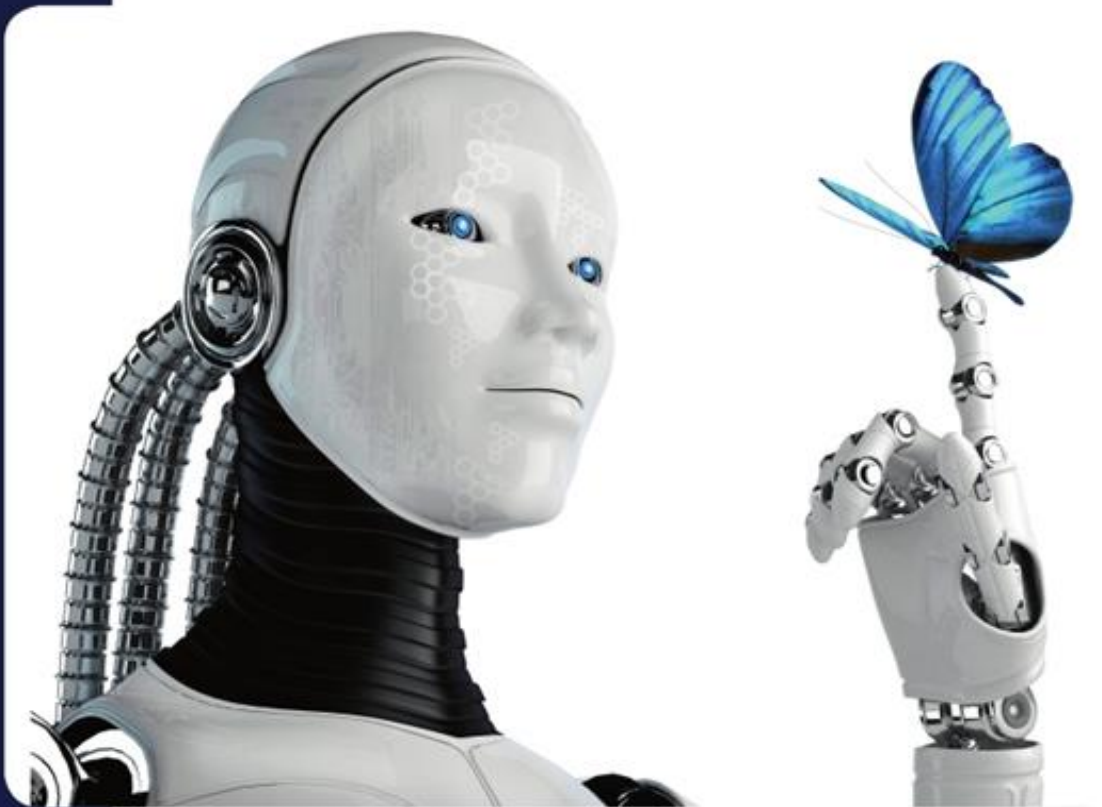


Newsletter July, 2024



ICR



Hot Issue

1. 2024 4th Auditor Training Course Plan
2. ISO adds climate change requirements to management system standards
3. SEMI S6 Tracer gas test for setting the exhaust of semiconductor hazardous gas machine





2024 4th Auditor Training Course Plan

- ICR International Certification Registrar Ltd. is an ISO auditor training provider directly registered to Exemplar Global. ICR plans to hold an **ISO auditor training course in July 2024**.
- Through the **AU/TL, QM, EM, and OH courses**, all the trainees will be conducted so that the one's can be qualified for each module.
- Our training teaches auditors how to provide impartial audits based on objective evidence.

※ **The detailed schedule** of the auditor training course **in July 2024** is as follows.

Curriculum	Training period	Training hours
AU/TL	July 15~17 (3days)	8hours/1day, total 24hours (3 days)
QM	July 18~19 (2days)	8hours/1day, total 16hours (2 days)
EM	July 22~23 (2days)	8hours/1day, total 16hours (2 days)
OH	July 24~25 (2days)	8hours/1day, total 16hours (2 days)

■ • **AU/TL Module : Off line**

(Address : B1 Seminar room, Daerung Post Tower 6th, 298, Beotkkot-ro, Geumcheon-gu, Seoul)

• **QM, EM, OH Module : On line (Zoom)**

※ Please note that the training schedule and location may change depending on circumstances and each training may be held or not depending on the number of applicants.

☎ Inquiries

System Certification Center / Kim, Hyung-Geon

T. 070-5083-2635 / edu@icrqa.com

ISO adds climate change requirements to management system standards



■ Background to the revision

ISO and IAF have published a revision to their management system standards for climate change adaptation that adds climate change requirements. The revision includes important guidance to help organisations respond effectively to environmental change, and is an important change to ensure that climate change is managed effectively.

