

Newsletter August, 2024



ICR



Hot Issue

1. Introduction of high voltage test equipment for Military EMC
2. LOTTE HOTELS & RESORTS's ISO45001 Certificate Award Ceremony
3. The Serious Accidents Punishment Act and OHSMS(ISO45001)
4. Revision of KS C 9610-6-4:2022 General standards



Introduction of high voltage test equipment for Military EMC



■ Introduction of DC high voltage test equipment for Military EMC.

ICR Military EMC team has added high-voltage testing equipment that can meet the MIL-STD-461E/F/G, allowing them to test various high-voltage products compared to other organizations.

■ The equipment introduced is as follows.

▶ Bidirectional Programmable DC Power Supply

- Input Power : 3ϕ 380 V, 50/60Hz
- Output Voltage : 0 ~ 1,500 Vdc
- Output Current : - 240 ~ 240 A
- Capacity : -90 ~ 90 kW



Introduction of high voltage test equipment for Military EMC

▶ NNBL8229-HV

- Frequency Range : 9 kHz ~ 100MHz
- Max Current : 200 A
- Max Voltage : 1000 Vdc
- Impedance : $50\mu\text{H} + 5\Omega \parallel 50\Omega \pm 20\%$



▶ Solar 2714-106R Capacitor

- Capacitance : $10.0\mu\text{F}$
- Tolerance : $\pm 10\%$
- Max Voltage : 1200 Vdc
- Max Current : 500 A



 **Inquiries**

Mobility Center / Im, Dae-Hyun
T. 070-5083-7908 / terry.im@icrqa.com



LOTTE HOTELS & RESORTS's ISO45001 Certificate Ceremony



[LOTTE HOTELS & RESORTS's ISO45001 Certificate Award Ceremony.]

▣ LOTTE HOTELS & RESORTS Receives Safety and Health Management Systems Certification.

Recently, LOTTE HOTELS & RESORTS obtained ISO 45001:2018 certification from the **ICR**. This is the result of establishing a safety and health management systems to prevent serious accidents and operating major disaster response drills and risk assessments to create a safe and comfortable workplace.



LOTTE HOTELS & RESORTS's ISO45001 Certificate Ceremony

■ LOTTE HOTELS & RESORTS's ISO45001:2018 Certificate Award Ceremony.

On July 16, 2024, **ICR** and **LOTTE HOTELS & RESORTS** held an ISO45001:2018 safety and health management systems certification award ceremony at LOTTE HOTEL SEOUL.

Executives and employees of ICR and Lotte Hotel & Resort attended the certification ceremony to celebrate the acquisition of ISO45001 certification.

Mr. Kim Tae-hong, CEO of LOTTE HOTELS & RESORTS, said, "We will continue to make efforts to achieve zero serious disasters."

- Based on this certification ceremony, **ICR** will do our best to **become a certification body that contributes to increasing profits and developing growth of our customers** with the goal of **providing better and higher quality certification services.**

 **Inquiries**

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



The Serious Accidents Punishment Act and OHSMS

■ What is the Serious Accidents Punishment Act?

The Serious Accidents Punishment Act is a law enacted in January 2021 and enforced since January 2022 in South Korea. It aims to strengthen criminal penalties for business owners and management responsible for industrial accidents that result in significant human casualties. **From January 27, 2024, this law apply to businesses with five or more employees.**

■ Responsibilities of Business Owners

The core of the Serious Accidents Punishment Act is **accident prevention**, and business owners are responsible for maintaining a safe working environment.

If business owners or managers neglect their safety and health obligations, leading to serious accidents, they will be held accountable.



The Serious Accidents Punishment Act and OHSMS

■ Penalty Standards under the Serious Accidents Punishment Act.

1. Accidents resulting in one or more fatalities.
→ **Case 1. Imprisonment for at least one year or a fine of up to 1 billion KRW.**
2. Accidents causing injuries that require treatment for more than six months for two or more people.
3. Accidents causing occupational diseases (e.g., acute poisoning) as defined by presidential decree, affecting three or more people within.
→ **Case 2, 3. Imprisonment for up to seven years or a fine of up to 1 billion KRW.**

■ Requirements of the Occupational Health and Safety Management System. (OHSMS)

The core requirements of the OHSMS is risk assessment. Organizations that implement an OHSMS can more easily comply with the provisions of the Serious Accidents Punishment Act, thereby reducing legal risks and significantly contributing to ensuring the safety and health of workers.



The Serious Accidents Punishment Act and OHSMS

■ OHSMS (ISO 45001:2018) Requirements

OHSMS (ISO 45001:2018) Requirements			
4. Context of the organization		5. Leadership and worker participation	
4.1	Understanding the organization and its context	5.1	Leadership and commitment
4.2	Understanding the needs and expectations of workers and other interested parties	5.2	OH&S policy
4.3	Determining the scope of the OH&S management system	5.3	Organizational roles, responsibilities and authorities
4.4	OH&S management system	5.4	Consultation and participation of workers
6. Planning		7. Support	
6.1	Actions to address risks and opportunities	7.1	Resources
6.1.1	General	7.2	Competence
6.1.2	Hazard identification and assessment of risks and opportunities	7.3	Awareness
6.1.3	Determination of legal requirements and other requirements	7.4	Communication
6.2	OH&S objectives and planning to achieve them	7.5	Documented information
8. Operation		9. Performance evaluation	
8.1	Operational planning and control	9.1	Monitoring, measurement, analysis and performance evaluation
8.1.2	Eliminating hazards and reducing OH&S risks	9.1.1	General
8.1.3	Management of change	9.1.2	Evaluation of compliance
8.1.4	Procurement	9.2	Internal audit
8.2	Emergency preparedness and response	9.3	Management review
10. Improvement			
10.1	General		
10.2	Incident, nonconformity and corrective action		
10.3	Continual improvement		



