

Address :3611, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do , South Korea (10048) Company Id No : 110111-243147 Tax & VAT Id No : 105-86-35114 Tel : (+82)2-6351-9001~5 / Fax : (+82)2-6351-9007 Home page : www.icrqa.com

Hot Issue

- **1. Accreditation Certificate Reissued by KOLAS**
- 2. EG-RTP and ICR Training Program
- **3.** Certificate of Personnel Competence (IECEx CoPC)
- 4. DOF Vibration Test System With Environmental Test Chamber
- 5. South Africa news on Non-Type approved equipment



Address :3611, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do , South Korea (10048) Company Id No : 110111-243147 Tax & VAT Id No : 105-86-35114 Tel : (+82)2-6351-9001~5 / Fax : (+82)2-6351-9007 Home page : www.icrqa.com

Accreditation Certificate Reissued by KOLAS



Korea Laboratory Accreditation Scheme

CERTIFICATE OF ACCREDITATION

ICR Co., Ltd.

Accreditation No. : KT652 Corporation Registration No. : 110111-2431479 Address of Laboratory : 112, Hwanggeum 3-ro 7beon-gil Yangchon-eup, Gimpo-si, Gyeonggi-do date of Initial Accreditation : January 16, 2015 Duration : January 16, 2019 ~ January 15, 2023 Scope of Accreditation : Attached Annex Date of issue : April 28, 2020

This testing laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025 : 2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique).



LEZ Seing WOO

Administrator Korea Laboratory Accreditation Scheme

Korea Laboratory Accreditation Scheme(KOLAS) is a signatory of the ILAC mutual recognition arrangement

1/215

On April 28, 2020, the accreditation certificate is reissued according to **KS Q ISO/IEC 17025:2017** by **KOLAS**.

Address :3611, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do , South Korea (10048)



Exemplar Global – RTP Training Program

- ICR International Certification Registrar Ltd. Is an auditor training provider directly registered to Exemplar Global.
- The RTP training program is a program that allows auditor training provider to freely develop and provide training courses by continuously meeting the requirements of a certified training program.
- ICR will develop and provide a variety of training courses according to the RTP and TPECS programs.

ICR Training Program

- ICR will provide various training services to customers by developing ICR training programs.
- For more information, will be announced on the ICR website in May.

System Certification Div. / Kim, Chae-Lin T.02-6351-9001 / kcl@icrqa.com

Certificate of Personnel Competence (IECEx CoPC)



ATEX members acquire the Certificate of Personnel competence (IECEx CoPC) and provide technical support to customers based on their professional knowledge and skills to help them obtain certification more easily and quickly.



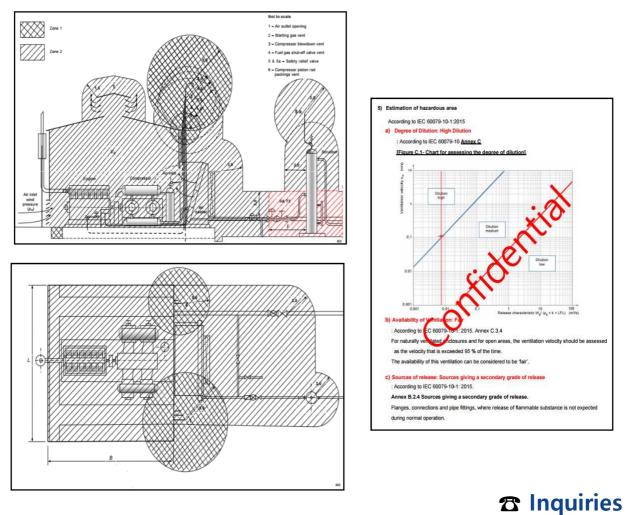


Address :3611, Hagun-ri, Yangchon-eup, Gimpo-si, Gyeonggi-do , South Korea (10048) Company Id No : 110111-243147 Tax & VAT Id No : 105-86-35114 Tel : (+82)2-6351-9001~5 / Fax : (+82)2-6351-9007 Home page : www.icrqa.com

Certificate of Personnel Competence (IECEx CoPC)



ATEX members acquire the IECEx CoPC Unit 002 and provide customers with services for the classification of hazardous area according to IEC 60079-10-1, IEC 60079-10-2.



