MESSAGE

Our mission is to support the state-of-the-art technology with safety.

We greatly appreciate your patronage for us.
Cosmos Corporation has been working as a pioneer company of safety engineering since foundation in 1987. We support the lives of people from the behind through check of safety by conformity assessment of the state-of-the-art products produced one after another in the era.
The absolute worth, “Safety”, is what we always continue to pursue.
We are devoted to day-to-day, incessant study in order to improve our skills and knowledge to meet various demands related to the safety.
In June 2021, Cosmos Corporation was accredited as a National Certification Body of IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE). It was the first accreditation for a pure Japanese private company.
The WTO/TBT Agreement strongly encourages members to base their conformity assessments on international standards and schemes established by International Electrotechnical Commission, whether mandatory or voluntary, and to mutually recognize their results of assessment among member bodies. The IECEE CB Scheme is well known as a mechanism to meet these purposes.
We are proud of our experiences and achievements of a large number of products. We will keep providing the world’s highest level of safety engineering in the belief that they bring trust from customers.

President of Cosmos Corporation 濱口慶一
Keiichi Hamaguchi

Company Principle

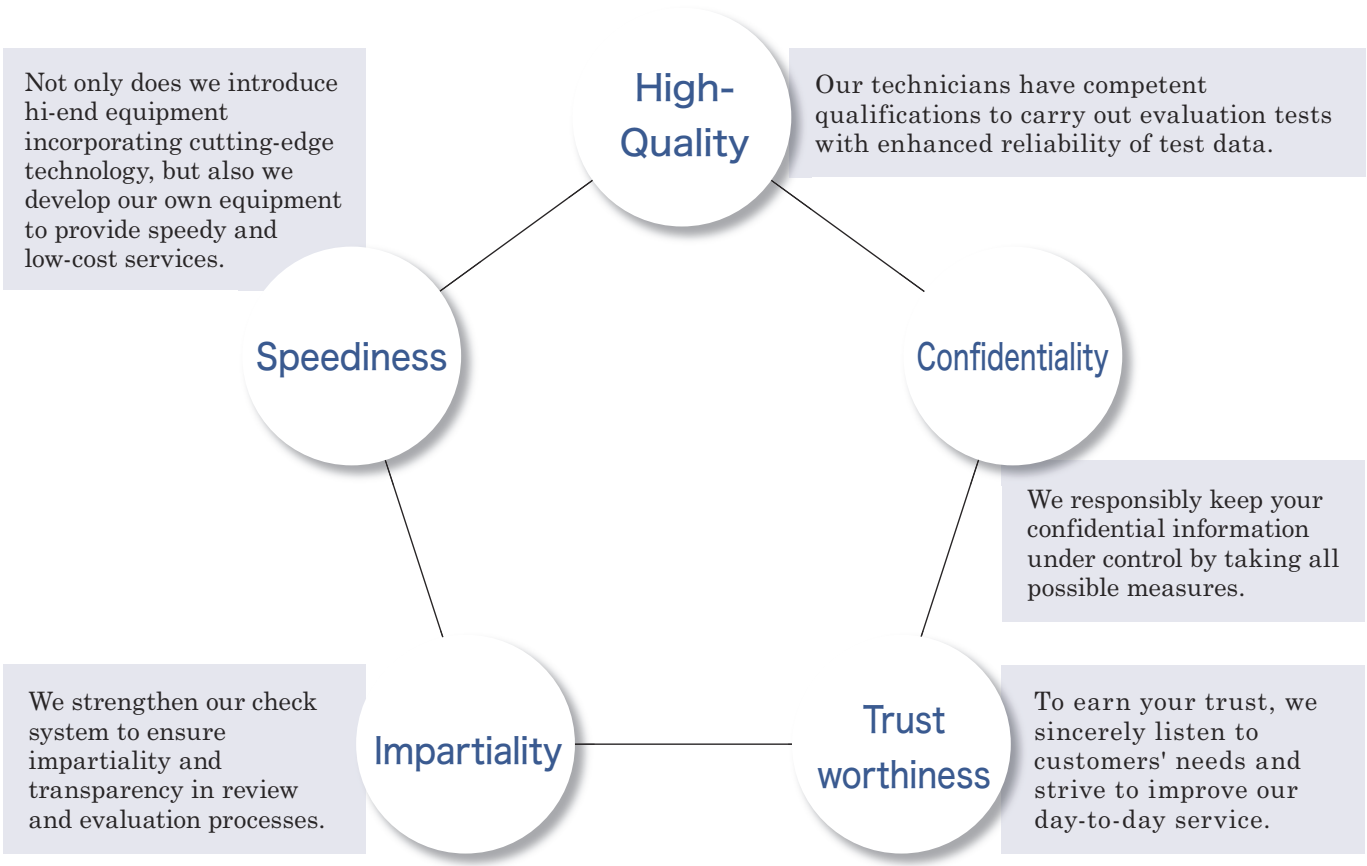
- We assure bright future of all employees and contribute to society by pursuing happiness both materially and spiritually.
- We contribute to improvement of product safety and security and the social welfare.

