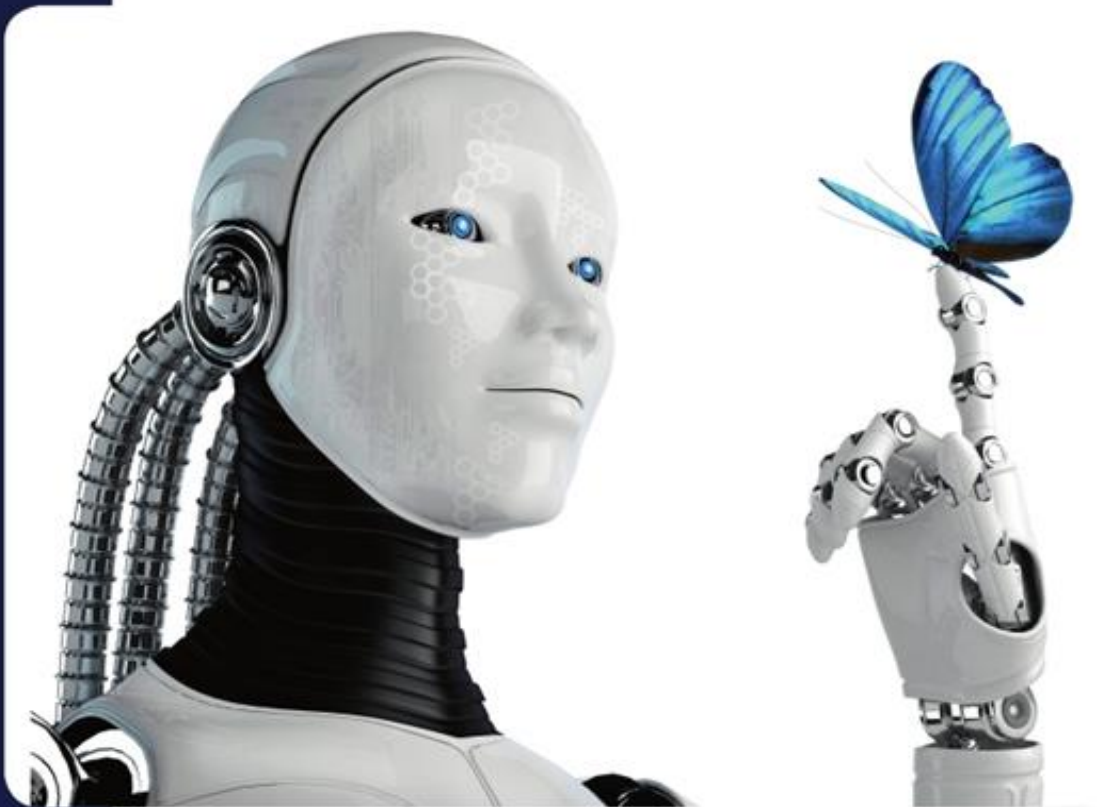


Newsletter November, 2024



ICR



Hot Issue

1. Registered as an ISO 19443 Certification Body with NQSA(Nuclear Quality Standard Association)
2. Jaguar EMC RI 130 Test set-up
3. Publication of EN ISO 3691-4:2023





Registered as an ISO 19443 Certification Body with NQSA



■ NQSA(Nuclear Quality Standards Association) (url :www.nqsa.org)

NQSA is a non-profit association jointly launched in January 2011 by Framatome (EDF subsidiary) and BUREAU VERITAS (French certification agency), and is an organization that is receiving attention from nuclear power orderers and manufacturers around the world.

As nuclear power is beginning to receive attention as an energy source for decarbonization due to the emergence of climate change internationally, NQSA is actively promoting the use of the **ISO 19443 standard** for major nuclear power plants, major nuclear engineering and manufacturers, and TIC (Testing, Inspection, and Certification) companies in terms of **safety and quality in the nuclear power supply chain**.



Registered as an ISO 19443 Certification Body with NQSA

	NATIONAL ACCREDITATION BODY				
	ACCREDIA (Italy)	COFRAC (France)	DAKKS (Germany)	KAB (Korea)	UKAS (UK)
AFNOR CERTIFICATION		X			
APAVE CERTIFICATION		X			
BUREAU VERITAS CERTIFICATION					X
C&P	X				
DNV		X			
ICIM	X				
ICR				X	
K-CERT				X	
KOREA FOUNDATION FOR QUALITY				X	
KOREA KNOWLEDGE STANDARDS REGISTRAR				X	
KOREAN STANDARDS ASSOCIATION				X	
KIWA KOREA				X	
LRQA					X
QSRMC CPC					X
QUALIANOR CERTIFICATION		X			
SGS ICS		X			
SOCOTEC CERTIFICATION		X			
TUV RHEINLAND CERT			X		
TUV SUD		X			

< NQSA_List of ISO 19443 Accredited Certification Bodies >

■ ICR, Registered with NQSA as an ISO 19443 CB

Recently, major European countries have been requiring ISO 19443 certification as a prerequisite for the supply of nuclear power plant equipment and services.

