal liability; improving machine throughput and performance; machinery designs for a changing workforce. To your customers, a safer, more productive, less costly machine is a more valuable machine. Learn about the range of design tools and methodologies that are available to help you meet these challenges and reduce your time to design, develop, and deliver safe, productive machinery.

Water Wastewater

Wednesday, November 19
9:00 a.m. – 11:30 a.m.

Globally, water treatment facilities are facing unprecedented concerns. For decades, the infrastructure has been able to handle and meet the demands of society; but today, aging infrastructure, growing population and urban sprawl are stretching treatment facilities beyond capacity. At this forum, water industry professionals will discuss global industry trends and issues, the benefits of deploying a flexible and scalable solution, and methods to help reduce total lifecycle cost and overall risk.

TECHNICAL SESSIONS

Technical sessions are sixty minute presentations by leading industry and product experts. All sessions are available on a first-come, first served basis on site- no registration required.

AUTOMATION SOLUTIONS & SERVICES

T01 Best Practices in Front End Engineering Design (FEED)

Front End Engineering and Design (FEED) is where much of the value is built into a project. These high value engineering services usually occur at the beginning, or front end, of a project. This session will focus on where FEED fits in the overall project execution lifecycle and why you should engage someone like Rockwell Automation. You'll learn how to get all the right stakeholders together – EPCs, end users, operators, finance, specialists, etc. We'll use real world examples to discuss deliverables and how to drive overall project results.

T02 Get Ahead with Remote Monitoring Solutions

Between 2010 and 2012, the cost per hour of downtime increased by an average of 65%. How are you preventing a costly catastrophe in your facility? Discover how you can stay a step ahead by remotely monitoring your automation assets and IT infrastructure to help keep your line running, improve productivity and optimize maintenance efforts.

T03 Reducing Risk and Achieving Agility with Serialization

While there are no global serialization requirements, one thing is clear regardless of your geography – serialization legislation is on the rise. Serialization requires a comprehensive system to track and trace products from manufacturing through the entire supply chain. Join us to learn how best in class companies are using new serialization solutions to help reduce implementation risks using commercial off-the-shelf technology to quickly optimize their return on investment.

T04 Flexible Manufacturing in Life Sciences

With the increase in single-use or disposable technologies, a shift is occurring in the Life Sciences industry making traditional large scale facilities less viable. This discussion explores the factory of the future featuring modular, scalable, flexible manufacturing designs and skids helping companies to go to market faster and more cost effectively.

T05 Does Your Workforce Training Measure Up to Your Unique Business Needs?

Technology is changing the way your workforce develops their job knowledge and skills. Custom e-Learning content is a critical factor in how quickly new knowledge transfers from the training experience to the plant floor. Join this session to understand more about custom e-Learning and its impact on competency development, consistent training delivery and return on your investment. Learn how custom e-Learning is delivered using a variety of e-delivery options and how a real-world custom e-Learning solution helped accelerate workforce training.

T06 Machine Safety: Achieving and Maintaining Regulatory Compliance

The trends for machine safety continue to grow as the world evolves and regulatory compliance becomes more common. Rockwell Automation safety consultants have been helping automation users like you help protect their workforce and operations for many years. New global standards change how automation systems are classified. Are you familiar with the new standards and do you know how to address them? During this session, we will discuss the process that is used to help identify and mitigate safety concerns.

T07 Talking to IT About Secure Remote Access

The convergence of Information Technology (IT) and Operational Technology (OT) brings opportunities for optimized processes and more data for effective decision making. Despite technical and organizational challenges that can arise, there are compelling business reasons and strong technology drivers to support IT-OT convergence. In this session, we will arm you with the information you need to have a discussion with your IT department around secure remote access and how you can meet security and other IT standards without sacrificing production.

T08 Maintain Phase

Some of the strongest, most productive companies in the world rely on safety as a pillar for their successful business model. Once a safety plan is in place, maintenance of that plan is as critical to success as the plan itself. But what does safety system validation entail? We will explain how you can help ensure proper safety system installation and functionality through validation, lockout/tag out (LOTO), and arc flash assessments to help identify issues and simple improvements to help with risk reduction and overall LOTO time reduction.

T09 Stahlin Non-Metallic Enclosures: Innovation in Non-Metallic Materials Increases Service Life and Lowers Total Lifecycle Costs for Electrical Components Used In Harsh Environments

Avoidance of product failure is essential for every electrical project, especially those occurring in harsh environments. Specifiers must define essential application-specific requirements for predictable service longevity. This presentation will address proper material selection and how such efficiency positively impacts the overall project value and cost-efficiency.

T10 Burner Management and Combustion Control Standards Review

For many industrials and institutions, updated standards and regulations are prompting conversion to lower emission systems, which is appealing from both an economic and efficiency standpoint. This session will review contemporary standards and approaches to address those requirements for industrial boilers and process heating applications.

T11 Central Utilities Optimization

A special review of pumping systems and chiller plant optimization will discuss a variety of approaches to help reduce energy use as well as decrease wear and tear on equipment.

T12 Game of Woes

Today there are over 10 million unfilled manufacturing jobs due to skill gaps. Maintenance and engineering employees are retiring at a rate faster than those entering the workforce. Companies spent $3.7 trillion US dollars on new technology in 2013 alone. These trends present a serious challenge for manufacturers, leaving those responsible for supporting and managing automation technology with fewer skilled resources, supporting larger and more sophisticated systems, with ever-increasing productivity goals. Learn how to leverage service agreements with guaranteed response times to identify your biggest risks, create a plan to manage them and improve your organization's chances of success.

CONNECTED ENTERPRISE

T13 The Future of Manufacturing in a Connected World

Integration of control and information on the manufacturing floor will be essential for manufacturers to remain competitive. In this session, Rockwell Automation and Cisco will discuss how we are delivering products, solutions and services that use our industry-leading best practices for networking and convergence for organizational efficiency. Topics include: use cases and solution sets for the plant of the future – automation infrastructure, security and compliance, mobility, video and collaboration, industrial computing and cloud, remote expertise and remote services, and energy management.

T14 Simplifying the Transition to Virtualization

Many manufacturers understand the benefits that a virtual infrastructure can bring to the production environment. However, many are still hesitant to make the transition. Learn the advantages of virtualization and how working with a trusted partner can help your organization realize the benefits faster and make the transition easy.

T15 Operational Excellence by Leveraging Internet of Things Technologies

The next industrial revolution is happening right now. Companies are finding new, innovative ways to use technologies ranging from the cloud, big data and remote monitoring to improve global production, sustainable efforts and overall business. Learn how these technologies can help transform manufacturing to drive better collaboration and productivity to help achieve operational excellence.