Management philosophy

We steadfastly adhere to independence, fairness and neutrality, offer product evaluation service with the best technical competency, contribute to the society with assuring customers’ prosperity and commit to bright future of all employees.
We keep in our mind that compliance is essential to ensure trustworthiness.
As a trustworthy certification body as well as a testing and calibration laboratory, we contribute to safety and security of world-wide distributed products.

COSMOS SPIRIT

Five points to support customers' cutting-edge technology



Management System

As an independent third-party assessment body, we aim to ensure safety of products distributed worldwide, and we are always making efforts to deepen our professional expertise and improve product safety engineering, strictly maintaining “independent, fair and neutral position”.
In addition, we have organized our compliance system to keep good and solid corporate management in order to be recognized and trusted in the society.

Compliance System

We define compliance as "practicing reliable and fair corporate activities according to social norm and corporate philosophy as well as laws, regulations and company rules".
We consider it as one of most important issues of our management and strictly keep it to earn stronger trust of customers and society.

ABOUT US

Corporate Summary

Company name	Cosmos Corporation
Established	October 31, 1987
Capital	30 million yen [as of July 2021]
End of fiscal year	June 30
Number of employees	182 people [as of July 2021]
Representative	Keiichi Hamaguchi, Representative Director
Bank	San ju San Bank, Hyakugo Bank, MUFG Bank, Shoko Chukin Bank, Japan Finance Corporation
Business contents	Evaluation of electrical appliances, medical devices, etc. according to domestic and international safety standards, certification, agent service for applications, EMC testing, environmental testing, research, translation, calibration, IT security, etc.
Head Office Location	718-1 Katsurase Town, Matsusaka City, Mie Prefecture 515-1104 Japan
Offices	【Office】Matsusaka Office, Akeno Office, Oonoki Office, Watarai Site (EMC Site) 【Satellite Office】Tokyo Office, Osaka Office, Kobe Office
Corporate No.	8190001006631

