

# Newsletter

## February, 2026



# ICR



# Hot Issue

1. Launch of international standards-based Cybersecurity testing services
2. Proficiency Test among KOLAS External Laboratories: Suitable.
3. Prepare for ISO Certification with ICR!
4. Machinery Regulation (EU) 2023/1230 transition



# Launch of international standards-based Cybersecurity testing services



## ■ Launch of Cybersecurity Testing Service

**ICR** launched its Cybersecurity testing service in January 2026, starting with vulnerability diagnosis and penetration testing of X-ray equipment. X-ray equipment developers plan to utilize ICR's Cybersecurity testing reports for EU MDR certification.

## ■ The Need for Cybersecurity Testing

Cybersecurity threats are becoming increasingly sophisticated due to technological advancements, and various damage cases are occurring.

- ❖ Cybersecurity breaches are becoming increasingly sophisticated and routine
- ❖ Cyberattacks leveraging advanced technologies like artificial intelligence (AI) are on the rise
- ❖ An environment vulnerable to new forms of cyber threats
- ❖ Cybersecurity testing is required for various certifications

## Major Advanced Cyber Threats

### AI-Based Attacks



### Software Supply Chain Attacks



### Cloud & IoT Attacks



### Ransomware Attack Evolution



### Various Hactivist Attacks



# Launch of international standards-based Cybersecurity testing services



## ■ Cybersecurity Regulation Trends

### ❖ US

In the US, the FDA and SEC mandate Cybersecurity in their relevant regulations, and Cybersecurity test reports serve as key evidence for risk management and liability in the event of an incident.

### ❖ Europe

Europe mandates cybersecurity for products and services in various industries, including the CRA, CE RED, and EU MDR, and requires Cybersecurity testing for certification.

### ❖ Korea

Korea requires Cybersecurity testing under the Information and Communications Infrastructure Protection Act and the Ministry of Food and Drug Safety's medical device certification, and the scope of application is gradually expanding.



**ICR provides Cybersecurity testing services** to meet the international community's growing demand for cybersecurity due to advanced cyber threats and to support domestic companies' response to global regulations.

# Launch of international standards-based Cybersecurity testing services



## ■ Main test items

- ❖ Vulnerability Assessment
- ❖ Penetration Testing
- ❖ Source Code Security Analysis
- ❖ Fuzz Testing
- ❖ Attack Surface/Chaining
- ❖ Security Requirements Testing
- ❖ Software composition analysis (Based SCA/SBOM)

## ■ Test subjects and related test standards

Test subject	Related test standards
Industrial equipment	IEC 62443-3-3, IEC 62443-4-1, IEC 62443-4-2
Medical devices	IEC 81001-5-1, IEC 60601-4-5, MFDS Certification Guidelines for Cybersecurity of Medical device
Wireless devices/IoT	EN 18031-1, EN 18031-2, EN 18031-3, EN 303 645
Automobile	ISO/SAE 21434

## Contact

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# Proficiency Test among KOLAS External Laboratories: Suitable.



## ■ The Proficiency Test Overview

This proficiency test was conducted to evaluate the measurement capabilities of **KOLAS-accredited testing laboratories and general industries** in reliability testing, and to ensure the reliability of testing institutions as well as the fairness and accuracy of test results.

The test was organized by the **Korea Testing Laboratory (KTL)** with approval from the **Korea Accreditation Organization**, and **ICR** participated in the ***"High-Temperature Environment and Reliability"*** test in the second half of 2025.

## ■ Applicable Standards

**ICR** recognized the following **international and military standards for high-temperature environment and reliability testing**:

- ❖ IEC 60068-2-2
- ❖ KS C IEC 60068-2-2
- ❖ MIL-STD-810F 501.4 (High Temperature)
- ❖ MIL-STD-810G 501.5 (High Temperature)



# Proficiency Test among KOLAS External Laboratories: Suitable.

## ■ Test Results

- A total of 22 testing institutions participated in the performance evaluation
- **ICR received a "Satisfactory" rating**
- **The expertise of ICR engineers** in high-temperature reliability testing **was confirmed**

## □ 안정성

- ISO 13528:2022 따른 안정성 평가

시험항목	순회전후 평균값 차이 (비교)	0.3 x 숙련도시험표준편차	판정	
고온 관련 환경 및 신뢰성 (2 차)	0.1250	<	0.3655	만족

## ■ Future Plans

provide enhanced **reliability testing services** to customers, **ICR** plans to continuously **strengthen its technical capabilities** through various initiatives beyond participation in proficiency testing programs.

