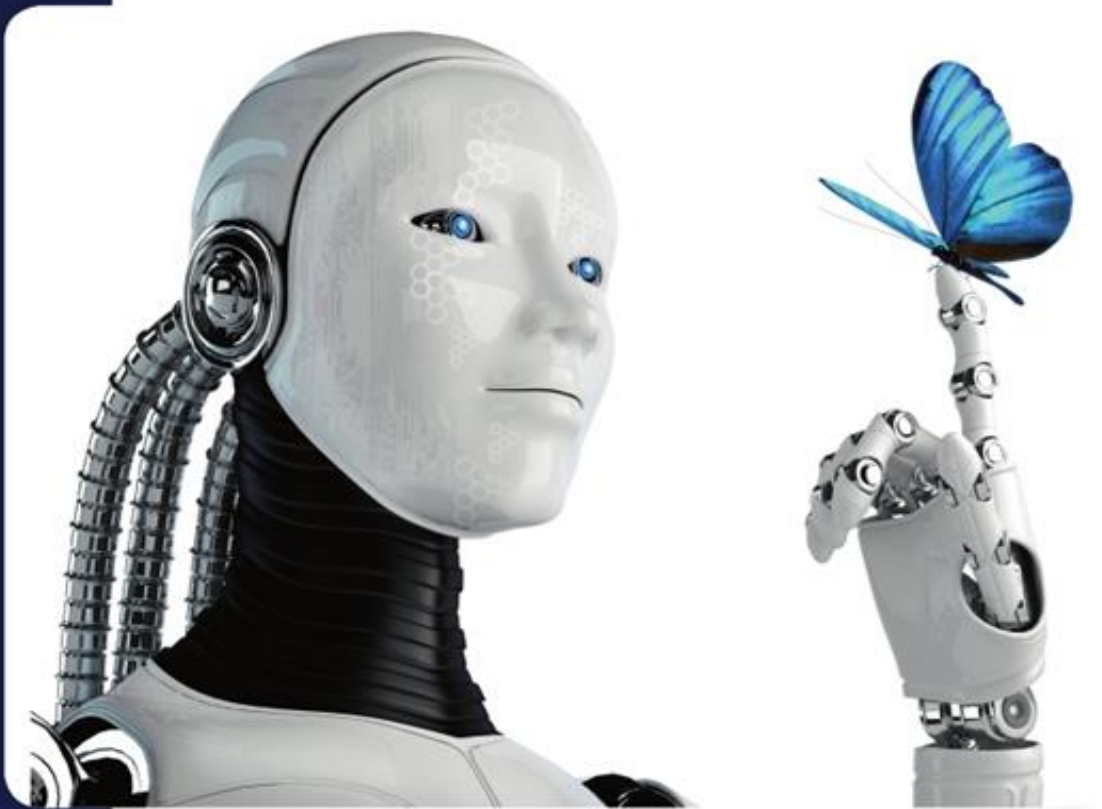


# Newsletter July, 2023



# ICR



# Hot Issue

1. Completed registration of IECEx ExTL
2. MOU with NCC of Brazil
3. KOLAS KR Standard update and renewal review
4. Operational status of battery cyler
5. HLS (High Level Structure)
6. RRA Notification No. 2023-48

**Administrative notice of partial revision  
(proposal) of notification on conformity  
assessment of broadcasting and communication  
equipments, etc.**



# Completed registration of IECEx ExTL




## ■ ICR has completed the final registration of the ExTL.

ICR has completed the evaluation according to the IECEx Scheme and the final registration of ExTL was completed according to the voting results of 36 countries.

## ■ ICR is able to issue IECEx & ATEX test reports and certificates.

With the registration of ExTL, **ICR is now able to issue both IECEx & ATEX test reports and certificates** and we're going to provide better services to our customers.