▶ For a complete session schedule, visit www.automationfair.com

T16 Turning Big Data Into Information

You have heard about big data, but is big data for everyone? On our journey, we will compare small data, big data and the "just-enough" data, which may be somewhere in between. In this session, we will cover techniques you can use to help transform your data into actionable insights and information. We will take a look at several successful, real-world examples, and discuss techniques to get you started. Come see what big data is all about, and where your next steps may lead.

T17 The Journey to a Smarter, More Productive Workforce

Today everything from updating friends to depositing a check can be done on a mobile device. So why is your plant any different? Part of the Connected Enterprise is staying connected – no matter where you are. In this session, we will take a look at today's phone and tablet tools, which can help you move towards mobility. We will also take a look beyond the horizon, and discuss scenarios and tools that we have in the works for the not-too-distant future. Come see the strides we have made in mobility, and where we are headed next.

T18 Achieving Operational Excellence Through a Connected Enterprise

At Rockwell Automation, we have been on a journey to globalize our manufacturing footprint. This measured objective can be accomplished through the implementation of advanced technology, compelling leadership and the deliberate permeation of a fresh organizational culture anchored by the embraced principles of speed, quality and a consistency of purpose. In this session we will examine best practices and lessons learned during the quest to implement the Connected Enterprise and achieve a multi-faceted, collaborative, demand-driven and sustainable high-mix manufacturing business environment.

T19 The Collaborative Design Journey

Design is a brief but critical period in the life of an automation system, and it is also one of the most dynamic. It takes a diverse team of specialists, from OEMs to System Integrators to engineers, working together to solve the difficult problems that guide a new idea along the journey to final product. What role do you play on the journey? In this session, you will hear how new methodologies are revolutionizing the design phase. Whether you are a new user or power user, you will see how Rockwell Automation control systems are evolving to help you and your team collaborate more effectively. You will learn how new workflows and high-level capabilities in our control system software can help you and your team accomplish more in less time. Design is a collaborative journey that determines how a manufacturing system will run for the rest of its life. See where your journey will take you next.

CONTROL SYSTEM DESIGN

T20 Rockwell Software® Studio 5000®: The Automation Engineering and Design Environment

Attend this session to learn about Rockwell Software Studio 5000, our new automation engineering and design environment. The session will cover what Rockwell Software Studio 5000 is, where it is going, and how it can help reduce your engineering time, reduce risk, and increase your productivity.

T21 Increasing Software Development Efficiency Using the Integrated Architecture® Application Tools

Learn about new and existing Integrated Architecture system tools that can help speed implementation of your control system in all phases of the project. From videos to manuals to simple software applications, these tools help you understand, plan, and configure an Integrated Architecture system.

T22 MathWorks – Using Real-Time Simulation to Validate Controller Programming

This session will demonstrate how machine and process designers can test PLC programming before connecting to actual equipment and systems, thus reducing the cost and time of testing. Simulink Real-Time helps validate control programs executing on PLCs while connected to a real-time simulation via EtherNet/IP. This approach helps ensure programming performs as intended before commissioning tests begin on the actual machine or process.

T23 FANUC / Rockwell Automation Partnership – What Does it Mean for Manufacturing Production and Engineering?

A few years ago, FANUC and Rockwell Automation began working together to synergistically develop an integrated manufacturing architecture based around Ethernet/IP. Since that time, the development has been fast and furious. With the leveraged integration of distributed I/O, along with safety I/O, manufacturing intelligence information, system data backup, ancillary equipment integration, plus the latest in robotic product integration, FANUC and Rockwell Automation are more able than ever before to provide a completely integrated automation manufacturing solution.

T24 Powerit Solutions: Internet of Things – Take Advantage of Connectivity to Optimize Energy Usage

As more intelligent devices are connected, integrated systems can take advantage of device information in new ways. Standards like CIP energy allow these devices to present themselves as a part of a demand management solution, providing status and flexible control of a facility's electrical loads, and enabling energy cost reduction.

T25 EPLAN Software & Service: Enjoy Engineering Again and Design for Real

Share engineering data between departments. Synchronize between EPLAN P8 and RSLogix™ 5000. Now, take your schematic design to prototyping in 3D with EPLAN Pro Panel including automatic wire routing. EPLAN FieldSys interfaces plant cabling driving a full end-to-end design.

T26 ProSoft Technology: Enhance Your Logix Systems for Energy, Oil and Gas Applications

Need to implement IEC-61850 or DNP3 into your Allen-Bradley Logix architecture? Would you like to cut your installation costs for flow computing applications? Learn about the technology available to implement relays and protection equipment for energy applications. And how to cut your installation costs by using an in-chassis flow computer.

T27 Online Development Inc.: Data Exchange Approaches for ControlLogix® Controllers

Transactional data exchange between ControlLogix controllers and enterprise systems can be handled using a range of methods. In this session, data exchange approaches using separate computers and in-chassis modules will be compared. Two modules from OLDI will cover: tManager and the OPC UA Server

T28 The Latest in On-Machine Solutions

This session will cover the basic philosophy behind On-Machine, the benefits of On-Machine solutions and the latest products including Armor™ GuardLogix® safety control system and ArmorStart® LT.

T29 New PanelView™ 800 HMI Family

Learn in depth about the new PanelViewTM 800 HMI for use with Micro800® and MicroLogix™ controllers. It offers improved CPU performance with fast boot-up time and response time, better screen resolution with new 4", 7" and 10" models available. Configuration is performed with Connected Components Workbench™ software and includes enhanced features of portrait mode, recipe and symbol library.

T30 Position-Based Control with CIP Sync Technology

Due to network latency, the On-Machine DIO solutions were limited to standard/analog I/O applications in the past and were rarely used for high-speed motion applications. By adopting this position-based control solution today, it allows machine builders to do precision control more effectively with minimal latency and simple to use with motion arm output cam (MAOC).

T31 What's New in Visualization

Discover new solutions that help improve productivity by expanding connectivity and enhancing design and maintenance tools. From machine-based operator interface to highly networked systems, this session will focus on what's new with FactoryTalk® View SE, FactoryTalk® View ME, PanelView™ Plus, FactoryTalk® ViewPoint, FactoryTalk® VantagePoint and Allen-Bradley® industrial computers.

INFORMATION & VISUALIZATION SOFTWARE

T32 Grantek: Renewable Energy Mega SCADA

Power Generating Companies have continued to adopt forms of renewable energy such as wind and solar in an effort to diversify their generating asset base and add incremental capacity that is carbon neutral. Effectively operating and managing an expanding fleet of generating assets in a secure manner and balancing production capacity with demand can be very complex. Grantek Systems Integration, a Rockwell Automation Solutions Partner assisted a major electric power holding company with an operations intelligence solution based on FactoryTalk® View which provides a common information platform for monitoring, controlling, and reporting on their fleet of solar and wind generating assets.

