

Newsletter

May, 2025



ICR



Hot Issue

1. Seminar on how to respond to CE/RED cybersecurity regulations
2. Completion of large explosion-proof room (ICR Battery Testing Center)
3. Increasing explosive accidents and necessity of explosion-proof certification
4. Is your ISO certification properly maintained?





Seminar on how to respond to CE/RED cybersecurity regulations

■ European Radio Equipment Directive (CE/RED) CyberSecurity

Protecting critical systems and data from threats in digital spaces such as wired and wireless Internet.

From 1 August 2025, all wireless devices placed on the European market must comply with the Radio Equipment Directive (RED) cybersecurity requirements.

■ Cybersecurity EN 18031

Cybersecurity EN 18031		
Protection of Network	EN 18031-1	RED Article 3.3 (d)
Privacy	EN 18031-2	RED Article 3.3 (e)
Monetary fraud	EN 18031-3	RED Article 3.3 (f)

1) RED Article 3.3 (d)

- Protection against network damage and network asset protection, service degradation.

2) RED Article 3.3 (e)

- Protection for personal data and privacy.

3) RED Article 3.3 (f)

- Protection of information and data related to financial transactions such as money, monetary value or virtual currency.

Seminar on how to respond to CE/RED cybersecurity regulations

■ Cybersecurity Scope of Application

- 1) All wireless products directly or indirectly connected to the Internet.
(Ex : mobile phones, tablets, digital cameras, communication devices.)
 - 2) Internet of Things (IoT) devices that can transmit data via the Internet.
 - 3) Toys and equipment for infants, such as baby monitors.
 - 4) Wearable devices, such as smart watches, smart bands, and location trackers.
 - 5) Connected industrial equipment.
- ※ Product groups that are exempt from application in whole or in part.





Seminar on how to respond to CE/RED cybersecurity regulations

■ ICR is planning to hold a CE/RED cybersecurity seminar.

ICR will be hosting a seminar by inviting certification and testing experts to introduce the cybersecurity response measures required by the RED guidelines.

We ask for your interest in attending the seminar so that you can handle cybersecurity without any problems.

■ Cybersecurity seminar schedule

- ❖ Date: Wednesday, May 21, 2025
- ❖ Time: 1:00 PM - 5:00 PM
- ❖ Location: Korea Smart Healthcare Association Training Center
12th floor, 1211-1215, Gasan A1 Tower, 205-27, Gasan Digital 1-ro,
Geumcheon-gu, Seoul.

 **Inquiries**

EMC&RF Test Center / Won, Yong-Min
T. 070-5083-2642 / ymwon@icrqa.com



Seminar on how to respond to CE/RED cybersecurity regulations



Response Plan for Cybersecurity Regulations in the European Radio Equipment Directive (CE/RED)



All wireless devices placed on the European market from 1 August 2025 must meet the cybersecurity requirements of the Wireless Equipment Directive (RED-2014/53/EU).



Date: Wednesday, May 21, 2025

Time: 1:00 PM - 5:00 PM

Location: Korea Smart Healthcare Association Training Center

12th floor, 1211-1215, Gasan A1 Tower, 205-27 Gasan Digital 1-ro, Geumcheon-gu, Seoul

(Use Exit 11 of Gasan Digital Complex Station)

Time	Topic	Presenter
12:40 - 13:00	Participant registration	everyone
13:00 - 13:30	Introduction to ICR Polska	Rafal Kalinowski ICR Polska (NB 2703) Managing Director
13:30 - 14:50	CE/RED Cybersecurity Conformity Assessment Procedure	Piotr Fiedoruk ICR Polska (NB 2703) RED Expert
14:50 - 15:00	Relaxation	
15:00 - 16:30	Cybersecurity Testing according to European EN Standards	Cho Jae-hyun, Team Leader KOTCA (KT846) Cybersecurity Test Team Leader
16:30 - 17:00	Questions and Answers	ICR Polska & KOTCA

The event order and time may change depending on the circumstances on the day.

Application for attendance is on a first-come, first-served basis.

(Scan the QR code or download the application form from (<http://go.kr.me/5lxda/TygtCIVTLj>))



Inquiry : ☎ 02-6351-9002 / lej0470@icrq.com

Completion of large explosion-proof room (ICR battery testing center)



[The view of ICR Pyeongtaek battery testing center]

■ ICR's large explosion-proof room has been completed.

ICR battery testing center has expanded a large explosion-proof room that can test the safety of medium and large batteries(**EV**, **ESS**) and has been conducting **battery safety tests** since December 2024.