Accordingly, several organizations in major nuclear power industry countries such as France, the UK, and Korea have been recognized as ISO 19443 accredited certification bodies, and **ICR has also completed registration with NQSA as an ISO 9443 accredited certification body.**



Registered as an ISO 19443 Certification Body with NQSA

■ ISO 19443 certified companies also register with NQSA

In addition, companies that have obtained ISO 19443 certification in each country can also register with NQSA, so information on companies that have obtained ISO 19443 certification in 11 countries including the US and France is being disclosed, and in Korea, **Doosan Energy, International Electric Co., Ltd., and APS Energia**, which have obtained certification from ICR, are also being disclosed. We hope that this will be an opportunity for you to **obtain ISO 19443 certification through ICR and enjoy the international promotional effects of the NQSA at the same time.**

Korea

Poland

DOOSAN

SINCE 1946
국제전기(주)

APS

More info

More info

More info

Return

Return

NQSA

Nuclear Quality Standard Association

Tour Alta

4 Place des Saisons

92400 COURBEVOIE

NQSA

Nuclear Quality Standard Association

Tour Alta

4 Place des Saisons

92400 COURBEVOIE

< NQSA_List of ISO 19443 certified companies >



Registered as an ISO 19443 Certification Body with NQSA

■ ISO 19443:2018 Certification Inquiry

ICR will continue to expand the **ISO 19443:2018(certification of nuclear supply chain quality management systems)** based on its experience in domestic nuclear engineering and manufacturing as well as overseas companies (Poland_APS Energia).

For detailed consultation and procedure guidance on obtaining ISO 19443, **please contact ICR's System Certification Center.**

 **Inquiries**

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Jaguar EMC

RI130 Test equipments set-up

■ ICR, Introduction of RS103 test equipment for Jaguar

The ICR Automotive EMC team has completed **RI 130 test set-up** of **Jaguar's EMC test standard. (JLR-EMC-CS v1.0 Amendment 4)**

The RI130 test is designed to test the coupling resistance of electronic components. The main contents are as follows.

■ Key contents of the RI130 Test

▶ Test Purpose

- Immunity test for coupling transients between wires.

▶ Test equipments

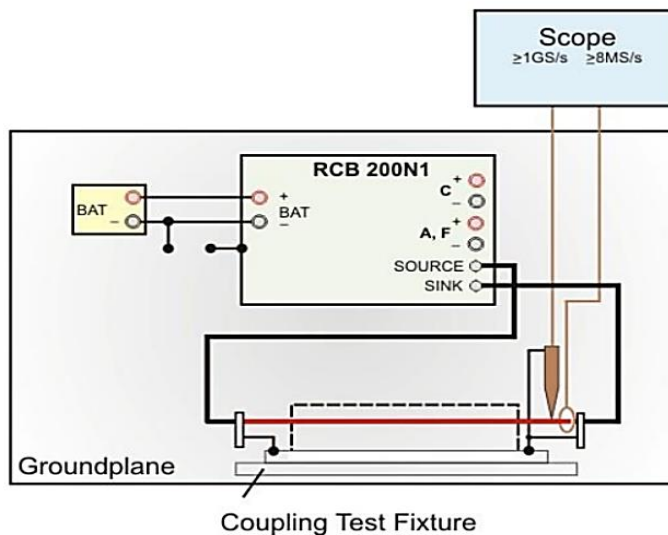
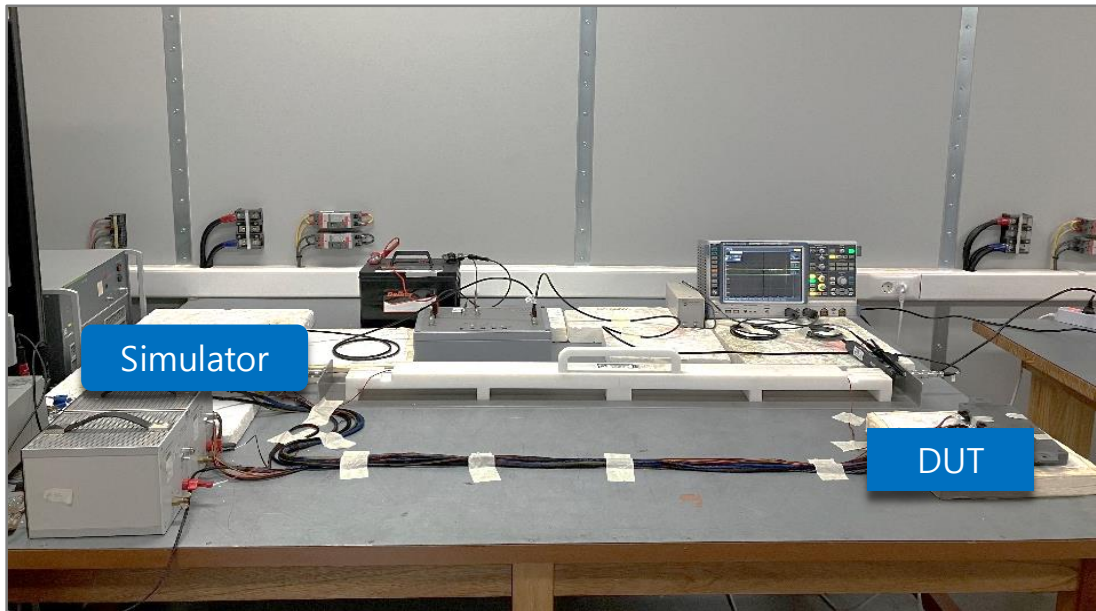
- RCB200N, Coupling test fixture
- Oscilloscope, Voltage probe, Current probe