T33 Motorola Solutions: Warehousing 2018: Three Key Technology Trends

Join Motorola and Rockwell Automation for an information session exploring three critical technology trends that will enhance and drive your profitability: automated inventory control, voice and multimodal picking, and traceability. By 2018, warehouse and distribution centers will be seen as an asset that can drive growth and profits, not just a means to do business. Following the presentation, three demo stations will be setup for a hands-on look at these technologies and how to implement them into your operation.

T34 eRPortal Software Group, LLC: Managing Distributed Assets Using GIS and FactoryTalk® Integrated Maintenance Management Software

Maintenance efficiencies and equipment uptime levels are optimized using eRPortal and Google GIS in a Rockwell Automation PlantPAx® operation. Work orders are auto-created based on FactoryTalk® tag levels. Technicians view the work location and add other inspections to his route, based on geo-proximity of nearby assets. History is added to FactoryTalk® VantagePoint® dashboards.

T35 Schweitzer Engineering Laboratories: Integrating Power System Reports Within Process Historian Repositories for Improved Visibility and Analysis

This presentation outlines the methods used to transfer and store oscillographic event report data from protective relays into process historians. The nature and format of event reports are presented, and some of the benefits of combining high-speed event data with other time series information are explored.

T36 AEA srl (Loccioni Group): Assembly and Testing Line for Oil Control Valves

We will present our latest Oil Control Valve Automatic Production System where we met the project time constraint and achieved a high quality end result through the use of Rockwell Automation solutions, in particular the new Kinetix® 5500 servo drive and the GuardLogix® PLC.

T37 Dalian Daxiang Electric (Dalian Rubber & Plastic Machinery): The Total Solution on the Tire Machinery

With the Logix platform and Ethernet based communication of Rockwell Automation, to realize the integrative manufacture from MES to the Mixer, Extruder, Calender line, so as to power saving, increasing productivity and reached information management.

T38 FactoryTalk® VantagePoint EMI: 50 Minutes to Value

If you had 50 minutes, a computer running FactoryTalk® Vantagepoint ,and an information engineer, what could you do? In this session, the instructor will lead you through solution creation on-the-fly. What types of ad-hoc analysis can you do? What types of content are easiest to develop? Could you really do a full report-package solution with FactoryTalk® VantagePoint in the allotted time?

T39 Introduction to FactoryTalk® VantagePoint and Enterprise Manufacturing Intelligence

You have heard about Manufacturing Intelligence, but do you have a good base understanding for what FactoryTalk® VantagePoint EMI, our reporting and analytics product, can really do? Come take a quick tour of FactoryTalk® VantagePoint EMI and learn more about what it has to offer.

T40 Mobility and Portability with Today's Rockwell Software®

Bring your own device to work? Need to support mobile workers? Production and operations management solutions today require various forms of access to their manufacturing intelligence systems including mobile devices and web clients. In this session, see how Rockwell Software® can begin to help accomplish these goals with access to FactoryTalk® View SE, FactoryTalk® VantagePoint EMI, and eventing on any mobile platform.

T41 Introduction to FactoryTalk® Historian: Overview Strategies for Collecting and Analyzing Data

A distributed historian strategy produces strong advantages. Learn how FactoryTalk® Historian delivers a scalable, modular, synchronized methodology for collecting, maintaining, and analyzing process data at each level of manufacturing operations. New features and functionality will be highlighted and compared to similar products in the marketplace.

T42 FactoryTalk® Metrics: Showing Value in 50 Minutes

If you had 50 minutes, a computer running FactoryTalk® Metrics, and an information engineer, what could you do? In this session, the instructor will lead you thru solution creation on-the-fly. What types of ad-hoc analysis can you do? What types of content are easiest to develop? Could you really show the value of OEE in the allotted time?

T43 Panduit: Seeing is Believing – Real-Time Physical Network Visualization

This session will cover the challenges associated with managing a physical network on the factory floor and introduce a new software platform designed to help. Never before has it been so straight forward to understand bandwidth, troubleshoot device connections, and map logical system layouts to their physical location.

T44 Hillshire Farms: Manufacturing Intelligence Key Ingredient in Food Safety Modernization Act Compliance

The Food Safety Modernization Act requires food producers take new preventative measures against foodborne illness hazards. Hillshire Brands, a global leader in packaged meat and bakery production, has expanded scalable manufacturing intelligence solutions based on FactoryTalk® software to meet new guidelines. Production facilities currently log 100 to 2,000 data points. Centralized trend reporting and analytics enabled on mobile devices and advanced alerts are helping to more tightly control production, bolster reporting and track and trace capabilities and even help increase production flexibility.

NETWORKS & SECURITY

T45 Stratix 5100™ Wireless Access Point and Workgroup Bridge Configuration

Stratix 5100™ Wireless Access Point / Work Group Bridge enables the extension of EtherNet/IP to wireless media. Learn the basics of configuration using Stratix 5100™ device manager and implementing an Integrated Architecture system with premier integration using Rockwell Software Studio 5000 and FactoryTalk® View via add-on profiles, AOI and faceplates.

T46 Integrated Architecture® Tools for Securing Your Control System

Learn how you can reduce risk and enhance protection of your industrial control system against security threats. Discussion will focus on practical recommendations for installing, commissioning and improving the security of the Integrated Architecture system including capabilities in Logix controllers and how to use FactoryTalk® Security to control user access to key assets and information.

For a complete session schedule, visit www.automationfair.com

T47   Cisco Systems: Trends in Enterprise Networking

Learn from Cisco experts the trends in enterprise networking that may soon be impacting your EtherNet/IP networks. This will be a general overview of various technologies such as: transition from IPv4 to IPv6, flexibility gained from Software-defined Networking (SDN), TrustSec secure network access, bring your own device (BYOD), and cloud computing (public, private, fog).

T48   Stratus Technologies: Leveraging VMware for Rockwell Automation Applications

Learn invaluable benefits of using VMware to deploy and run Rockwell Automation applications, including training on a new VMware server sizing tool as well as steps for deploying new PlantPAx® Virtual Templates and setting up a fault-tolerant environment for Rockwell Automation virtual machines. Participants will receive a copy of the sizing tool.

T49   General Cable: Industrial Ethernet Cable – The Perfect Solution for an Imperfect Environment

Industrial settings expose cables to unique environmental, climatic, and electrical conditions which Ethernet cables must be able to reliably operate in. This session will provide an overview of some of these challenging environments and how Industrial Ethernet cables are specifically designed for use in them compared to traditional premise cables.

T50   Kepware Technologies: Leveraging OPC UA to Help Meet Site Security Requirements

This presentation describes how the Oil & Gas Industry can meet security requirements by leveraging the OPC UA standard and role-based permissions within a communications platform. It discusses the "defense-in-depth" approach to securing critical infrastructure, and focuses on improving security within the client-server communications layer of the industrial control system.

T51   Owl Computing Technologies: Applying Data Diode Technology to Provide Network Segregation Security

This session will cover the application of data diode technology to implement security architecture between plant control systems and corporate systems. A use case showing the ease of integration of a data diode solution to segment an existing industrial control network from the corporate network will be described.