Completion of large explosion-proof room (ICR battery testing center)



[Interior view of the large explosion-proof room at ICR]

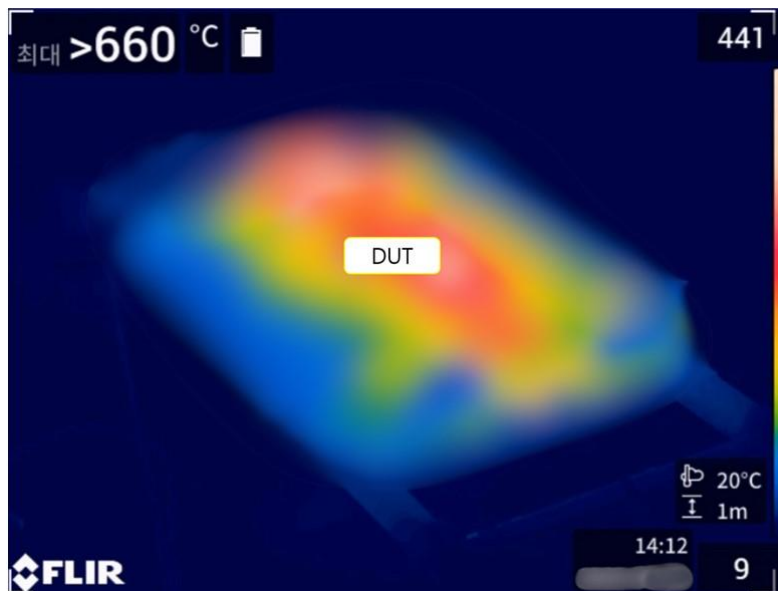
■ Battery safety tests are conducted in a large explosion-proof room.

In particular, the newly expanded large scale explosion-proof room enables safe execution of abuse testing where thermal events such as thermal propagation, thermal runaway, or combustion may occur. The facility is equipped with high resolution continuous recording cameras and thermal imaging cameras inside the room, allowing real time monitoring and recording of test progress to ensure accurate and safe testing procedures.

Completion of large explosion-proof room (ICR battery testing center)



■ ICR explosion-proof room tests and thermal imaging video



※ For security purposes, the image has been intentionally blurred. The actual image is displayed in high resolution.

Completion of large explosion-proof room (ICR battery testing center)



■ List of equipment operating in ICR's large explosion-proof room.

ICR battery testing center		
Equipment	Operation	Set up
Wet Scrubber	○	
DAQ(60 Ch) - Voltage Range : (-100 ~ 100) V - Temp. Range : (-200 ~ 1 350) °C	○	
Chiller - Bath volume : 80 L - Temp. Range : (-30 ~ 60) °C	○	
Thermal Camera - Temp. Range : (-120 ~ 2 000) °C	○	
Immersion Tank - Internal Dimension : (1 600 x 2 800 x 1 100) mm	○	
LPG Burner fire tester - By controlling the flow rate at 0.32 kg/h, the temperature can be maintained within the specified range of 800 to 1,100 °C.		○ by the End of April 2025

Completion of large explosion-proof room (ICR battery testing center)



■ ICR, KOLAS-accredited national testing laboratory

As a KOLAS accredited national testing laboratory, ICR is conducting **business discussions and technical exchanges with ICR Polska (Notified Body 2703)** to contribute to the revitalization of the electric vehicle battery market by supporting domestic battery manufacturers to export overseas.

■ Scope of KOLAS

- | | |
|---|--------------------------------|
| • IEC 62619:2022 | • IEC 60068-2-2:2007 |
| • IEC 62620:2014 | • IEC 60068-2-11:2021 |
| • IEC 62620:2014+ AMD1:2023 CSV | • IEC 60529:2013 |
| • KS C IEC 62619:2022 | • IEC 61373:2010 |
| • KS C IEC 62620:2014 | • KS C IEC 60068-2-1:2007 |
| • KS R 1204:2019 | • KS C IEC 60068-2-2:2007 |
| • ST/SG/AC.10/11/Rev.7:2019 | • KS C IEC 60068-2-11:2021 |
| • ST/SG/AC.10/11/Rev.7/Amend.1:2021 | • KS C IEC 60529:2013 |
| • ECE Regulation No.136(2016.02.05) | • KS C IEC 61373:2010 |
| • ECE Regulation No.100 Rev.3 (2022.03.23) | • KS R 1034:2006 |
| • SPS-C KBIA-10104-03-7312:2022 | • KS R 9144:2021 |
| • Notification of MOLIT 2023-481(2023.8.22) | • EN 61373:2010 |
| • KC 10031:2023(2023.10.19) | • MIL-STD-810G:2008 |
| • IEC 60068-2-1:2007 | • MIL-STD-810G:w/Change 1:2014 |

Inquiries

Battery Testing Center / Park, Young-Ho
T. 02-6351-9003 / youngho.park@icrqa.com

Increasing explosive accidents and necessity of explosion-proof certification



■ Explosions are on the rise

Recently, major industrial complexes, including those in Ulsan, have frequently experienced large-scale fires and explosions.

As a result, the need for explosion-proof safety management and explosion-proof certification has become even more critical.

On-site inspections have revealed common issues such as lack of explosion-proof structures, non-compliance with operating procedures, and inadequate certification processes.