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# Prepare for ISO Certification with ICR!

## ■ Understanding ISO Certification

Many companies are familiar with the term ISO certification, yet still ask, "What exactly is ISO?" or "Is it necessary for our organization?"

In this newsletter, we provide a clear overview of what **ISO certification** is and introduce the **ISO standards** most commonly applied by businesses.

ICR System Certification Center

# What Is ISO?

Advance to a Global Company  
through ISO Certification !

>

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# Prepare for ISO Certification with ICR!

## ■ What Is ISO?

ISO stands for the **International Organization for Standardization**, a non-governmental international body that develops international standards. These standards are designed to improve the **quality, safety, and efficiency** of products and services worldwide.

ISO certification demonstrates that an organization operates “**in compliance with internationally recognized requirements.**”



**ICR System Certification Center**

## What Is ISO?

### ISO Certification & Standards

ISO stands for the International Organization for Standardization, which develops internationally recognized standards used across various industries worldwide.

- Service Quality** (Icon: Award ribbon)
- Safety** (Icon: Clipboard with shield)
- Efficiency** (Icon: Gears and clock)

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# Prepare for ISO Certification with ICR!

## ■ Which Standards Are Available?

ICR provides a wide range of ISO certifications tailored to different industries and business objectives. Selecting the appropriate standard based on **an organization's industry, size, and management goals** is essential for effective implementation

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## ISO Standards Provided by ICR

 <p>ISO 9001 Quality Management System</p>	 <p>ISO 37001 Anti-Bribery Management System</p>
 <p>ISO 14001 Environmental Management System</p>	 <p>ISO 37301 Compliance Management System</p>
 <p>ISO 45001 Occupational Health &amp; Safety Management System</p>	 <p>ISO 19443 Quality Management System - Nuclear Supply Chain</p>
 <p>ISO 13485 Medical Devices Quality Management System</p>	 <p>ISO 27001 Information Security Management System</p>

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# Prepare for ISO Certification with ICR!

## ■ Overview of ISO Standards

### ❖ ISO 9001 – Quality Management System

A standard focused on quality control and continual improvement, requiring a structured management system to ensure consistent product and service quality.

### ❖ ISO 14001 – Environmental Management System

A standard for environmental protection and sustainable management, guiding organizations to minimize environmental impact and use resources efficiently.

### ❖ ISO 45001 – Occupational Health & Safety Management System

A standard designed to protect employee health and safety by preventing workplace risks and promoting a safe working environment.

### ❖ ISO 13485 – Medical Devices Quality Management System

A standard for quality management systems related to medical device manufacturing and associated services, ensuring the safety and effectiveness of medical devices.



# Prepare for ISO Certification with ICR!

## ■ Overview of ISO Standards

### ❖ ISO 37001 – Anti-Bribery Management System

A standard that establishes a management system to prevent, detect, and address bribery. It defines policies, procedures, and controls to support ethical and transparent business practices.

### ❖ ISO 37301 – Compliance Management System

A standard that provides a systematic approach for establishing and maintaining compliance with legal, regulatory, and other applicable requirements.

### ❖ ISO 19443 – Quality Management System for the Nuclear Supply Chain

A standard for organizations operating in the nuclear sector, specifying quality management requirements to address supply chain risks and ensure nuclear safety.

### ❖ ISO 27001 – Information Security Management System

A standard for establishing and maintaining an information security framework, enabling organizations to protect sensitive information and manage security risks effectively.

# Prepare for ISO Certification with ICR!

## ■ Why ISO Certification Is Important?

ISO certification is not merely a formality but **a strategic tool for strengthening business competitiveness**. For this reason, many organizations view **ISO certification as an investment**.

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## Why ISO Certification ?



**Global Competitiveness**

ISO certification demonstrates compliance with internationally recognized standards, supporting global market entry.



**Quality Management & Efficiency**

Standardized processes enhance operational consistency and efficiency.