T52   Spectrum Controls, Inc.: Remote Access for OEM Machine Builders

Improve operational up-time and reduce the total cost of service through the use of remote monitoring and access. Achieve higher customer satisfaction, create added value, and improve revenues through the use of WebPort remote access technology.

T53   ESTeem Wireless Modems: Securing Critical Wireless Networks

Securing critical infrastructure and industrial control systems against on-going terror and cyber threats is one of our nation's highest priorities. The communication networks supporting these systems are the first line of defense. This presentation will outline current wireless security standards and provide best practices for securing wireless networks.

POWER, MOTION & MOTOR CONTROL

T54   Short Circuit Protective Device Options

This session is an overview comparison of short circuit protective devices such as circuit breakers and disconnect switches, including a review of applicable standards including UL508, UL98, and NFPA79. We will also discuss where and why each technology is used, as well as their differences and similarities.

T55   Hammond Power Solutions Inc.: High Efficiency Transformer Applications

Learn about various applications and design considerations using the current NEMA TP1, NEMA Premium and the future DOE 2016 values. Review the upcoming DOE efficiency requirements and how that will affect specifications, applications and costing. Specific information for technical selection, regulations, retro-fits and payback analysis will be presented.

T56   Western Integrated Systems: Protecting Personnel and Optimizing Machine Performance Using ArcShield™ CENTERLINE® 2100 MCC and PowerFlex® 750 Series VFDs

A new mill installation required a focus on Safety, Optimization, and Communication. Learn how a Rockwell Automation Solution Partner engineered and delivered Arc Shield CENTERLINE 2100 MCCs and PowerFlex 750 Series VFDs to provide their client with personnel safety, machine optimization, and reduced start up time using EtherNet /IP communications.

T57   Marathon Motors: Permanent Magnet AC Motor Technology

Permanent Magnet AC (PMAC) motors provides many benefits to the user, including improved efficiency, power density, dynamic performance, reliability and inherent braking. Understanding the technology and its comparison with induction motors and drives, will result in a more successful installation and improved productivity.

T58   Systems Interface: Have a Drive with Us!

This session begins with an overview of cost saving aspects of Connected AC Drives for improved Setup, Operation, and Maintenance, followed by a review of several recent AC Drive applications involving shipboard PowerFlex 755-driven winches, Integrated Motion on the EtherNet/IP network of PowerFlex 755 drives for absolute positioning and electronic gearing, and cost-effective conveyor control with networked PF4Ms.

T59   Bonitron: UPD Lite | Emergency Uninterruptible Power for Drives

What if your process loses power mid-cycle and you need to move it to a safe position? While a full-size UPS or Ride-Thru may be too expensive UPD Lite is designed for low speed emergency backup power (Power = Speed x Torque). Join us to discuss cost-effective emergency power options.

T60   Integrated Safety with Kinetix and PowerFlex Drives

Discover the advantage of Integrated Safety for motion control applications. See how networked safety over EtherNet/IP applies Safe Torque-Off to your application and meets required safety ratings.

T61   Leverage the Integrated Architecture System with the Combination of Kinetix and PoweFlex Drives

Learn how Kinetix and PowerFlex drives compliment each other and the advantage of each in specific applications. See how a common Rockwell Software Studio 5000 configuration and programming experience not only helps save start up time, but also delivers a coordinated and synchronized machine.

T62   Next Generation of Compact AC Drives

Don't miss this opportunity to see learn about the newest series of PowerFlex AC drives, the PowerFlex 520-Series. The PowerFlex 523, PowerFlex 525 and the new PowerFlex 527 drives provide users with a new user experience along with features not found in the marketplace today. Learn how the unique hardware design, variety of power range and motor control options, along with the programming tools that make configuration easier than ever before, can help you lower your total cost to design, develop and deliver your machine.

T63   PowerFlex Medium Voltage Drives for Heavy Industry Applications

Learn how PowerFlex 7000 medium voltage drives contribute to the success of heavy industries that require continuous and efficient operations. New capabilities extend application reach for safety and hoist applications. To help reduce downtime, realize cost savings and increase plant safety, see how Virtual Support Engineer monitors equipment and collects valuable performance analytics.

T64   Drive Application Success with the PowerFlex 750-Series AC Drives

Don't miss this opportunity to learn how the PowerFlex 750-Series drives can help drive your application to success. See how this portfolio of PowerFlex® 753 and PowerFlex® 755 drives have developed to deliver a broad power range and wide range of motor control to fit applications. See how our drive capabilities help provide preventative maintenance allowing you to reduce downtime and keep operations running.

PROCESS SOLUTIONS

T65 Migrating Your Legacy DCS System

Are today's optimization and innovation demands hampered by your old process control system? Is support for your legacy DCS diminishing? This session will explore the advantages of migrating to the modern PlantPAx system. You'll learn about the multitude of tools – scanners, cables, code conversion, wiring harnesses, and more – available from Rockwell Automation that can help you migrate your system.

T66 Process Safety and Critical Control: What Solution Best Meets Your Needs

Choosing the correct safety solution to meet availability and safety requirements is a critical decision. In this session, we'll explore our process safety offerings from SIL 2 and Sil 3 to fail-safe, fault tolerant and triple modular redundancy. Learn which option is best for your requirements and how each helps improve efficiencies and performance.

T67 Rethink What to Expect From Your DCS

Across all process industries, there's continued pressure to find new sources of productivity and margin growth. Yet many process companies are using the same automation approach and control system technologies that they were using decades ago. This session will discuss a better approach to process control – one that helps deliver a more contemporary, information-centric and integrated control system in the production environment.

T68 Cybertrol Engineering: Flexible and Fault-tolerant Virtualized Batching Solution

Find out about a manufacturer that required a flexible batching solution that could handle more than one hundred sources/processes/destinations. The system design used FactoryTalk® Batch in a virtualized, fault-tolerant environment. It included an application that imported corporate formulas and allowed site specific recipes and production scheduling via a web interface.

T69 Endress+Hauser: Harnessing the Power of Instrumentation: Reliable Field Data

The term statistical process control (SPC) is a subject that most process owners understand. Knowing whether a process is in control and stable is paramount to produce a product that meets customer needs. We will show how reliable pH measurement can allow for the application of realistic tolerances, which can help lead to improved product quality and profitability.

T70 Molex: A Smooth Profibus Redundancy Solution for the Logix Family of Controllers

If Profibus DP is part of your control application, reinforcing the availability of your installation can help increase productivity through a smooth redundancy solution. Molex proposes an easy, open and efficient architecture without adding any specific material based on our SST Profibus remote module connected over EtherNet/IP.