■ major revisions

4.1 Understanding the organization and its context.

The organization shall determine external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended result(s) of its XXX management system.

Added: The organization shall determine whether climate change is a relevant issue.

4.2 Understanding the needs and expectations of interested parties.

The organization shall determine:

- The interested parties that are relevant to the XXX management system.
- The relevant requirements of these interested parties.
- Which of these requirements wo;; be addressed through the XXX management system.

Added: NOTE: Relevant interested parties can have requirements related to climate change.

ISO adds climate change requirements to management system standards



▶ 4.1 Understanding the Organization and its Context

Organizations are required to evaluate whether climate change is a critical issue. This means understanding external and internal issues and identifying how climate change may impact the achievement of the management system's objectives.

▶ 4.2 Interested Parties' Climate Change Requirements

It is also specified that interested parties may have requirements related to climate change. This emphasizes the need for organizations to understand interested parties' needs and incorporate them into their management systems.

■ Impact of the revisions and how to respond

Organizations must evaluate the impact of climate change on management and establish a system to manage it. This helps not only in risk management but also in creating new opportunities.

ISO adds climate change requirements to management system standards



■ Climate change action guidance by industry

1) Construction companies

Construction companies should use recyclable materials and energy-efficient equipment. They need to reduce greenhouse gas emissions through improved fuel efficiency, use of renewable energy, and eco-friendly transportation. Waste should be managed and reduced through recycling and reuse programs. Durable structures should be designed considering climate change risks. Engaging with the community to raise awareness and providing education on sustainable construction practices is essential.

2) Manufacturers

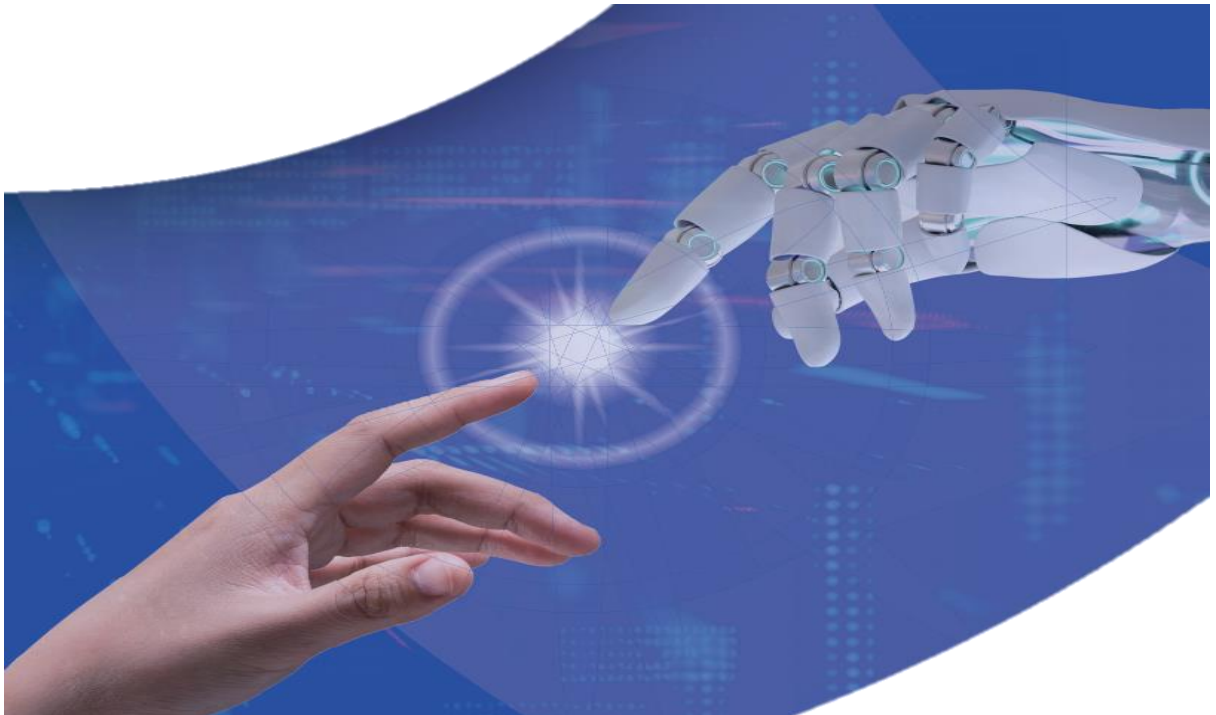
Manufacturers should monitor and improve energy efficiency. They must minimize raw material consumption through the use of recyclable and sustainable resources. To reduce greenhouse gas emissions, they should improve process efficiency, optimize logistics, and use eco-friendly packaging. Waste should be reduced through recycling and reuse programs, and considerations for recyclability and end-of-life disposal should be integrated at the product design stage.

