

# Korea Corner

## Global Leader KERI in Testing and Certification - About KERI



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Executive Director  
KERI

Korea Electrotechnology Research Institute (KERI) has established in 1976 for the purpose of creating, developing and disseminating new knowledge and technology in the fields of the electric industry and electric power business, and thus advancing the national economy and welfare. And KERI's Testing & Certification Services has begun its role

as an independent third-party organization in 1982.

Uiwang branch of Testing & Certification Services was renamed as Power Apparatus Testing & Evaluation Division in 2005. Power Apparatus Testing & Evaluation Division was moved to Ansan city in 2007 except for the High Power Testing Department from Uiwang city.

In 2007, the numbers of testing services were 20,000 and testing revenues were approximately 400 million dollars. The numbers of testing services are 18,000 as of October, 2008.

Power Apparatus Testing & Evaluation Division in Ansan branch is newly built and equipped with state-of-the-art testing facilities. Test site is divided into two buildings.

Test building at a height of 5 meters consists of Safety and Operational performance test room for low voltage electrical equipment, Protective relay test room, Material properties test room, Chemical analysis test room, Calibration room and others.

Test building at a height of 15 meters consists of HV(High Voltage) test cell, Power-frequency short-circuit test cell, PD(Partial Discharge) test cell, EMC



**Test building**

test cell including anechoic chamber and others. Especially, Power Electronic test laboratory are newly established in order to support IT technology of the electric industry effectively.

The automatic temperature & humidity control system is installed in all test rooms including tempera-



**Safety performance test room**



**Test building**



**Chemical analysis test room**



**EMC anechoic chamber**



**Impulse generator**

ture-rise test room and control rooms of test cells to meet testing requirements. These testing environmental conditions comply with all ISO/IEC guidelines as an accredited international testing laboratory.

#### **Accredited status**

KERI was designated as a certified testing laboratory in 1994 for 840 test items by KOLAS (Korea Laboratory Accreditation Scheme), a current member of ILAC(International Laboratory Accreditation Corporation). Test reports and certificates issued by KERI are accepted in 35 countries that have signed multilateral agreements with ILAC.

Also KERI is certified as a product certification body in 2005 by KAS(Korea Accreditation System), a member of International Accreditation Forum, IAF.

KERI is now recognized as the new global leader in the field of testing and certification being internationally accepted as a CBTL(Certification Body Testing Laboratory) in 2004 and a NCB(National Certification Body) in 2008 for 25 IEC standards of 4 product categories(POW, PROT, CONT, EMC) by IECCE CB-Scheme.

Testing & Certification Services is carried out by several departments and their work are briefly introduced as follows.

#### ◎ Quality Certification Department

- Inspection services for development and acceptance tests for electrical apparatus

- Factory inspection for KS and high efficient electrical apparatus
- Management of quality system for internationally accredited body
- Activities related to standardization for national and international standards

#### ◎ Electric Apparatus Testing Department

- Type tests and acceptance tests for electrical equipment and power apparatus
- EMC tests for electrical equipment and power apparatus
- Tests and evaluation for IT equipment and protocol in IT equipment
- Materials and chemical analysis tests for electric apparatus

#### ◎ Safety Performance Testing Department

- Tests for KS certification and Safety certification of low voltage electrical equipment
- IECCE CBTL activities for low voltage protective equipment
- Calibration services for measuring equipment
- Low voltage and high power testing using short-circuit transformers

#### ◎ High Power Testing Department II

- Direct short-circuit tests on LV and MV electrical equipment
- Short-time withstand current and peak withstand current tests
- Capacitive and inductive current switching tests
- Short-circuit withstand tests on power transformers

#### **Epilogue**

KERI has provided its customers worldwide with the testing, certification, inspection, and calibration for electrical apparatus ranging from low voltage to high voltage. KERI is also an internationally certified testing and certification body with well recognized technical capabilities, strict testing and certification procedures and fully experienced experts.

In order to comply with the latest standards such as IEC, IEEE, ANSI, JIS, UL, KS and the various technical requirements from our customers in the world, KERI has been continuously expanding its infrastructure through the enhancement project of its testing facility on a regular and occasional basis.

KERI is now a world-class testing and certification institute whose growth goes beyond Korea and Asia. KERI will carry out its responsibility and role as a globally reputable testing laboratory and certification body on the basis of an outstanding infrastructure, technical professionalism, and transparent and systematic operations.



[www.keri.re.kr/test/](http://www.keri.re.kr/test/)

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