T71 ESE, Inc.: Increase Production, Improve Product Consistency and Provide Faster Mock Recalls

When a primary customer gives you these three initiatives – how do you respond? ESE, Inc. will describe how a food processing company is using a fully integrated, quality management system into their production processes. This company formerly used a primarily manual process and integrated a modern PlantPAx control system with a quality management system in an MES (Manufacturing Execution System).

T72 Pepperl+Fuchs, Inc.: Explosion Protection Methods and Solutions – A Comparison Between Intrinsic Safety vs. Explosion Proof

Intrinsic safety is a commonly used explosion protection method. This presentation will illustrate some of the advantages of intrinsic safety barriers over other explosion protection methods used in process automation.

T73 Exploring Sustainable Condition Monitoring Technologies: Logix, EtherNet/IP and the Dynamix™ 1444 Series

See how a Logix controller, uses an advanced equipment diagnostic add-on-instructions (AOIs) and standard Integrated Architecture tools, to detect, identify and monitor faults in industrial equipment. The session will illustrate how an automated solution, using common Logix controllers and Dynamic 1444 series monitors can be applied to forewarn users of problems before production is impacted or to enable more efficient, cost effective maintenance strategies.

T74 Fundamentals of Model Predictive Control

What control problems are ideal for deploying Model Predictive Control (MPC), and how does MPC deliver higher performance when deployed against these appropriate control challenges? How can you pre-quality value and calculate payback? Basic MPC solution design and value estimation methods will be presented in this session.

T75 Process Skid Integration Solutions

As an end user or OEM, you're looking for more functionality, lower costs and ease of integration for skid equipment. This session will provide guidelines and strategies to help you successfully deploy modular solutions. You'll learn about the scalable, reusable, plug-and-play equipment control options, tools and support available with the PlantPAx process automation system.

T76 Discover the Benefits of Model-Based Utility Energy Optimization

Generating chilled water, steam, refrigerant or electricity with local equipment provides ongoing challenges to help minimize energy consumption. The benefits of real-time optimization will be demonstrated utilizing mathematical equipment models to determine minimum cost dispatch. We'll discuss measurement, performance reporting, and optimization – a step that can help realize energy savings of up to 10-40%.

T77 Banks Integration Group: The Conversion of a Delta-V DCS Platform to a PlantPAx System Based Solution for a Pharmaceutical Manufacturer

This presentation will take the audience through the engineering and design process used by Banks Integration to convert the Delta-V DCS design to a control system using a PlantPAx system and several components of the PI enterprise infrastructure. The session includes system architecture, networks, and sub-system integration and control details.

T78 Datalogic Automation: Consumer Goods Packaging: A Picture is (Literally) Worth A Thousand Words

Federal regulations and new initiatives ensuring product transparency throughout the processing path have warranted new solutions for traceability. Technology, once limited to bar code serialization, can now determine product defects by matching graphics on packaging to thousands of images in a database providing critical information, greater accuracy and higher returns.

T79 River Consulting: Integrated Continuous Process Control and BMS Using PlantPAx and GuardLogix® Platforms

Learn about successful application of the PlantPAx and GuardLogix platforms to control a new continuous process chemical facility with 40 PID loops and seven burners totaling 20MW. Topics include the solution architecture, design process, testing, controller and network redundancy, historian, diagnostics and failsafe I/O.

T80 MYNAH Technologies LLC: Equipping the Operators of the Future

The new generation of operators have the challenge of operating highly automated and complex plants and are put into a position where they must learn at a faster pace. Practicing in a simulated environment is a proven method in transitioning the next generation to successful operators.

T81 HMS Industrial Networks AB: Remote Monitoring, Maintenance and Programming of PLC-based Applications in the Oil & Gas Market

Discover how you can reduce service and downtime with a remote application management solution. Monitor your application with user interfaces, data logging, reporting and alarm emails and texts. Program your PLC remotely to correct problems from around the world.

▶ For a complete session schedule, visit www.automationfair.com

SAFETY & COMPLIANCE

T82 **Pentair Equipment Protection (Hoffman®): Use of Purge and Pressurization for Enclosures in Hazardous Locations**

Purge and pressurization is a protection concept that can be utilized when placing equipment into hazardous locations. This presentation will show advantages and disadvantages, different pressurization methods, enclosure requirements, cost of operation and guidelines for agency certifications for the use of this method of hazardous location protection.

T83 **Polytron: Safety First – Putting Up Your Guard with Rockwell Automation Safety Technology**

Learn how Polytron applies machine safety best practices to help a major consumer packaged goods company implement its strategic risk assessment plan using Rockwell Automation safety technology to mitigate risk. Also, learn how Polytron's focused training ensured continuity of performance for this manufacturer's workforce safety in updated machine operation.

T84 **Fluke Corporation: Working Safer Through Utilization of Wireless Test Tools**

Traditional test tools require close contact and proximity with hazardous voltages. Learn how wireless test tools allow users to work safer and safely troubleshoot in hazardous environments by reducing the risk for arc flash potential and staying out of the arc flash zone.

T85 **Machinery Safety Verification and Validation Requirements, Processes and Documentation (English)**

The Safety LifeCycle approach, as defined in standards IEC 61508 and IEC 62061, requires verification to prove the circuit for the safety functions of the machine are working properly and meet specified requirements, and validation to test the safety functions of the system. These functions require a plan and proper documentation. This session will cover the verification and validation process, proper documentation, and available tools. Ideally, we recommend attending "Machinery Safety System Development and Configuration Tools Overview" workshop prior to this session.

T86 **Maquinaria de Verificación y Validación de Requisitos de Seguridad, Procesos y Documentación (Español)**   `Español`

El enfoque de seguridad LifeCycle, tal como se define en las normas IEC 61508 e IEC 62061, requiere la verificación de probar el circuito para las funciones de seguridad de la máquina está funcionando correctamente y cumplir con los requisitos especificados, y la validación para probar las funciones de seguridad del sistema. Estas funciones requieren un plan y la documentación adecuada. Esta sesión cubrirá el proceso de verificación y validación, la documentación adecuada, y las herramientas disponibles. Idealmente, recomendamos Taller antes de asistir a esta sesión "Herramientas de configuración general sobre el desarrollo del sistema de seguridad de maquinaria y".

T87 **Machinery Safety System Selection and Development (English)**

Following a risk assessment identifying hazards to be mitigated, suitable methods of safeguarding measures to meet machinery safety standards must be designed and implemented. Safety automation technologies are usually deployed including inputs, logic device, and outputs to perform a specific safety function. This session will cover safety function design, including tools to expedite and document the process. Ideally, we recommend attending "Machinery Safety System Development and Configuration Tools Overview" workshop prior to this session.