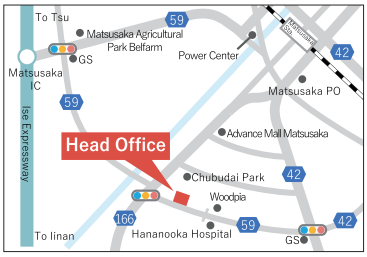
History

1987	
October	Established in Akeno, Obata Town, Watarai County, Mie Prefecture (now renamed Akeno, Obata Town, Ise City, Mie Pref.)
1988	
October	Established the new building (in the same address)
1991	
December	Increased capital to 5 million yen
1992	
August	Expanded the old building
1994	
August	Increased capital to 10 million yen
1996	
April	Established EMC Site in Shimesasu, Watarai Town, Watarai County, Mie Pref.
May	Completion of new building
June	Appointed and registered as an Appointed EMC Laboratory of TÜV Rheinland
July	EMC Lab accredited and registered by Voluntary Control Council for Information Technology Equipment Completed FCC filing for EMC Lab
November	EMC Lab certified and registered by Nemko
1998	
September	Test Lab accredited as IECEE CB Testing Laboratory
1999	
April	Increased the capital to 30 million yen
May	Established an open site in Shimesasu, Watarai Town, Watarai County, Mie Pref. Certified and registered by Nemko, FCC, VCCI
2001	
January	Expanded the new building
March	Registered as accredited testing laboratory (name according to old system) under the Telecommunications Business Act
2004	
May	Registered as accredited calibration laboratory under the Japan Calibration Service System (JCSS) (Scope: Electricity)
September	Established Oonoki Office in Oonoki, Watarai Town, Watarai County, Mie Pref.
October	Certified and registered by MET, certification body in the U.S.
2005	
April	Registered as accredited third-party certification body that certifies specially controlled medical devices according to Pharmaceutical and Medical Device Act (Registration No. AG)
November	Relocated the Headquarters (from Ise-shi, Mie to Oonoki, Watarai Town, Watarai County, Mie Pref.) Registered as a certification body that certifies radio equipment according to the Radio Act (Classification of Business 1)
2006	
May	Established Tokyo Office (in Tachikawa City, Tokyo)
July	Established Kobe Office (in Kobe City, Hyogo)
December	Established the Office Building of the Matsusaka Office (in Matsusaka City, Mie Pref.)
2007	
March	Established the Testing Building of Matsusaka Office
August	Registered as an accredited EMI laboratory by BSMI (Taiwan)
November	Registered as an accredited testing laboratory by Japan Esthetic Industrial Association
2008	
September	Registered as an accredited certification body according to the Telecommunications Business Act
November	Registered as a certification body that certifies radio equipment according to the Radio Act (Classification of Business 2 and 3)
2009	
February	Registered as an accredited laboratory according to the Equipment Certification System by Japan Esthetic Organization
August	Established EMC Center in Matsusaka Office EMC Lab accredited and registered by American Association for Laboratory Accreditation (A2LA)
2010	
February	Registered as an accredited testing laboratory under the Energy Efficiency Regulation in California, the United States
2011	
January	Established a business alliance with DNV (in Norway)
August	Calibration service accredited and registered by American Association for Laboratory Accreditation (A2LA)
September	Relocated Tokyo Office (from Tachikawa City to Bunkyo District, Tokyo)
2012	
January	Expanded the automotive EMC test facility in EMC Center of Matsusaka Office
May	Established Osaka Office (in Kita District, Osaka City, Osaka) Relocated Kobe Office (from Minatojimaminami-machi to Minatojimanaka-machi, Chuo District, Kobe City)
November	Started evaluation of mobile terminal equipment, W-CDMA and LTE (Telecommunications Business Act)
2013	
February	Started evaluation of mobile terminal, W-CDMA and LTE (Radio Act)
2014	
March	Accredited and registered by Voluntary EMC Laboratory Accreditation Center Inc. (VLAC)
July	Introduced measurement system for overseas radio equipment (2.4 GHz band)
September	Introduced the measurement system for overseas radio equipment (5 GHz band)
October	Registered as an accredited calibration laboratory according to Japan Calibration Service System (JCSS) (Scope: Time)
November	Accredited and registered as an accredited testing laboratory (by Luxcontrol in Luxembourg) for E-mark (certification mark of automobile parts for EU)
2016	
April	Introduced the Environmental complex testing equipment (for vibration test)
2017	
January	CSC Certification Scheme accredited and registered by American Association for Laboratory Accreditation (under ISO/IEC 17065)
February	Accredited and registered under JNLA
March	Introduced the environmental complex test equipment (for salt spray test)
May	Registered as JLMA-appointed laboratory
November	Registered as a Registered Inspection Body under the Electrical Appliances and Materials Safety Act
2018	
March	Registered as a designated EMC laboratory by South African Bureau of Standards (SABS)
2019	
March	Relocated headquarter (from Oonoki, Watarai County, to Matsusaka City, Mie)
2021	
June	Accredited as a National Certification Body under IECEE CB Scheme

