Who We Are
What We Do
Why it Matters

Who We Are

Since 1945, the International Society of Automation (ISA) has worked to create a better world through automation. As a non-profit professional association, we connect our global community of technicians, engineers, and other automation professionals through standards-based technical resources, networking, and career development opportunities.

ISA by the Numbers

138
Standards

16
Personnel Credentials

8
Product & System Certifications

8K
Professionals Trained (2022)

10K
Event Registrants (2022)

ISA Can Help You Achieve your Goals

ISA provides a wide-range of programs and products that provide the automation community with vital resources:

- Industry standards
- Certification and certificate programs
- Education and training
- Conformity assessment

- Books and technical articles
- Conferences and exhibits
- Networking and career development opportunities

Major Automation Topics We Cover

Digital Transformation/ Industry 4.0

Process Automation and Control

Cybersecurity and Connectivity

Factory Automation and Machine Control

Operations and Management

Industries We Serve

- Agriculture
- Aircraft, Aerospace
- Automotive, Transportation Vehicles/Systems
- Chemicals and Allied Products
- Communications/Networking/ Data Services
- Computers, Electronics, and Semiconductors
- Education and Training
- Engineering Consulting/EPC
- Ethanol Production
- Fabricated Metal Products
- Facilities/Building Management

- Consumer Packaged Goods, Food, Beverage
- Glass, Concrete, Stone, and Clay Products
- Government or Military
- Industrial Machinery and Equipment
- Instrumentation, Control, Test, Measurement Systems
- Marine, Maritime
- Medical Devices/Equipment
- Metal Processing
- Mining and Minerals
- Oil, Gas, and Petroleum

- Paper, Wood, and Allied Products
- Pharmaceuticals, Life Sciences
- Plastics and Rubber
- Power Generation/Distribution
- Smart Cities/Building Automation
- Systems Integration/Value-Added Resellers
- Textiles, Apparel, and Leather
- Warehouse/Distribution, Logistics, Ports
- Water/Wastewater

13,800+ members in 104 countries

70.3% North America

8% Europe

12.8% Asia Pacific

5.2% Middle East

3.6% LatAm/ Carribean

Membership

ISA is the professional home for engineers, technicians, leaders, and students in the industrial automation industry. We are creating the future of automation, and we need your skills, perspective, and insight to make it happen. Join us!

Connect

- Engage in technical discussions on ISA Connect.
- Network with automation professionals through geographic sections.
- Build connections through conferences, webinars, and online discussions.

Grow

- Explore opportunities and build your resume with ISA Career Center.
- Post job openings and access over 50,000 automation professionals.
- Serve on a standards committee.
- Advance or help others grow with ISA Mentor.

Learn

- Access over 138 standards that reflect leading industry expertise.
- Read the latest in industry information through our online news sources.
- Take training designed to build technical and leadership knowledge skills, including the ISA Business Academy.
- Earn professional credentials that document your skills and set you apart.
- Browse ISA content in our Pub Hub library.

ISA events are where everybody comes together. It's high energy and everybody cares about where the industry is going.

The class was excellent, the program was excellent. The certification programs are one of the best in the industry.

For me, the first thing I think of when you say ISA is 'family.'

In ISA you find mentors across all fields of your profession to help your career take off quickly.

I have met some of the best people in automation by being part of ISA.

Standards

ISA consensus-based industry standards make automation safer and more efficient. We have over 138 standards that reflect the expertise of more than 3,500 industry experts from around the world.

Our ISA/IEC 62443 series of standards are the world's only consensus-based automation and control systems cybersecurity standards. They have been adopted by the United Nations, government organizations, and manufacturing sectors worldwide.

ISA standards are developed and reviewed by thousands of automation professionals worldwide, focusing on cybersecurity, safety, batch control, and enterprise integration.

ISA is accredited to develop standards by the American National Standards Institute (ANSI). ISA standards are published as American National Standards, and many are submitted through the International Electrotechnical Commission (IEC) and receive international adoption.