T88 **Selección del Sistema de Seguridad de Maquinaria y Desarrollo (Español)**   `Español`

Tras una evaluación del riesgo que identifique los riesgos a ser mitigados, métodos adecuados para salvaguardar las medidas para cumplir las normas de seguridad de las máquinas deben ser diseñados e implementados. Tecnologías de automatización de seguridad generalmente se despliegan incluyendo insumos, dispositivo lógico, y salidas para realizar una función de seguridad específica. Esta sesión cubrirá diseño de la función de seguridad, incluyendo herramientas para agilizar y documentar el proceso. Idealmente, recomendamos Taller antes de asistir a esta sesión "Herramientas de configuración general sobre el desarrollo del sistema de seguridad de maquinaria y".

T89 **Introduction to Functional Safety for Machinery (English)**

Emerging technologies and changing standards provide new requirements and opportunities for machine builders. Learn about these new opportunities and how to take advantage of them in this session that reviews EN ISO 13849-1, the SISTEMA calculator and other tools you can use to help build a better machine.

T90 **Introduccion a la Seguridad Funcional en Máquinas (Español)**   `Español`

Nuevas tecnologías y estándares cambiantes proporcionan nuevas necesidades y oportunidades para los usuarios y fabricantes de maquinaria. En esta sesion aprenderemos acerca de estas nuevas oportunidades y cómo aprovecharlas en nuestras aplicaciones. Revisaremos el estandar EN ISO 13849-1, la calculadora SISTEMA y otras herramientas que pueden utilizarse para tener y construir una mejor máquina.

T91 **How to Select the Right Machinery Safety Logic System**

Machinery control and safety applications range from simple to complex. Learn how to select the right safety logic system to help create a safer, sustainable, more productive, and cost-effective machine. Rockwell Automation experts will explore the pros and cons of different safety logic systems — from relays to integrated safety controllers — to help you make the right choice.

T92 **Advanced Programming Techniques for Machinery Safety Applications**

In addition to the standard control applications performed by programmable controllers, complex safety applications can also be performed that would be far more difficult and expensive using hard-wired devices. This session will review the considerations and techniques for programming safety devices to address safety and productivity issues in complex applications.

T93 **Boiler Safety Solutions**

Learn how the Rockwell Automation complete portfolio of control and safety solutions are applied in a typical biomass boiler used in cogeneration equipment. In this session, you will see how the controls solution met and, in some aspects, exceeded NFPA85.

T94 **Case Study: Improving Safety and Performance to Deal with an Aging Workforce and Machinery Obsolescence**

A number of issues facing today's manufacturers combine to reduce productivity and put workers at higher risk. As an aging workforce gives way to inexperienced workers using older machinery, safety risks increase dramatically. Discover how one manufacturer and its system integrator used the safety lifecycle to improve throughput 30% while helping to reduce safety risks.

T95 **E-Technologies Group: Machine Safety – Not Just for Compliance**

Machinery safety is crucial to effective, efficient operation at any manufacturing facility — as such, it cannot be an afterthought. Integrating safety features and functions in the earliest phases of the design process helps ensure these mechanisms contribute to a solid design, rather than slow down implementation. Long-term, this approach saves costs.

T96 **Grace Engineered Products Inc.: Reduce Risk with PESDS Making NFPA 70E Compliance Safer**

Permanent electrical safety devices (PESDs) reduce risks in and help to create an electrically safe work condition and will affect your electrical safety program. Safety is not zero risk, but decreases risks to an acceptable level. The NFPA 70E has changed maintenance practices, designs, and electrical/mechanical lockout/tag out procedures to reduce electrical hazards.

T97 **New ANSI RIA R15.06: Robot and Robot System Safety**

ANSI RIA R15.06 - 2012 is the new robot system safety standard and the "old" 1999 R15.06 will no longer be valid for use as of the end of 2014. This session will outline the new standard and how it differs from the previous.

T98 **Post Glover Resistors: High Resistance Grounding (HRG) and NEC – Considerations and Concerns**

High resistance grounding (HRG) is a leap forward in industrial safety. Knowing how to install and effectively use it in conjunction with NEC guidelines is paramount to maximizing the return on investment. This presentation will highlight and explain pertinent sections of the NEC as they relate to proper implementation of HRG.

T99 **ISO 14119 – A Small Standard with a Lot of Requirements**

A practical review of the new ISO 14119 interlocking switches standard and what it means for new guarding and interlocking designs.

HANDS-ON LAB REGISTRATION

Hands-on labs allow you to work directly with Rockwell Automation products. You can register for them before arriving at the Automation Fair event. Registering online for hands-on labs will save you time and help you plan your day more efficiently, giving you more time to take in all Automation Fair has to offer.

1 Register for Automation Fair®

Register at **automationfair.com**.

2 Register for Hands-on Labs

Monday, September 22: Go to **automationfair.com** and choose "Hands-on Lab Registration." (Remember you must be registered for the Automation Fair to register for hands-on labs.) You must register by 11 p.m. EST on Monday, October 27.

3 Check-in for your Hands-on Lab Seats

Tuesday, October 28: Check-in to confirm all your hands-on lab seat selections. You must confirm by 11 p.m. EST on Friday, November 7.

4 At Automation Fair

At Automation Fair, go to show registration to pick up your show badge along with your ticket(s) for your registered hands-on lab sessions.

For more information about registering for hands-on labs at this year's Automation Fair event, please go to: **www.automationfair.com**.

HANDS-ON LABS

90 Minutes

Hands-on labs are ninety minutes and allow you to work hands on with Rockwell Automation products. See above for information on how to register.

CONTROL SYSTEM DESIGN

L04   Basic PLC Programming with Micro800™ Controller

This introductory lab will cover the basic capabilities, applications and programming of micro programmable logic controllers (PLCs). In this lab you will learn about the Micro800 controller features and how to program the Micro800 PLCs with Connected Components Workbench software for a simple applications.

L05   Advanced PLC Topics for Micro800 Controllers with Motion Capabilities and CIP Messaging functionality

In this advanced lab, learn how to interface the Micro800 controller family with PowerFlex compact drives and Kinetix component servo drives. Participants will use the Connected Components Accelerator Toolkit (CCAT) to complete simple machine applications.

L17   Rockwell Software Studio 5000 and Logix Basics Lab

Are you new to Logix programming or want a quick refresher on the basics? This session will provide an overview of the core capabilities offered in Rockwell Software Studio 5000 and highlight the importance of good design practices. Mastering these fundamentals will help ensure a good design and prepare you for the advanced session.

L18   Rockwell Software Studio 5000 and Logix Advanced Lab

So you have the basics, now let us take it to the next level with this advanced Rockwell Software Studio 5000 and Logix session. This pick-and-choose lab will allow you to explore topics of interest and quickly see how it's capabilities add the most value to your design.

INFORMATION & VISUALIZATION SOFTWARE

L06   FactoryTalk View Site Edition: Building Applications

This hands-on lab focuses on the basic building blocks for a FactoryTalk Site Edition application. Topics include creation of screens, tag database population, parameter passing, datalogs, trending, macros, events, introduction to FactoryTalk® Alarms and Events, introduction to VBA, client configuration, and an introduction to FactoryTalk ViewPoint.