OFFICES AND TESTING LABORATORIES

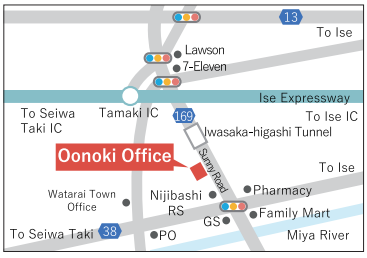
◆ Head Office・Matsusaka Office

718-1 Katsurase Town, Matsusaka City, Mie Prefecture 515-1104 Japan
TEL: +81-598-60-1827 FAX: +81-598-60-0300
【Main services】
Evaluation of electrical appliances, medical device, etc. according to domestic and international safety standards, certification, agent service for applications, EMC testing, environmental testing, research, translation, calibration, IT security



◆ Oonoki Office

3571-2 Oonoki, Watarai Town, Watarai County, Mie Prefecture 516-2102 Japan
TEL: +81-596-63-0707 FAX: +81-596-63-0777
【Main services】
Evaluation of electrical products according to the Electrical Appliances and Materials Safety Act, EMC measurement, certification according to the Telecommunications Business Act and Radio Act

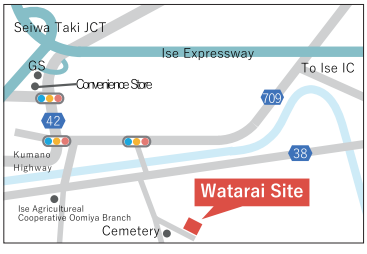


◆ Akeno Office

319 Akeno, Obata Town, Ise City, Mie Prefecture 519-0501 Japan
TEL:+81-596-37-0190
【Main service】
Environmental tests

◆ Watarai Site (EMC Site)

543 Shimesasu, Watarai Town, Watarai County, Mie Prefecture, 516-2119 Japan
TEL: +81-596-64-0888
【Main service】
EMC measurements



Tokyo Office

2F Bühne
Honkomagome, 6-5-3
Honkomagome,
Bunkyo District, Tokyo
113-0021 Japan
TEL:+81-3-5981-6880
FAX:+81-3-5981-6881

Osaka Office

Plaza Umeshin
Building 806, 4-15-18
Nishi-temma, Kita
District, Osaka City
530-0047 Japan
TEL:+81-6-6809-6666
FAX:+81-6-6809-6656

Kobe Office

3F Kitafuto Deck
Plaza 2-1-12
Minatojimanaka-machi,
Chuo District, KobeCity
650-0046 Japan
TEL:+81-78-302-5556
FAX:+81-78-302-5557

Cosmos Corporation
URL https://www.safetyweb.co.jp TEL:+81-598-30-5225 FAX:+81-598-30-5571

CSC MARK CERTIFICATION

Need for CSC Certification Mark by Cosmos

Certified

Since 1987, we have evaluated a lot of our customers' products for 30 years.
Making use of our experiences and engineering skills that we have developed until now, we offer our unique product safety certification service, "CSC Mark Certification".

Our goal for evaluations and certifications is:
"Customers' products are safe, not to cause any accident in the market and a lot of burden on customers for recovery, etc."

Recently, companies manufacturing or marketing electrical products are strongly required to assure product safety on their own responsibility.
In addition to your self-evaluation, you can add further reliability by our CSC Certification granted by us as a neutral third-party assessment body.
In CSC Certification, we perform conformity assessment according to appropriate safety standards and factory inspections (initial/periodic) by using CIG 023, and then certify your product based on their results.
Certified products may bear CSC mark.
CSC Mark on your product will let consumers know you manufacture and market reliably safe electrical products.