Industrial Safety Center / Yang Dae-song T.02-6351-9001 / yds@icrqa.com



Purpose of Evaluation

- Evaluation of noise characteristics for product and component tolerances
- Structural design feasibility assessment for single and finished products



- ► Evaluate the degree of deterioration due to long duration
- Preliminary evaluation of noise problems that may occur during assembly and production

BSR

- ▶ BUZZ(버즈), Squeak(스퀵), Rattle(래틀)
 - This is a generic term for annoying sounds that cause customer dissatisfaction with noise generated while driving a vehicle.





Occur Cause

- Design and production stages
 - Assembly characteristics, seam finish,
 - Material selection, fastening characteristics,
 - Lack of rigidity etc.
- ► User steps
 - Operating endurance, vibration endurance, environment
 - Changes in durability and fastening conditions etc.

Equipment Components

- ► 6-axis Exciter(MB Dynamics)
 - Power Amplifier
 - Electricity through vibration amplification device generation of vibration through supply
 - Shaker
 - It is controlled by a PC through a sensor and has a profile suitable for the vehicle model
 - -Installation of 7 units for 6-axis simultaneous excitation
 - Vibrator control PC
 - Control the exciter such as excitation profile, vibration level, vibration mode







Equipment Components

- High and low temperature complex environment anechoic chamber (STI)
 - Anechoic chamber
 Air conditioner Off : ≤25dB(A)
 Air conditioner On : ≤30dB(A)
 - Anechoic chamber Temp. : -40 ~ 80°C Humid. : 50±5%
- Noise measurement equipment (HEAD Acoustics)
 - HEADlab Front-End
 - Measure the generated noise and save it as data
 - Microphone
 - Measure the noise generated by the product due to vibration







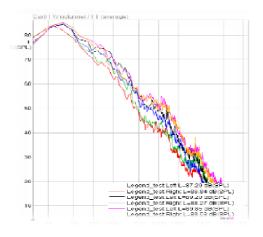




Equipment Components

- Noise analysis equipment (HEAD Acustics)
 - HEAD Artemis
 - The noise data generated through Front-End is Spec. Analysis under conditions suitable for
 - Acoustic psychology module
 - Analysis of Loudness, Sharpness, Roughness, etc.







Equipment Specifications

Shaker type		Permanent Magnet Electro-Dynamic Shaker
Background Noise		≤30dB(A), 1.5 sone at running
Frequency Range		DC – 200Hz
Dynamic Stroke		50mm pk to pk (vertical direction) 25mm pk to pk (Fore-aft, Lateral, Roll, Pitch, Yaw
Max Payload		Up to 500kg
Temperature Range		-40 ~ 80°C
Excitation Direction		Multi-axis (up to 6 axes) with simultaneous or sequential / 7 units
Control		Sine/Random/Time History
Feature		Comply with HKMC ES SPEC, GMW, Ford Spec
Effective Size		7.0 (W) × 7.2 (L) × 3.0 (H)m
Background Noise	Facilities Off	≤25dB(A)
	Facilities On	≤30dB(A)
Cut-off Frequency		250 Hz
Temperature Condition		-40 ~ 80°C
Humidity Condition		50±5% (23±3°C)
Completion Date		December. 2017

The inquiries Mobility Center / Lee, Han-Kook

T.010-5522-1825 / lhk9876@icrqa.com

South Africa news on Non–Type approved equipment

- On 14th February, South Africa ICASA (Independent Communications Authority of South Africa) on a joint operation with the South African Police Services we confiscated various non type-approved (unlicensed) communication gadgets in Mahikeng. Confiscated goods include 55 phones and 350 Bluetooth speakers.
- It is illegal to import, retail or use communication equipment or gadgets that are not approved by ICASA.
- Should you have any enquiry or request for ICASA Type approval, please do not hesitate to contact us for assistance. We've provide Type approval certificate within 4 weeks lead time and issue certificate number in advance if necessary



☎ Inquiries EMC&RF Test Center / Park Jong-min T.010-5522-2754 / kaelu@icrqa.com