▶ Test pulse: A2-1, A2-2

Jaguar EMC

RI130 Test equipments set-up

► Set-up



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Publication of EN ISO 3691-4:2023



■ EN ISO 3691-4:2023

On May 15, 2024, a new edition of EN ISO 3691-4:2023 was published. EN ISO 3691-4 is a standard that specifies safety requirements for industrial automated trucks and related systems, particularly focusing on the unverified safety requirements.

It applies to **Automated Guided Vehicles (AGVs)** and **Autonomous Mobile Robots (AMRs)**, which are widely used in modern industrial environments.

- EN ISO 3691-4 requires that **the control systems related to the safety of industrial automated trucks** meet at least the minimum Performance Level.

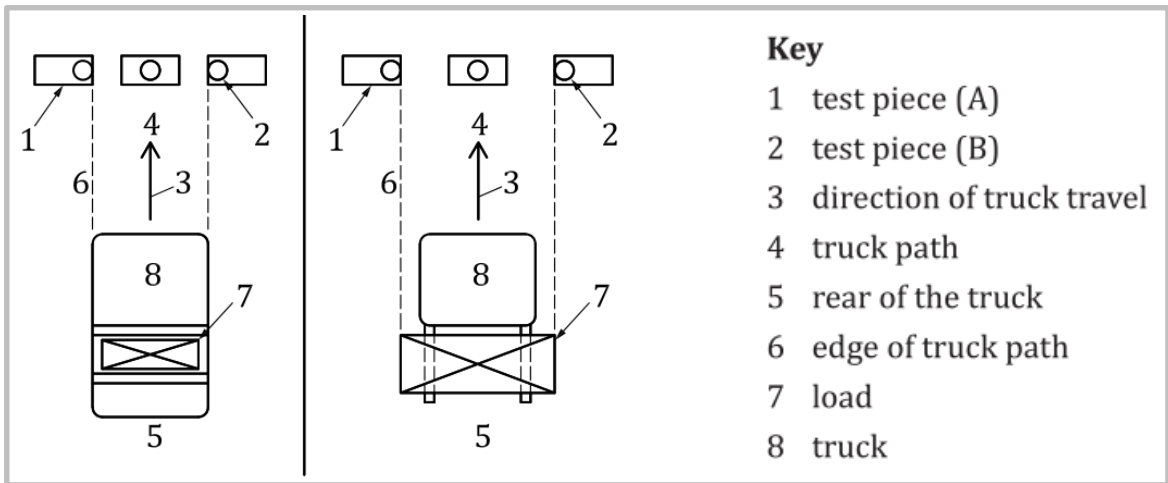
Safety function	Min. PLr
Braking system control	D
Over speed detection system	C
Adaption of the sizes of the active detection fields of an ESPE for movements	D
Automatic battery charging system	B
Checking the load is in the intended position system	B
Load handler position checking system	B
Stop system when detecting people while driving	D

Publication of EN ISO 3691-4:2023



■ Safety feature requirements for industrial driverless trucks.

- ▶ EN ISO 3691-4 conducts detection of persons, stability, structure, and dynamic testing to verify that the safety features of driverless trucks meet the requirements.



< Example of tests in certain direction of travel >

- ▶ The electrical requirements of driverless trucks follow EN 1175:2020.

■ ICR is conducting **testing and safety evaluations for driverless trucks.**

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www.icrqa.com

ICRO-31/R20161125 본 문서는 법률 제 14088호 저작권법의 보호대상이며, ICR의 지적 자산으로 불법 편집 및 복사를 금합니다.

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