L11   FactoryTalk View Machine Edition and PanelView Plus: Introductory Lab

This hands-on lab focuses on basic FactoryTalk View Machine Edition concepts for new users. Topics include creating an application, working with displays, global objects, and tags, using parameters, testing and running the application, and language switching. See how features like search and replace tag and text, tag cross-referenced and more, can help you to get more work done, in less time.

▶ **For a complete session schedule, visit www.automationfair.com**

NETWORKS & SECURITY

L02   Applying Network Address Translation (NAT) in Machine Applications

This lab highlights the use of integrated Network Address Translation (NAT) on the Stratix 5700™ switch to easily integrate duplicate machines and modular systems into a larger Ethernet network. A prior understanding of subnets, VLANs, and routing is highly recommended.

L03   Applying Integrated Architecture Features to Improve Industrial Control System (ICS) Security

Gain a better understanding of security features available in the Integrated Architecture and PlantPAx solutions. Learn how you can protect your controller content and how to control access to your processes with FactoryTalk® Security in both Rockwell Software Studio 5000 and FactoryTalk View SE. Finally, learn how to audit controller changes and detect unauthorized changes using FactoryTalk AssetCentre.

POWER, MOTION & MOTOR CONTROL

L01   Speed Integration with Ethernet-enabled CENTERLINE MCCs, Rockwell Software Studio 5000 and IntelliCENTER Software

Experience the ease of integrating CENTERLINE Motor Control Centers (MCCS) with their associated components — PowerFlex drives and E300 overload relays. See how, with a click of the button, the new IntelliCENTER Integration Assistant populates the Studio 5000 I/O tree, helping to simplify device configuration and reduce commissioning time and errors. In addition, discover the powerful combination of IntelliCENTER Energy which will monitor the energy usage within your MCC.

L08   Size, Select and Configure Kinetix and PowerFlex Drives Using Motion Analyzer

Experience the speed and simplicity of using the new Motion Analyzer to size and select motion and drive systems. This session will premiere the new web based selection tool.

L14   Drive Programming with the PowerFlex 525 AC Drive

Learn how to quickly and easily configure PowerFlex 525 AC drives. From the built-in human interface module (HIM), to Connected Components Workbench™ software or the Rockwell Software Studio 5000 environment, we provide you with powerful, intuitive tools to help enhance your user experience and reduce your development time so you can deliver machines faster and more efficiently. Finally see how automatic device configuration can help save valuable time to get your machines back on line faster.

L15   Integrated Motion on EtherNet/IP

Learn how to configure, program, and commission a CompactLogix™ 5370 controller with integrated motion on EtherNet/IP using the new Kinetix 5500 servo drives and PowerFlex 527 variable frequency drives.

PROCESS SOLUTIONS

L07   Introduction to the PlantPAx Process System for Operations and System Engineering

This two part lab examines the PlantPAx system within a simulated plant environment through the eyes of an operator or system engineer. As an operator, you will learn about navigating and interfacing with the system in a utilities and batch area. As an engineer, you will learn how to execute simple configuration changes and add a new control strategy using the PlantPAx library. This session is ideal for those seeking basic familiarity with the PlantPAx system.

L09   Introduction to Configuring an AADvance™ Process Safety Solution

The AADvance solution is a truly distributed, scalable architecture comprised of a hardware controller and a software environment that allows you to apply different levels of module redundancy as required by specific parts of your application. It offers a high level of flexibility from small quantity I/O to large systems, non-safety to SIL3 and fail-safe to multiple fault tolerant.

L16   Improve Design Flexibility Through PlantPAx Field Device Networks

Learn how to simplify the configuration of smart process instrumentation via EtherNet/IP, HART, Foundation Fieldbus and Profibus-PA utilizing device integration tools and documents. Explore asset management solutions, along with the latest Fieldbus linking devices and library objects, to understand how to save integration time and improve productivity. The allotted time allows for a hands-on experience with ONE technology: EtherNet/IP, HART, Foundation Fieldbus or Profibus-PA.

SAFETY

L10   Effective Design Methods for Integrating Safety Using Logix Controllers

Learn how you can help improve safety and productivity while reducing cost using the integrated standard and safety GuardLogix solution. This lab uses simple built-in safety instructions and features to demonstrate how easily these goals can be achieved.

L12   Introduction to the Guardmaster® 440C-CR30 Software Configurable Safety Relay

Learn how to use the newest safety logic device from Rockwell Automation — the Guardmaster 440C-CR30 software configurable safety relay. The Guardmaster 440C-CR30 is configured with a simple, intelligent function block editor in the free Connected Component Workbench software package. In this lab, you will learn how to use the configuration software and how to take advantage of several of the key features.

L13   Reducing Machinery Safety System Development Time Using Safety Automation Builder

In this session, you will learn how to help reduce development and deployment time of machinery safety systems using the Safety Automation Builder (SAB) configuration tool. SAB facilitates the planning of safety systems, helping you lay out the machine safety hazards and access points, define the appropriate safety functions, select products to achieve the required safety performance level (PL) according to EN ISO 13849-1, create SISTEMA projects for analysis of all safety functions, and create a bill of material.

90 Minutes

WORKSHOPS

In-depth demonstration workshops are ninety minute presentations by leading industry experts. All workshops are available on a first-come, first-served basis on site – no registration required.

AUTOMATION LIFECYCLE & MIGRATION SERVICES

W01 End-to-End Pipeline Control: From Source to LACT

Over 40,000 kilometers of new pipeline infrastructure is built each year around the globe to help meet rising demands for energy. Because much of the typical pipeline operation (well pads, pipelines and LACT units) is isolated and does not have personnel dedicated to controls engineering and maintenance tasks, any system failure can be costly and time-consuming. During this workshop we will discuss how to communicate with multiple protocols to allow interfacing with vendor skids for efficient control and data collection, and how to design, engineer, install and maintain your pipeline operations with enhanced safety and improved efficiency to help you minimize risks and maximize uptime.

CONNECTED ENTERPRISE

W02 Securing the Connected Enterprise

Historically plant automation and business networks have been segregated and isolated using different communications technologies. Cisco and Rockwell Automation have partnered to provide a common network and security environment on a single unified network infrastructure. Learn how we are delivering solutions for security which include unified security policy management and layered security functionality appropriate for the industrial environment.

W03 Benefits of Using Managed Infrastructure and Security Services

Do technology skill gaps, an aging workforce, and lean initiatives that reduce headcount sound familiar? Learn how Rockwell Automation and its strategic partners can help simplify your infrastructure challenges, help provide secure operations using on premise and cloud technologies to efficiently improve the security posture of manufacturing facilities, address IT skill shortages, improve capital project efficiency and streamline your support strategies.