The Serious Accidents Punishment Act and OHSMS

■ Business Sectors Eligible for OHSMS Certification



Construction



Manufacture



Development



Transport



Agriculture

The OHSMS is **an international standard** designed to help establish health and safety management systems across **all types of work environments**. This system helps organizations effectively manage and prevent various risk factors they may encounter.

- **The ICR boasts highly reliable services, thanks to its professional auditors in each field.** By establishing and operating an OHSMS that meets global standards, companies can prevent serious accidents and maintain a safe working environment.

 **Inquiries**

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

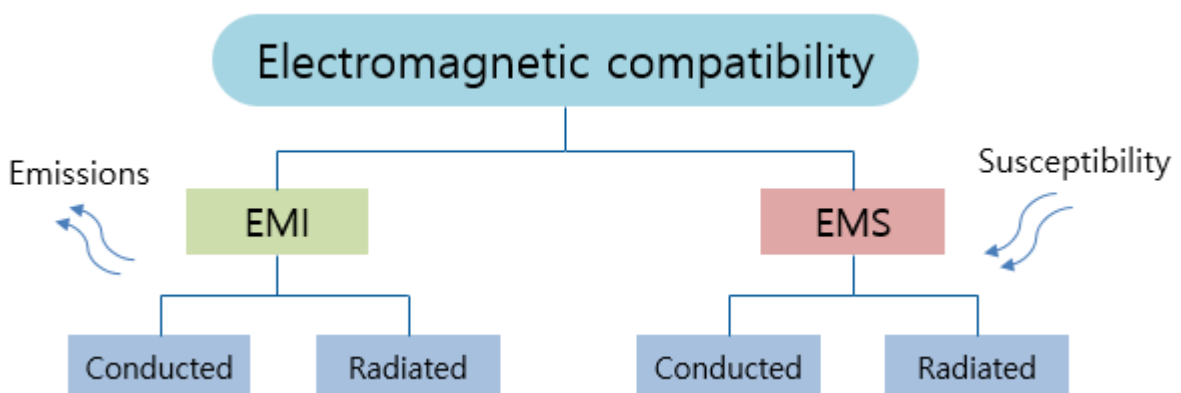
Revision of KS C 9610-6-4:2022 General standards



■ **KS C 9610-6-4:2022** Generic standards - **The standard for electromagnetic emissions in industrial environments was revised** on February 28, 2022.

■ **Electromagnetic interference(EMI)**

- Electromagnetic interference (EMI) is when a device emits electromagnetic waves into the environment that can interfere with other devices or control circuits, causing the device to malfunction.
- This is why standards must be set for electromagnetic emissions to prevent device malfunction and damage.
- EMI is broadly categorized as **conductive emissions (CE)** and **radiated emissions (RE)**.



Revision of KS C 9610-6-4:2022

General standards



■ Revised items

1) Revised scope

Before the revision	After the revision
<p>This part of KS C 9610-6-4 for emission requirements applies to electrical and electronic equipment intended for use within the industrial environment locations, and emission requirements in the frequency range 0 Hz to 400 GHz are covered.</p> <p>No measurement needs to be performed at frequencies where no requirement is specified.</p>	<p>This part of KS C 9610-6-4 for emission requirements applies to electrical and electronic equipment intended for use within the industrial environment locations. The environments encompassed by this document cover both indoor and outdoor locations.</p> <p>Emission requirements in the frequency range 9 kHz to 400 GHz are covered in this document and have been selected to provide an adequate level of protection of radio reception in the defined electromagnetic environment.</p> <p>No measurement needs to be performed at frequencies where no requirement is specified.</p>

2) Add operating conditions

Intended operational arrangement(s) of EUT	Test arrangement	Remarks
Table-top only	Table-top	-
Floor-standing only	Floor-standing	-
Can be floor-standing or table-top	table-top	-
Rack mounted	In a rack or table-top	-
Other, for example wall mounted, ceiling mounted, handheld, body worn	Table-top	With normal orientation If the equipment is designed to be mounted on a ceiling, the downward-facing portion of the EUT may be oriented facing upward.

Revision of KS C 9610-6-4:2022 General standards



■ ICR, Electromagnetic interference(EMI) Test photos

These are pictures of actual conductive and radioactive interference tests **that we have done at the ICR.**



<Conducted interference test>



<Radiated interference test>

- **The ICR** has test equipment for **KSC 9610-6-4** specification and **can be tested. We are also available for on-site testing of Fixed installation equipments** in industrial environments.

Inquiries

Industrial Safety Center / Kang, Gyeong Man
T.070-5083-2620 / kkm@icrqa.com