Organisation	Associated Bodies	Scope
REPUBLIC OF KOREA ICR Co Ltd ICRK <b>Type:</b> ExTL <b>Contact:</b> Mr. Dae-Song Yang  113, 112, Hwanggeum 3-ro 7beon-gil, Yangchon-eup, Gimpo-si, Gyeonggi-do, Republic of Korea REPUBLIC OF KOREA  ☎ +82 2 6351 9002 ✉ Email	<b>Associated ExCBs:</b> ICR Polska Sp. z o.o. - POLAND	<b>IEC 60079-0:</b> Part 0: Equipment - General requirements <b>IEC 60079-1:</b> Part 1: Equipment protection by flameproof enclosures 'd' <b>IEC 60079-11:</b> Part 11: Equipment protection by intrinsic safety 'i' <b>IEC 60079-18:</b> Part 18: Equipment protection by encapsulation "m" <b>IEC 60079-31:</b> Part 31: Equipment dust ignition protection by enclosure 't'



# Completed registration of IECEX ExTL



## ■ Application structure and Equipments

- ▶ Flameproof enclosure – Ex “d” IEC 60079-1 Edition 7.0
  - Motor, Actuator, Indicator, Transmitter, Gas Detector, Luminaires
- ▶ Intrinsic safety – Ex “i” IEC 60079-11 Edition 6.0
  - Sensor, Mobile device, Oxygen Analyzer
- ▶ Encapsulation– Ex “m” IEC 60079-18 Edition 4.0
  - Solenoid valve, Power supply device
- ▶ Dust ignition protection by enclosure - Ex “t” IEC 60079-31 Edition 3.0
  - Gas Detector, Pressure Transmitter, Solenoid Valve

# Completed registration of IECEX ExTL



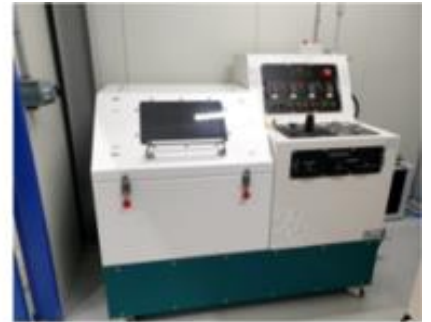
## ICR's Ex Testing Facilities



Ex Test Building



Ex "d" Test Chamber



Overpressure test device



MESG Tester



Spark Ignition Tester



Thermal Endurance Chamber

**Inquiries**

Industrial Safety Center / Yang, Dae-Song  
T.070-5083-2658 / [yds@icrqa.com](mailto:yds@icrqa.com)

# MOU with NCC of Brazil



**ICR**



**NCC**  
a Bureau Veritas Company

- **ICR Polska**, the Polish branch of ICR, and **NCC** of Brazil **signed a agreement for mutual agreement** for factory audit of Ex manufacturer on June 2023.
- **NCC (NCC Certificação es do Brasil Ltda.)**, established in 1975, provides certification services for electrical and electronic products in various fields, including **Ex products**, and is an **INMETRO certification Body** required in Brazil and South America.
- Through this agreement, **ICR** will provide better **certification service** to clients who want to enter the **Brazilian and South American markets**.

 **Inquiries**

Industrial Safety Center / Yang, Dae-Song  
T.070-5083-2658 / yds@icrqa.com

# KOLAS KR Standard update and renewal review



■ ICR KOLAS certification authority completed registration of updated standard of **KR\_2019 → KR\_2022 standard**, and on 23.06.02, from Korean Register.

The renewal review has been completed.

- **Scope : Electrical Testing and Vibration Testing**

The image shows a formal approval certificate from the Korean Register. At the top center is the KR logo. Below it, the title reads "APPROVAL CERTIFICATE FOR TEST LABORATORY". The certificate details the following information: Certificate No. PCT37514-TL001, Initial Approval date of 15th June, 2017, and a Scope of Services for Electrical Testing and Vibration Testing. The Test Laboratory is identified as ICR, located at #112, Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimp-si, Gyeonggi-do, Rep. of Korea. The approval condition is noted as "See 'Appendix 1 & 2'". A large, semi-transparent KR logo is centered on the page. The main body of text certifies that the laboratory's facilities, quality control, and testing procedures are in compliance with the Korean Register's rules and recognized standards. It references Circular 8.58 and KS Q ISO/IEC 17025:2017. The certificate is valid until 14th June, 2026, and was issued on 2nd June, 2023. It is signed by the General Manager of the Marine & Ocean Equipment Team. At the bottom, there are four small notes regarding the certificate's validity and renewal conditions.