Scope

The CSC Certification Scheme covers household appliances, lighting equipment, and so on. This Scheme is accredited by American Association for Laboratory Accreditation (A2LA) under ISO/IEC 17065:2012, Conformity assessment - Requirements for bodies certifying products, processes and services (Certification No. 2900.03), which makes the scheme more more reliable.

Cosmos Corporation
URL https://www.safetyweb.co.jp　TEL：+81-598-30-5225　FAX：+81-598-30-5571

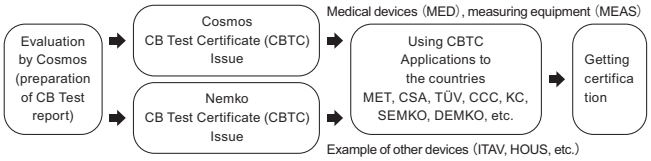
SUPPORT FOR WORLDWIDE APPROVALS

Evaluation, certification and application agency services for approval of electrical and electronic equipment according to safety standards

◆ CB Certification services according to international IEC standards

Cosmos Corporation is accredited as a National Certification Body (NCB) for medical devices (MED) and measuring instruments (MEAS) and also as a CB Testing Laboratory of NCB Nemko Group AS, Norway for other catogories (ITAV, HOUS, etc.) Use of CB Test Certificate and CB Test Report can significantly reduce evaluation costs and shorten lead time of evaluation, because evaluation to be implemented in each CB member country requires only to check the differences between IEC standard and that member country's corresponding national standard.

【 Example of application flowchart 】



◆ Services for European market access

On behalf of you, we carry out conformity assessment to European Directives such as Low Voltage Directive, required for CE marking and offer application service for getting approvals for safety marks in European countries and research services. We also provide support services for evaluations according to ErP Directive and other Directives.

◆ Services for North American market access

It is general to get certification marks issued by NRTL (National Recognized Testing Laboratories) approved by the Department of Labor according to OSHA (Occupational Safety and Health Act). We act as your agent for approval of any of 20 NRTLs, e.g. Eurofins E&E (MET), Nemko North America, according to your request.

We also support you for access to Canadian market.

◆ Support for reporting for radiation-emitting products to U.S. FDA

We prepare Product Reports for laser, X-ray, ultrasound and act as your agent for submission to Food & Drug Administration.

◆ Service for Asian market access

【China CCC】We provide following services: research on whether your appliance is subject to CCC certification or not; purchase of standards; application agency; and getting certifications.

【Various kinds of Korean KC mark】We provide research and agency services for getting KC marks (including KCs) such as those for safety, EMC, radio, telecommunication and energy according to laws and regulations.

【BSMI in Taiwan】We are registered as a safety and EMC laboratory by BSMI in Taiwan. CB Test Report and EMI Report issued by Cosmos are accepted by BSMI, and you can use them to get certification with document review only. Please note that the acceptance of our reports depends on the category of your product.

【Others】We provide research and agency services for approval of other Asian countries, such as Malaysia, Singapore, Hong Kong, Thailand and India, etc.

◆Services for Central and South American market access

【Brazil】Use of ILAC report issued by Cosmos will help you to get INMETRO certification without sending samples.

【Mexico】We act as your agent for getting NOM mark certification and provide evaluation according to the Mexican energy regulations.

◆Services for Oceanian market access

【Australia and New Zealand】We support you to verify conformity for RCM marking required according to product safety and EMC regulations and evaluate your products according to the energy regulations.

◆Services for Middle Eastern market access

【G-mark for the GCC countries】Using Cosmos CB Test Report attached to Nemko CB Test Certificate will help you to get registration certificate and UAE ECAS mark approval.

【Israeli SII】Using Cosmos CB Test Report attached to Nemko CB Test Certificate will help you to get SII Test Certificates.