> **Our ISA/IEC 62443 series of standards has been adopted by the United Nations, government organizations, and manufacturing sectors worldwide.**

ISA Standards Topics of Focus

- Alarm Management for the Process Industries (ISA18)
- Batch Process Control (ISA88)
- Cybersecurity for Industrial Automation & Control Systems (ISA99 / 62443)
- Enterprise-Control System Integration (ISA95)
- Functional Safety – Safety Instrumented Systems (ISA84 / 61511)
- Human-Machine Interfaces (ISA101)
- Instrumentation Symbols and Documentation (ISA5, ISA20 and ISA51)
- Intelligent Device Management (ISA108)
- Loop Checks, Calibration, Commissioning, and FAT/SAT (ISA105)
- Power Plants, Fossil and Nuclear (ISA77 and ISA67)
- Procedure Automation for Continuous Process Operations (ISA106)
- Valves / Valve Actuators (ISA75 and ISA96)
- Wireless Systems for Industrial Automation (ISA100)
- Additional Topics (ISA7, ISA12, ISA37, ISA60, ISA71, ISA76, ISA92)

What We Do

Education and Training

Developed by real-world experts in the automation and control field, ISA training covers relevant topics and vital technologies.

ISA training is always non-biased and vendor-neutral.

Critical Course Topics

ISA training courses and programs are designed to cover the complex operational and technical systems that industrial automation and control engineers and technicians design, operate, and/or maintain.

Developed and Delivered by Subject-Matter Experts

ISA training developers and instructors are subject-matter experts who bring years of real-world experience to the table and are dedicated to our mission of creating a better world through automation. Many ISA courses are based on ISA consensus industry standards—developed by thousands of experienced professionals from around the world.

Unbiased/Vendor Neutral

ISA training courses are intentionally vendor neutral—exercises and hands-on equipment are sourced from a variety of suppliers.

Documented Credibility

ACCREDITED IACET PROVIDER

ISA is accredited by the International Accreditors for Continuing Education and Training (IACET) and offers IACET CEUs for its learning events.

Continuing Education Credits

ISA facilitates development, maintenance, and documentation of individuals' professional development in the form of CEUs, digital credentials, and PDHs.

Certification

ISA certification programs provide an objective, third-party assessment and confirmation of skills and experience. With two different programs catering to engineers and technicians, earning an ISA certification demonstrates your mastery of automation knowledge.

Individuals certified by ISA programs must meet rigorous standards, including:
• Mandatory education and/or work experience requirements
• Passing certification exam
• Committing to the ISA Code of Ethics

Certified Automation Professional® (CAP)®

CAPs are engineers and professionals who work in process and manufacturing automation. They are responsible for direction, definition, design, development/application, deployment, documentation, and support of software and equipment systems.

Certified Control System Technicians® (CCST®)

CCSTs are automation and control technicians who calibrate, document, troubleshoot, and repair/replace instrumentation for systems that measure and control level, temperature, pressure, flow, and other process variables.

Certificate Programs

ISA offers certificate programs that are designed to increase knowledge and skills across a broad range of topics. Our certificate programs include:

Gain recognition by getting your name listed in the ISA Credential Directory, used by employers, customers, and others to verify a credential holder's certification or certificate.

Fire and Gas Mapping Specialist

Automation Project Management Specialist

CAP Associate

CST Associate
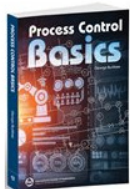
Cybersecurity Certificate Program

Safety Certificate Program

What We Do

Publications

ISA is the authoritative publisher of technical resources covering the automation profession. Written and reviewed by experts, these publications will keep you fully informed about the latest technological developments, applications, trends, and standards within the automation industry.

Books

Authored by subject-matter experts on current and emerging technologies and applications, ISA provides a variety of titles for engineers, technicians, managers, sales and marketing professionals, and academics. ISA books can help you expand your skills, create a reference library, or prepare for a CCST®, CAP®, or CSE exam.

InTech

ISA's *InTech* magazine is your source of in-depth technical articles on leading automation topics, including digital transformation, cybersecurity, process automation, and much more. Written for engineers, technicians, industrial managers, and automation business professionals, *InTech* digital magazine is published six times per year in PDF format and distributed via email.

Automation.com

ISA's Automation.com is your continuous source for industry news, new products, articles and trends from our own editors and subject matter experts. News is published daily on the website, and Ebooks come out six times per year to address the latest insights on essential automation topics. Automation.com also offers topical newsletters forty times per year, as well as special educational webinars on products and services.