**KR**  
KOREAN REGISTER

**APPROVAL CERTIFICATE FOR  
TEST LABORATORY**

**Certificate No.** : PCT37514-TL001      **Initial Approval** : 15th June, 2017  
**Scope of Services** : Electrical Testing and Vibration Testing

**Test Laboratory** : ICR  
#112, Hwanggeum 3-ro 7beon-gil, Hagun-ri, Yangchon-eup, Gimp-si,  
Gyeonggi-do, Rep. of Korea

**Approval Condition:** See "Appendix 1 & 2 "

**KR**

**THIS IS TO CERTIFY** that the Test Laboratory of the above-mentioned including testing facilities, quality control and general standards of testing procedures has been audited by this Society and found to be in compliance with the requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Test Laboratories".

Circular 8.58 Instruction for the approval of test laboratory and KS Q ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.

This Certificate is valid until 14th June, 2026  
Issued at Busan, Korea on 2nd June, 2023

 **KOREAN REGISTER**  
*[Signature]*  
General Manager of  
Marine & Ocean Equipment Team

Note 1. This certificate will be valid subject to complying with the approved conditions described on the certificate and/or on the Rules of this Society.  
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.  
3. Any significant changes in the certified system of the above test laboratory without approval from this Society will render this certificate invalid.  
4. If the relevant rules, regulations or standards are changed during the validity of this certificate, the test laboratory shall be re-approved by this Society on the basis of the changes.

# KOLAS KR Standard update and renewal review



- As a designated **testing agency for Korean Register**, ICR is responsible for **the public confidence in test quality**. We have been recognized and strengthened customer service once again.

 **Inquiries**

Mobility Center/ Im, Dae-Hyun  
T. 070-5083-7908 / [terry.im@icrqa.com](mailto:terry.im@icrqa.com)



# Operational status of battery cyclers



■ **ICR Battery Testing Center** installed additional 12 channels of battery module cycler in April, and all channels has been operating with new project since May. ICR Battery Testing Center has battery cycler as follows.

- 1) **Pack/System(ESS)** – 1,500 V, 1,000 A, 2Ch (parallel: 2,000 A)
- 2) **Pack/System(EV)** – 1,000 V, 500 A, 2Ch (parallel: 1,000 A)
- 3) **Module** – 200 V, 500 A, 20Ch (parallel: Max. 2,000 A)
- 4) **Cell** – 6 V, 100 A, 30Ch (parallel: Max. 1,200 A)

■ We can conduct not only general charge/discharge tests but also **evaluations linked to chamber + CAN communication + chiller.**

## ICR Battery performance testing room



<Battery pack/system>



<Battery module>

# Operational status of battery cycler



■ ICR Ltd. is capable of testing at all battery levels in performance/environmental/safety evaluation.

	<Performance>	<Environment>	<Safety>
Cell	<ul style="list-style-type: none"> <li>• Cycle life</li> <li>• Capacity and efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Combined vibration (Cycler + Chamber + Vibration system)</li> </ul>	<ul style="list-style-type: none"> <li>• Electrical safety (OVP, UVP, OCP, Etc)</li> </ul>
Module	<ul style="list-style-type: none"> <li>• Energy density</li> <li>• Chamber + Chiller + CAN communication</li> </ul>	<ul style="list-style-type: none"> <li>• IP and Immersion</li> <li>• Salt spray</li> </ul>	<ul style="list-style-type: none"> <li>• Mechanical integrity</li> <li>• Nail penetration</li> </ul>
Pack / System	<ul style="list-style-type: none"> <li>• HPPC, DCIR, High C-rate and Power</li> </ul>	<ul style="list-style-type: none"> <li>• Altitude simulation</li> <li>• Thermal shock</li> <li>• high &amp; low temp cycle</li> </ul>	<ul style="list-style-type: none"> <li>• Thermal runaway/ Thermal propagation</li> <li>• External short circuit</li> <li>• Drop/Dynamic Drop</li> </ul>

■ If you have any inquiry about battery testing and certification service as well as Performance, Environment and Safety, please feel free to contact our Battery Testing Center.