ISO adds climate change requirements to management system standards



3) Software Companies

Software developers should optimize algorithms and data processing methods to minimize energy consumption and choose energy-efficient data centers. Supporting remote work to reduce carbon emissions and minimizing paper usage in offices are also crucial. Efforts should be made to minimize environmental impact throughout the software lifecycle, and staff should be trained on sustainable development practices. Programs to raise awareness about energy efficiency, renewable energy, and sustainable software design should be implemented



ISO adds climate change requirements to management system standards



■ Feel free to contact us

ICR Certification Institute is committed to helping organisations successfully respond to change by providing expert support on the latest standard revisions.

If you have any questions about management system certification with climate change requirements, please contact **ICR Systems Certification Center**.

 **Inquiries**

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



SEMI S6 Tracer gas test for setting the exhaust of semiconductor hazardous gas machine

■ SEMI S6 Tracer gas test

Manufacturers that work with semiconductor hazardous gases must have a "Material Safety Data Sheet" (MSDS) to prevent the risk of accidents due to leaks of chemicals handled in their equipment and workplaces.

The SEMI S6 Tracer gas test is a validation test that uses gas leakage measurements to determine the risk of a gas leak so that proper venting can be established.

■ Hazard for chemical leaks

Toxic (warning signs)



Flammable (warning sign)







SEMI S6 stipulates that for Toxic and Flammable, you must meet less than 25% of the OEL and LFL values for each substance to have adequate venting.

※ OEL : Occupational exposure limits, LFL : Lower flammability limit

SEMI S6 Tracer gas test for setting the exhaust of semiconductor hazardous gas machine

SEMI S6 test equipments

Test equipments	Purpose of use
Autotrack 101 	<ul style="list-style-type: none"> • It is an equipment that analyzes the gas measured in the gas box. • Measure against Toxic in the front and Flammable in the back.
SF6 gas 	<ul style="list-style-type: none"> • Using a harmless gas for testing since real gas is not available
Velocity and Pressure Meter 	<ul style="list-style-type: none"> • Equipment that measure the speed and pressure of the facility exhaust
Mass Flow meter 	<ul style="list-style-type: none"> • Flowmeter to match the actual flow rate of the gas you use



SEMI S6 Tracer gas test for setting the exhaust of semiconductor hazardous gas machine

■ SEMI S6 Tracer gas test procedure

1. Get the MSDS for the gas you use from the manufacturer to determine what is flammable and what is toxic.
2. For the test instrument (Autotrac 101), turn on the power to heat the test oven and wait for the temperature in the oven to reach 105 °C. (Approximately 24 hours)
3. Perform the self-calibration of Autotrac 101 to verify the correct test value during the test.
4. After calibration is complete, proceed with the Toxic test.

5. Toxic test

Connect SF₆ gas to the leak point of the gas corresponding to Toxic inside the gas box, set it to the flow rate of the gas you actually used using a mass flow meter, and spray it.

For 0 to 6 minutes after spraying, gas leaking from the east, west, north, and south directions of the gas box is collected through a collection syringe. Insert the collected gas into the front of the Autotrac 101 to check the measured value.



SEMI S6 Tracer gas test for setting the exhaust of semiconductor hazardous gas machine

■ SEMI S6 Tracer gas test procedure

6. Flammable Test

After connecting the flammable hose to the point and dead space selected as ignition risk sources inside the gas box, adjust and spray the flow rate of gas corresponding to the flammable with the mass flow meter. After spraying, for each selected point, connect the flammable hose to the Rear point of Autotrac 101, and conduct the direct measurement.

7. After each measurement, convert the measured value into ERC to ensure that the converted value is less than 25% compared to OEL and LFL.
8. If it is less than 25%, it is PASS; if it is more than 25%, increase the displacement of that gas and repeat the above process to see which displacement results in a PASS value.



SEMI S6 Tracer gas test for setting the exhaust of semiconductor hazardous gas machine

- In the case of semiconductor facilities dealing with harmful gases, safety matters to prevent human damage caused by leakage have become essential.

ICR Co., Ltd. is an accredited testing agency certified by KOLAS and can provide SEMI's evaluation and report to evaluate the safety of the manufacturer's facilities.

If you have any questions about SEMI evaluation and report on semiconductor equipment manufacturing, please contact **ICR Industrial Safety Center**.

 **Inquiries**

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