◆Services for African market access

【South Africa】Using Cosmos CB Test Report attached to Nemko CB Test Certificate will help you to get the Letter of Authority (LOA) without sending samples. For EMC, Cosmos is a SABS-designated laboratory. EMC reports issued by Cosmos can be used to obtain CoC.

Evaluation of industrial machinery based on safety standard

For export and import of industrial machine and machine systems, you need to deal with various kinds of safety regulation in each country. To support you for addressing the safety regulations (EU Machinery Directive, U.S. OSHA, Korean KCs (Self-Regulatory Safety Confirmation), Japanese Occupational Safety and Health Act, etc.), we offer you comprehensive services including construction check, risk analysis, application to competent authorities, etc.

We also provide technical guidance services and conduct evaluation of facilities according to the installation requirements of Japanese Industrial Safety and Health Act for employers.

◆ Three ways of construction check

① Construction check by verification of drawings at development stage
② Construction check on similar machine or machine to be improved
③ Construction check on machine to be shipped

◆ Preparing and editing test reports and technical documents

If you need our evaluation report and TCF for CE marking under EU Machinery Directive, we would evaluate your machine according to proper standards, prepare an evaluation report and compile the TCF.

◆Agency services of applications to worldwide certification bodies

In case your product falls within the category specified in Annex IV of EU Machinery Directive or you want to get approval of competent bodies for your marketing strategy, we support you for various procedures of application for approval and attend witness tests in Japan.

Application agency and measurement services of radio equipment for overseas approvals

We support you for measurements and applications for approval in order to satisfy worldwide regulations of radio equipment, such as wireless LAN and RFID, etc.

【Main countries covered】U.S. (FCC), European Union (CE), more than 100 other countries and regions (China, Korea, Taiwan, etc.)

Cosmos Corporation

URL https://www.safetyweb.co.jp　TEL：+81-598-30-5225　FAX：+81-598-30-5571

PRODUCT SAFETY TESTING AND CERTIFICATION

Marketing authorization/Evaluation services for designated specially controlled medical devices, etc.

Cosmos Corporation is a Registered Certification Body (No. AG) under the Pharmaceuticals and Medical Devices Act.

【Certification】Certification of designated controlled medical devices and certain designated specially-controlled medical devices

【Designated controlled medical devices (Class II)】

● Active implant devices ● Anesthetic and respiratory devices ● Dental devices ● Medical electrical equipment ● Clinical equipment ● Non-active implant devices ● Ophthalmic and visual equipment ● Reusable devices ● Single-use devices ● Household massage equipment, household electrical therapy equipment and its related equipment ● Hearing aids ● Radiology and image diagnosis equipment

【 Designated specially controlled medical devices (class III) 】

● Pen type injection device ● Enteral feeding infusion pump, general-purpose infusion pump/syringe infusion pump, and patient-controlled analgesic infusion pump ● Reusable manually-operated pulmonary resuscitator and single-use manual pulmonary resuscitator ● Anaesthesia depth monitor, central monitor with analytic capability, cardiac arrhythmia monitoring system, multiparameter monitor with critical parameters, apnoea monitor, apnoea alarm, electrocardiac module with arrhythmia analysis function, electrocardiographic/respiratory module, nerve detection module, and intracranial pressure module

● Non-sterile silk suture, sterile silk suture, polyester suture, polyethylene suture, polypropylene suture, polybutester suture, polytetrafluoroethylene suture, plastic suture, polyamide suture, polyvinylidene fluoride suture, polyurethane suture, vinylidene fluoride/hexafluoropropene copolymer suture, stainless suture and titanium suture ● Self-monitoring glucose meter

【Evaluation】Evaluation according to IEC/JIS standards

Conformity assessment and evaluation under the Electrical Appliances and Materials Safety Act

Cosmos Corporation is a Registered Inspection Body under the Electrical Appliances and Materials Safety Act.