**Customer Trust & Satisfaction**

Certification serves as credible proof of quality, reinforcing customer confidence and corporate reliability.



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# Prepare for ISO Certification with ICR!

## ■ Conclusion

**ICR** provides reliable certification audits for all the standards introduced above, conducted by qualified and verified auditors with the appropriate competence.

For further information, please feel free to contact the **ICR System Certification Center** at any time.

 **Inquiries**

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# Machinery Regulation (EU) 2023/1230 transition:



‘The grace period is nearing its end’

## ■ Transition from the Machinery Directive to the Machinery Regulation

The Machinery Directive 2006/42/EC, which has been used since 2006, was strengthened and replaced by a Regulation in 2023, and its contents were also amended and expanded.

Although we are currently within the transition (grace) period from the Directive to the Regulation, as of **14 January 2027, all machinery products (including both new and used equipment)** will be required to be designed and manufactured in accordance with the Regulation.

Therefore, starting in 2026, manufacturers should begin preparing equipment design and production in compliance with the Machinery Regulation so that equipment can be manufactured without delays in upcoming schedules.



# Machinery Regulation (EU) 2023/1230 transition: 'What has changed?'



## ■ Key change points of the Machinery Regulation

### ❖ 1. Change from Directive to Regulation

The former Machinery Directive 2006/42/EC was implemented through national transposition by each Member State. However, with the adoption of the Regulation, it becomes directly applicable across the EU with identical wording, strengthening consistency in interpretation and enforcement throughout the EU.

### ❖ 2. Strengthened software security

New requirements have been added to protect safety-related components and logic of machinery and control systems against corruption. (1.1.9 Protection against corruption, 1.2.1 Safety and reliability of control systems)  
Compliance with these requirements is presumed where the machinery has been certified, or a statement of conformity has been issued, under a cybersecurity certification scheme adopted pursuant to Regulation (EU) 2019/881.



Notified Body  
**2703**



# Machinery Regulation (EU) 2023/1230 transition: 'What has changed?'



## ■ Key change points of the Machinery Regulation

### ❖ 3. Refinement of conformity assessment procedures for machinery and related products

The conformity assessment procedures are structured into five modules: A, B, C, H, and G. Among them, Module G is newly introduced as unit verification.

- Module A: Internal production control
- Module B: EU Type-Examination (previously EC Type-Examination)
- Module C: Conformity to type based on internal production control
- Module H: Conformity based on full quality assurance
- Module G: Conformity based on unit verification

**Under Module G**, certification is required for each individual unit (per machine/serial). **A Notified Body (ICR POLSKA) performs the examinations and tests and issues the certificate.**

- ❖ 4. Explicit obligations for substantial modifiers
- ❖ 5. Official acceptance of digital documentation for instructions for use, declaration of conformity, etc.
- ❖ 6. Clarification of legal responsibilities of importers and distributors
- ❖ 7. Reflection of autonomous and emerging-technology environments (AMRs, perimeter protection, sensing devices)

Notified Body  
**2703**



# Machinery Regulation (EU) 2023/1230 transition:



**‘What certification services does ICR provide?’**

## ■ ICR’s assessment services related to the Machinery Regulation

At **ICR**, we are proactively responding to the introduction of the Machinery Regulation.

### ❖ **Module Selection consulting:**

Proposing the optimal assessment route (A/B/C/G/H) for each equipment type.

### ❖ **Preparation for full application on 14 January 2027:**

End-to-end support from design and technical documentation to module selection.

### ❖ **Cyber Security x Machinery Safety collaboration:**

Minimising transition risk by simultaneously mapping the security requirements under the Cybersecurity Regulation (EU) 2019/881 and the safety requirements under the Machinery Regulation (EU) 2023/1230.

Notified Body  
**2703**



# Machinery Regulation (EU) 2023/1230 transition:



‘What certification services does ICR provide?’

## ■ ICR’s assessment services related to the Machinery Regulation

ICR, in collaboration with **ICR POLSKA**, provides a **one-stop service** covering **machinery safety, cybersecurity, and EMC certification**, delivering an integrated end-to-end conformity assessment process—from technical documentation and testing to review/audit—in line with **Notified Body requirements**.



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