CONTROL SYSTEM DESIGN

W04 SLC Migration: Tips & Tools Lab

This lab will cover the use of SLC migration enablers that help perform an SLC to CompactLogix™ migration. Topics covered include Integrated Architecture Builder, code conversion tools, and the 1747-AENTR Ethernet adaptor.

W05 Sensing Your Architecture with IO-Link

This session will outline how IO-Link enabled sensors will help enable you to capitalize on diagnostics and Automatic Device Replacement, support tool changes and take advantage of multiple profile capability to maximize uptime.

W06 Rockwell Software Studio 5000 Logix Designer™ Workshop

Do you want more than an overview, but do not want to dive right into a lab? If so, this workshop is for you. This session combines presentation with instructor led demonstration of the new Rockwell Software Studio 5000 Logix Designer productivity features. There is no better way to quickly see and learn what this powerful new release has to offer.

W07 Accelerate Your Small Machine Design with Connected Component Solutions

Connected Components Workbench software offers controller programming, device configuration and integration with HMI editor to help make programming your standalone machine more simple. In this session, you will learn how to optimize your stand-alone machine designs by taking advantage of the Connected Components Accelerator Toolkit pre-written BOMs, CAD, Logic and HMI design examples that provide the base design structure. Add functionality to Micro800 controller, such as analog or serial ports, without expanding the control panel footprint by leveraging plug-in modules. The free single package, Connected Components Workbench software, reduces initial time to set-up controls between multiple devices.

W18 What's New in Visualization

Discover new solutions that help improve productivity by expanding connectivity and enhancing design and maintenance tools. From machine-based operator interface to highly networked systems, this session will focus on what's new with FactoryTalk® View SE, FactoryTalk® View ME, PanelView™ Plus, FactoryTalk® ViewPoint, FactoryTalk® VantagePoint and Allen-Bradley® industrial computers.

NETWORKS & SECURITY

W08 Design and Develop Robust EtherNet/IP Networks

See considerations developed by Rockwell Automation and its partners to help you design and deploy a scalable, robust, and future-ready plant-wide / site-wide EtherNet/IP network infrastructure. Topics will include segmentation techniques, data prioritization, resiliency, time synchronization, structure and hierarchy. A prior understanding of general networking concepts is recommended.

W09 Design Considerations for Securing EtherNet/IP Networks

See considerations developed by Rockwell Automation and its partners to help you design and deploy a more secure EtherNet/IP network infrastructure. Topics will include a defense-in-depth security approach and network security framework, including configuring a Stratix 5900™, to help you improve the availability and confidentiality of your EtherNet/IP network traffic. A prior understanding of general networking and security concepts is recommended.

W10 Wireless Design Considerations for Industrial Applications

Industrial Automation and Control System (IACS) applications increasingly use wireless LANs that require reliable data transmission with low levels of latency and jitter. Deploying a wireless network requires thoughtful planning and design, as well as periodic monitoring to meet expectations for bandwidth, throughput, reliability and security. Learn recommendation from Cisco and Rockwell Automation on how to successfully design and deploy WLANs.

POWER, MOTION & MOTOR CONTROL

W11 Machine Innovation with the iTRAK® System by Rockwell Automation

Learn how Rockwell Automation iTRAK technology is changing application solutions across the industry. This session will cover how the iTRAK system Integrated Architecture adds value for machine builders. Learn how to increase the speed and flexibility of your products and reduce their design and assembly costs, while end users experience dramatically increased productivity with higher throughput, faster changeovers and lower maintenance.

W12 PowerFlex Premier Integration – The Better Life

See how the integration of PowerFlex drives into the Integrated Architecture provides the Premier Integration experience. This session will explore the advantages of combining PowerFlex drives into a Logix control system and the software tools for integration.

▶ For a complete session schedule, visit www.automationfair.com

PROCESS SOLUTIONS

W13   Batch Management and Control

You depend on your batch operations for flexibility and performance that can be tailored to meet today's demands. Whether your needs are simple, or for a multi-vessel or complex multi-product, this session on the batch management and control capabilities of the PlantPAx system will resonate with you. We'll discuss recipe management, production scheduling, information and procedures management and much more.

W14   Discover the Functionality of the PlantPAx Library of Process Objects

The PlantPAx libraries are key ingredients to providing rich functionality with known performance. In this session, the capabilities and typical application of each library object will be presented. Common library features such as modes and alarms will be explained. You'll walk away with the knowledge to more efficiently develop and operate process systems and OEM skids.

SAFETY & COMPLIANCE

W15   Machinery Safety System Development and Configuration Tools Overview

In this session, you will learn how to help reduce development and deployment time of machinery safety systems using the Safety LifeCycle methodology and an array of tools available from Rockwell Automation. You will use a range of tools to help you determine return on investment for safety projects, design safety functions and systems, select appropriate safety devices, and help ensure that your system meets global safety standards and directives being increasingly specified by manufacturers.

W16   Introduction to Machine Risk Assessment and Functional Specification Development

Machine risk assessment provides the framework for safeguarding existing machinery and new machine designs. By properly identifying hazards and risk associated with machine interaction, you can help apply more effective and suitable methods of safeguarding measures that conform with today's global machine safety standards and regulations. This session will showcase the process of performing a machine risk assessment process, including its place in the safety lifecycle and use of available tools to expedite and document the process. Ideally, we recommend attending the "Machinery Safety System Development and Configuration Tools Overview" workshop prior to this session.

W17   Understanding the Standards Surrounding Arc Flash Hazards and Arc Resistant Equipment

De-mystify the "how-to" of implementing arc resistant equipment within typical industrial or commercial facilities. This workshop offers insight into several practical aspects of procuring and applying arc resistant equipment. Topics include NFPA 70E highlights, arc flash basics, a review of arc resistant equipment and arc assessment services.

FIRST®
ENGINEERING OUR FUTURE™

FIRST (For Inspiration and Recognition of Science and Technology), a not-for-profit organization, has a vision to create a world where science and technology are celebrated and where young people can dream of becoming science and technology heroes.

The *FIRST* Robotics Competition (FRC) is a unique varsity sport of the mind designed to help high school-aged young people discover how interesting and rewarding the life of engineers and researchers can be.

FIRST also offers the *FIRST* Tech Challenge (FTC), a more affordable and accessible program for high school students, the *FIRST* LEGO® League (FLL) for 9 to 14 year-olds and the Junior *FIRST* Lego League (FLL) for 6 to 9 year-olds.

You are sure to be engaged as students showcase their *FIRST* robots in the *FIRST* Automation Fair booth. Among all the sophisticated automation products and systems you'll see in the convention center, the *FIRST* booth will surely remind you why you were inspired to become an engineer.

Also visit the booth to learn about Project Lead The Way, our in-school STEM program of choice.

Rockwell Automation

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WWW.AUTOMATIONFAIR.COM

www.rockwellautomation.com

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