ISA Transactions—the Journal of Automation

Designed for research professionals and academia, *ISA Transactions* is focused on advances in the science and engineering of measurement and automation.

Look Who's Talking

ISA is proud to be the thought leader on automation, industry 4.0, digital transformation, operational technology cybersecurity, and more. ISA and its subject matter experts have appeared in:

Nasdaq TradeTalks • Newsweek • EFFICIENT PLANT • MANUFACTURING AUTOMATION • PHARMACEUTICAL COMMERCE • DesignNews • Smart industry • OIL&GAS JOURNAL • WORLD OIL • TODAY'S MEDICAL DEVELOPMENTS • MedCity News • control design • FOOD ENGINEERING • DARKReading • CONTROL ENGINEERING • SECURITY • pharma MANUFACTURING • CIO

Events and Conferences

ISA offers a variety of events, including technical conferences, webinars, and ISA Connect Live technical discussions. These events cover the breadth of information in industrial automation and provide opportunities to:

- Engage in face-to-face experiences with renowned experts and presenters
- Learn about the latest technologies and trends
- Improve your skills with high-value, peer-reviewed technical content
- Share your company's products and services
- Network with peers and colleagues around the world

ISA Event Content is Rated 5 Stars

★ ★ ★ ★ ★

ISA Events are International

OT CYBERSECURITY SUMMIT

Aberdeen, Scotland

DIGITAL Transformation Conference *Asia Pacific*

Perth, Australia

Award-Winning Event

AUTOMATION & LEADERSHIP Conference

Eventeer Awards 2023 WINNER

The ISA Automation & Leadership Conference is the first place winner in two categories at the annual vFairs Eventeer Awards: Best in Class Hybrid Event and Best Use of Mobile App. The event was also a runner up in the Best Use of Gamification category.

What We Do

Consortia

ISA leads collaborative forums for leading companies and stakeholders in industrial cybersecurity and interoperability.

ISA100 Wireless Compliance Institute

ISA100 Wireless Compliance Institute assures interoperability for wireless products conforming to the ISA100.11a (IEC 62734) international wireless standard. **www.isa100wci.org**

ISA Security Compliance Institute

ISA/IEC 62443 cybersecurity certification of COTS products, supplier development processes and automation at asset owner operating sites. **www.isasecure.org**

ISA Global Cybersecurity Alliance

Bridge the gap between ISA/IEC 62443 standards and market adoption. Lead cybersecurity culture transformation. **www.isagca.org**

ICS4ICS

Incident Command System for Industrial Control Systems establishes a playbook for responding to cyber attacks on automation in critical infrastructure. **www.ics4ics.org**

Conformity Assessment

Just as ISA develops many of the world's leading standards for automation and operational technology cybersecurity, ISA is also a leader in the conformity assessment space – offering proper systems and measures to assure compliance with standards.

ISA operates certification schemes in two important areas:

ISASecure offers product and system certifications that assess compliance to the ISA/IEC 62443 series of standards. These include:

- Component Security Assurance (CSA)
- IIoT Component Security Assurance (ICSA)
- System Security Assurance (SSA)
- Security Development Lifecycle Assurance (SDLA)
- IACS Security Assurance (IACSSA)

ISA100 Wireless is a plant-wide wireless infrastructure technology that improves plant performance, simplifies wireless operations, and reduces costs. ISA100 Wireless certification guarantees interoperability between vendors – delivering end users wireless solutions that are standards-based, resilient, and secure. The program offers solutions for device, system, and stack-level certifications.

Why it Matters

New innovations, increases in efficiency, more robust cybersecurity, and more sustainable operations – all of these depend on automation.

And automation itself depends on people to make the world a better place.

Automation, robotics, and artificial intelligence – none of these simply eliminate jobs as the headlines might lead you to believe, but rather repurpose existing jobs and create new ones.

Manufacturing and industrial work is no longer as dirty, monotonous, or dangerous as it once was. And all that human intelligence, creativity, and capacity that used to be at risk can be valued in new ways that make work and life safer and more efficient.

As the leading professional society for automation, ISA is focused on helping industry and policy makers the world over to prepare our workforce to meet the need for qualified engineers and technicians, and have a deep understanding of the standards and conformance programs that support the automation field.

www.isa.org

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