Explosion and fire at a crude oil tank in Ulsan Onsan Industrial Complex (2025-02-10)



Explosion accident at a hydrogen power plant construction site (2025-03-20)

Increasing explosive accidents and necessity of explosion-proof certification



■ The importance of explosion-proof certification

These kinds of explosion accidents are not simply internal facility issues. They pose a serious threat to regional safety as a whole and significantly affect public trust and corporate reputation.

Explosion-proof certification is not a simple paperwork procedure. It is a **protective measure that ensures safety throughout the entire process** — from the design of explosion-proof structures, product testing, and maintenance of product quality — and is the only means to protect precious human lives and the environment.

International standards such as **IECEX**, Europe's **ATEX**, and Korea's **KCs** certifications all serve as the minimum criteria for this protection. Failure to comply with these standards could result in serious accidents.



International Ex
certification



European Ex
certification



Republic of Korea
Ex certification

Increasing explosive accidents and necessity of explosion-proof certification



■ Provide explosion-proof certification solution proposals and consultations

ICR is committed to enhancing the credibility of explosion-proof certification through strict standards and rigorous evaluations in this rapidly changing environment.

ICR Explosion-Proof engineers holding IECEx CoPC qualifications, offers tailored solutions and consulting services through the **Hazardous area classification** (Unit Ex 002), the **Ex equipment Design/Installation** (Unit Ex 009), and the **Basic knowledge of the safety of hydrogen systems** (Unit Ex 011).

 **Inquiries**

Industrial Safety Center / Seo, Ho-Yeong
T.070-5083-2639 / hys@icrqa.com

Is your ISO certification properly maintained?

■ The importance of ISO certification Surveillance management

Obtaining ISO certification does not simply mean passing an annual audit. The true value of certification lies in how the system is **consistently maintained, continuously improved, and actively integrated into daily operations.**

In this newsletter, we share key points for effective surveillance management to help ensure that your ISO system brings real value to your organization.



Is your ISO certification properly maintained?



■ What Is surveillance Management?

Surveillance management refers to the continuous monitoring and improvement of the management system to ensure it remains effective during the validity of the certificate.

- **Internal Audits:**

Conducted at least once per year, with follow-up on findings

- **Management Review:**

Top management evaluates KPIs, corrective actions, complaints, etc.

- **Legal Compliance Checks:**

Regular updates and compliance monitoring of applicable regulations

- **Document & Record Control:**

Maintain latest versions, track revision history

- **Use of Certification Mark:**

Ensure proper use with correct scope and accreditation number

Is your ISO certification properly maintained?



■ Common Findings in Surveillance Audits

Area	Typical Issues	Recommendations
Internal Audit	Conducted superficially with only checklists	Include site observations, interviews, and documented evidence
Management Review	No meeting records or missing ISO-required items	Ensure annual review with complete agenda and documented outcomes
Legal Compliance	Outdated regulations not monitored or verified	Maintain updated legal register per department and review quarterly
KPI & Objective Review	KPIs are set but not regularly tracked or analyzed	Monitor performance monthly / quarterly and record corrective actions
Certification Mark	Used outside certified scope or without valid ID info	Train employees and follow ICR usage guidelines strictly



Is your ISO certification properly maintained?

■ Surveillance Audit Preparation Checklist

Focus Area	Recommended Frequency	Detailed Tasks & Guidelines	Notes
Internal Audit	At least annually	<ul style="list-style-type: none">Establish audit plan (scope, schedule, auditors)Conduct interviews, verify records and operationsReport findings and corrective actions	Assign qualified internal auditors
Management Review	At least annually	<ul style="list-style-type: none">Collect input: KPIs, complaints, audit resultsHold a formal meeting led by top managementDocument and follow up decisions	Meeting minutes required
Corrective & Preventive Actions	Ongoing	<ul style="list-style-type: none">Record all nonconformitiesImplement corrective actionsVerify effectiveness and prevent recurrence	Maintain CAPA logs
Document & Record Management	Ongoing	<ul style="list-style-type: none">Use only latest versionsTrack document revisionsControl access to digital and paper records	Required document control procedure
Use of Certification Mark	Ongoing	<ul style="list-style-type: none">Use only within scope and validityEnsure accuracy of certificate ID and version in all applications	Follow ICR branding policy
Legal & Stakeholder Requirements	Quarterly review	<ul style="list-style-type: none">Maintain department-specific legal listMonitor updates and document actionsTrack customer/public requirements	Keep legal compliance register

Is your ISO certification properly maintained?



■ ICR's Recommendation

ICR provides audit services not just to help clients pass ISO certification, but **to ensure their management systems contribute to real business performance.**

If your organization is looking for effective system operation through proper auditing, please contact ICR.

 **Inquiries**

System Certification Center / Kim, Gi-Beom
T. 070-5083-2656 / kgb@icrqa.com