

Newsletter

August, 2025



ICR



Hot Issue

1. A large Thermal shock tester has been installed.
2. In progress of designation as a testing institution
3. A practical guide to managing nonconformities and corrective actions in ISO certification audits



A Large Thermal shock tester has been installed.



■ **ICR has been operating two large Thermal shock tester.**

In July 2025, our company completed **the installation of a large Thermal shock tester.**

We have a total of two large Thermal shock tester.

It is possible to **test heavy objects** such as **automobile electrical equipment, motors, and large displays** that are becoming larger recently.

A Large Thermal shock tester has been installed.



■ Test equipment specifications

- 1) Max. Weight : 250 kg
- 2) Table size (mm) : 1450 (W) x 850 (D) x 700 (H)
- 3) Chamber temperature range : -65 ~ 175 °C
- 4) Type : Elevator

 **Inquiries**

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In progress of designation as a testing institution



■ Traction battery type approval

A traction battery refers to a battery that stores electrical energy to operate the drive motor of a vehicle or motorcycle.

From August 2023, self-certification has been applied, and starting from 2026, a mandatory certification system will be implemented, under which certification tests must be conducted only through designated testing institutions.

In progress of designation as a testing institution



■ Test standard

The certification test standards are stipulated in the Ministry of Land, Infrastructure and Transport (MOLIT) Notification titled "Enforcement Rules on the Performance and Standards of Motor Vehicles and Parts", specifically in Annex 1, Articles 48 and 48-2

■ Test items

Items	Explanation	Traction battery	Motor cycle Traction battery
Vibration	Safety against vibrations occurring during operation	○	○
Thermal shock	Safety against rapid temperature changes	○	○
Fire resistance	Ensuring sufficient evacuation time for passengers in the event of a fire	○	○
Short circuit	Safety of protection functions under external short-circuit conditions	○	○
Over-charge	Safety under over-charging conditions	○	○
Over-discharge	Safety under over-discharging conditions	○	○
Over-temperature	Safety under internal over-heating conditions	○	○
Over-current	Safety for preventing accidents caused by excessive current	○	○
Water immersion	Safety under flooding conditions	○	○
Mechanical shock	Safety against inertial loads generated during a collision	○	-
Mechanical integrity	Safety against contact loads generated during a collision	○	-
Drop	Safety against physical impact	○	○

In progress of designation as a testing institution



■ Amendment to the Enforcement Rules of the Motor Vehicle Management Act

According to the amended "Article 40-22 of the Enforcement Regulations of the Motor Vehicle Management Act", effective February 18, 2025, **this standard test can only be conducted at testing laboratories designated as safety performance testing institutions.**

■ Progress status of ICR

ICR is proactively advancing the designation process as a testing institution compliant with regulations ahead of other testing laboratories, and is **expected to complete the designation as a 'Safety Performance Testing Institution' by the third quarter of 2025.** Even during the grace period, we can conduct traction battery tests to provide an effective foundation for enhancing the reliability of our clients' products and their market promotion.

For **all inquiries related to battery testing**, including traction battery safety performance tests, please feel free to contact **ICR** at any time.

 **Inquiries**

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A practical guide to managing Nonconformities and Corrective Actions in ISO Certification audits



■ Practical guide to writing ISO certification audits nonconformities reports.

In the operation of a management system, when a nonconformity occurs, it is not sufficient to simply report that the issue has been "handled."

The key is to identify the fundamental cause, take immediate corrective measures, and systematically implement actions to prevent recurrence. However, we still frequently encounter reports at sites that are written in a formalistic or superficial manner.

In this newsletter, we have compiled proper writing methods by ICR auditors based on common mistakes observed during actual audits.

■ Understanding the Process

Step	Objective	Key Question	Expected Outcome
1. Root Cause Analysis	Identify the fundamental cause of issue	Why did this happen?	Prevention of recurrence of the same issue
2. Correction	Eliminate the immediate issue	How will we resolve the current issue right now?	Site recovery and restoration of trust
3. Corrective Action	Prevent recurrence of similar issues	What should we do to prevent this from happening again?	System improvement and preventive structure setup

A practical guide to managing Nonconformities and Corrective Actions in ISO Certification audits



■ Step 1: Root Cause Analysis

Category	Details
Common Mistakes	<ul style="list-style-type: none">- Vague expressions such as "staff mistake" or "lack of department attention"- Describes only the phenomenon without identifying the root cause
Proper Approach	<ul style="list-style-type: none">- Trace systemic/root causes such as lack of process, procedural flaws, or onboarding failures- Use tools like 5Why analysis or fishbone diagram (Ishikawa)
Example	<p>Nonconformity: Missing total inspection records</p> <p>Analysis: Although the procedure was clearly defined, the new employee had not been trained. → Root cause lies in the lack of connection between training system and onboarding process</p>

■ Step 2: Correction

Category	Details
Key Points	<ul style="list-style-type: none">- Remove the issue through immediate action- Submit evidence proving the restoration of normal conditions
Example	<ul style="list-style-type: none">- Missing test record → Re-inspection and documentation- Mixed materials → Segregation and replacement of affected items
Must-Include Items	<ul style="list-style-type: none">- Person in charge of the correction- Supporting evidence (e.g. photos, records, logs, pre/post correction documents)

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■ Step 3. Corrective Action – Examples

Type of Nonconformity	Corrective Action Details
Missing inspection items	<ul style="list-style-type: none"> - Revise inspection criteria and update relevant procedures - Digitalize key inspection checkpoints - Provide focused training to on-site workers and implement post-training assessment
Inadequate change management	<ul style="list-style-type: none"> - Standardize the change request process: request → impact analysis → approval → training → implementation - Link change records with automated tracking system - Establish integrated review system among relevant departments
Noncompliance with work standards	<ul style="list-style-type: none"> - Update work instructions and implement periodic review with confirmation records - Monitor work standard adherence with KPI indicators - Reinforce on-site supervision and internal/external training
Failure to perform equipment maintenance	<ul style="list-style-type: none"> - Set up automated alerts for scheduled maintenance by equipment - Digitalize maintenance records and enable traceable history - Strengthen preventive maintenance (PM) program and track its effectiveness
Failure to identify nonconforming products	<ul style="list-style-type: none"> - Redesign control zones for nonconforming products and introduce dual labeling system - Provide regular training on labeling and product segregation procedures
Omission of legal/regulatory requirements	<ul style="list-style-type: none"> - Establish an automatic update system for relevant laws and regulations (in cooperation with legal team) - Conduct risk assessment when requirements are revised and analyze their impact on processes - Introduce a verification process to confirm compliance implementation

A practical guide to managing Nonconformities and Corrective Actions in ISO Certification audits



■ Conclusion

A nonconformity report is not merely a “response,” but **a process of designing the trust of the organization.**

Understanding the root cause of a problem and establishing practical corrective and preventive actions are key steps that define the maturity of your management system.

Moving forward, **ICR** will continue to support and collaborate with you in building a structured certification system and driving meaningful improvement activities.

 **Inquiries**

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