**Inquiries**

Battery Testing Center / Yang, Chul-Ho  
T. 02-6351-9003 / yangch@icrqa.com

# HLS(High Level Structure)



## ■ What is HLS(High Level Structure)?

ISO's HLS (High Level Structure) is a **framework for unifying the structure of standard documents established by the International Organization for Standardization (ISO)**. HLS is applied in various standards such as ISO's management system standards ISO 9001, ISO 14001, and ISO 45001.

HLS was introduced to easily integrate and manage various management system standards. This allows organizations to build an integrated management system that is more efficient than implementing and maintaining multiple standards separately. This saves money and time, and helps enforce consistency and compatibility within the organization.

# HLS(High Level Structure)



## ■ The advantages of HLS

- 1. Consistency:** Consistent structure and terminology across standards can be used to build a consistent approach within an organization.
- 2. Compatibility:** You can easily integrate various standards to manage your management system. It helps organizations reduce the cost and time required to comply with and manage multiple standards simultaneously.
- 3. Efficiency:** HLS allows organizations to simplify the process of integrating and managing standards.

# HLS(High Level Structure)



## ▣ Effects of HLS introduction

With the introduction of HLS, companies can increase efficiency by integrating management systems and reducing duplication. For example, processes and functions such as leadership, planning, performance, performance evaluation and improvement can be managed in a single framework.

Businesses will have a consistent approach within their organization to improve efficiency and effectiveness.

In addition, by increasing the consistency and compatibility of the management system, it can enhance the organization's continuous improvement and regulatory compliance.

The introduction of HLS is successfully being carried out in various organizations for standards compliance and management system integration, which has a positive effect on improving the efficiency and quality of business activities.

## **Inquiries**

System Certification Div. / Lee, Jae-Min  
T. 070-5083-2612 / lee2750@icrqa.com

# Administrative notice of partial revision (proposal) of notification on conformity assessment of broadcasting and communication equipment, etc.



## National Radio Research Agency Notification No. 2023-48

In revising a part of the 「**Announcement on the Designation and Management of Test Institutions for Broadcasting and Communications Equipment, etc.**」 (National Radio Research Agency Notice No. 2023-4, March 6, 2023), to inform the public in advance and collect opinions, the purpose and main In accordance with the provisions of Article 46 of the 「Administrative Procedure Act」, the contents are announced as follows.

June 8, 2023

Director of the National Radio Research Agency

### ■ 1. Reasons for revision

Clarification of the meaning of qualification requirements for testing personnel, expansion of on-site inspection exemption when designation changes are made, preparation of grounds for security measures to prevent forgery and falsification of test reports, etc. 「Broadcasting Communication Part of the notification」 on the designation and management of testing institutions such as equipment is intended to be revised as follows.

# Administrative notice of partial revision (proposal) of notification on conformity assessment of broadcasting and communication equipment, etc.



## ■ 2. Main contents

### A. Reinforcement of examination qualification requirements

(clear meaning) (Article 5)

- Clearly stipulate the meaning of the relevant provisions to conform to the current designation system

### B. Extension of on-site inspection exemption when designation changes (Articles 6 and 8)

- Improvements to simplify the review process by expanding and operating the on-site review exemption when testing institution designation changes

### C. Preparation of grounds for security measures to prevent forgery and falsification of test reports (Article 13)

- Establishment of grounds for taking hologram and electronic security measures at designated test institutes to prevent forgery and falsification accidents when issuing test reports

### D. Current review period (Article 26)

- Due to the arrival of the deadline for reexamination of this notification, the base year is current (2020 → 2024)

 **Inquiries**

EMC&RF Test Center / Son, Min-Gi  
T. 070-5081-0023 / thsalsrl@icrqa.com