Conformity assessment of “AC Electric Appliances” and “Electric Motor-operated or Magnetically Driven Appliances”, which are classifications for specified electric appliances (Article 9 of the Act) ◇PS E◇

Check of conformity of non-specified electric appliances (Article 8 of the Act) ⓅS E

Certification and evaluation under the Radio Act/ Telecommunications Business Act

Cosmos Corporation is a Registered Certification Body (008) under the Radio Act and Registered Recognition Body under the Telecommunication Business Act.

【Certification】Certification of all wireless/terminal equipment

【Evaluation】Evaluation of wireless LAN, Bluetooth, LTE, etc.

Cosmos Corporation

URL https://www.safetyweb.co.jp TEL：+81-598-30-5225 FAX：+81-598-30-5571

EMC TESTING

Measurement services for electronic/ electrical equipment, vehicles and radio equipment, etc.

We provide EMC measurement services for various kinds of equipment from household appliances to large-sized equipment.

- EMC test (witnessed/entrusted)
- On-site EMC test

Our professional staff members carry out EMC measurement under your witness or entrustment to them.
Samples from noise suppression component manufacturers are always available at each testing facility.

◆EMC facility

☐ Large-sized 10 m anechoic chamber ····· 1
☐ 3 m anechoic chambers ····· 2
☐ Small-sized anechoic chambers for automotive devices ····· 2
☐ Shielded rooms ····· 4
☐ Open Area Test Sites ····· 2

◆Standard to be measured

Generic standards	IEC/EN 61000-6-1/-2/-3/-4
IT equipment	CISPR 32/35, EN 55032/35,FCC Part15 Subpart B, VCCI, ICES-003, CNS 13438 (BSMI), SANS 2332, SANS 2335
Medical equipment	IEC/EN 60601-1-2, JIS T 0601-1-2, J55014-1
Household appliances, electric tools	CISPR 14-1/-2, EN 55014-1/-2, J55014-1, CNS 13783-1(BSMI), SANS 214-1, SANS 214-2
Measuring equipment	IEC/EN 61326-1, JIS C 61326-1, SANS 61326-1
Marine equipment	IEC/EN 60945
PLC	IEC/EN 61131-2
Equipment with internal combustion engine	CISPR 12, EN 55012, ICES-002, SANS 212
Basic immunity standards	IEC/EN/JIS C/SANS 61000-4-2/-3/-4/-5/-6/-8/-11
Automotive devices	CISPR 25, ISO 11452, ISO 7637, ISO 10605, ECE-R10
Radio equipment	EN 301 489, FCC Part15 Subpart C

※ We can also conduct measurements according to other national standards, equipment-specific standards, etc.

◆Accreditations/Registrations granted for facilities

☐ A2LA accredited laboratory
☐ CBTL of Nemko
☐ BSMI [Safety and] EMI testing laboratory
☐ ISED Canada accredited testing laboratory
☐ FCC
☐ VCCI
☐ Germany TÜV Rheinland Appointed Test Lab.
☐ Accredited and registered by Voluntary EMC Laboratory Accreditation Center Inc. (VLAC)
☐ South African Bureau of Standards (SABS) EMC testing laboratory

On-site EMC test

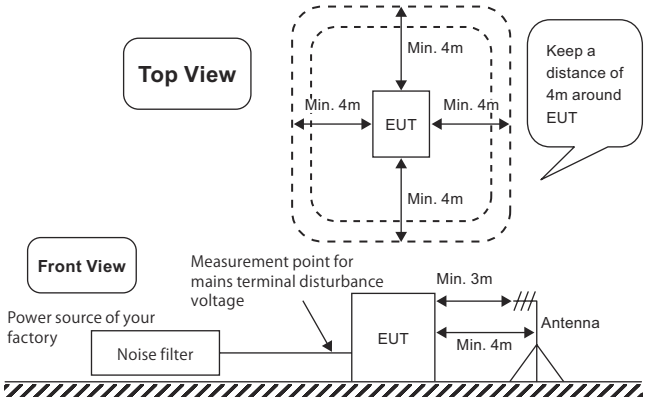
For EMC measurement of large-sized equipment and facilities which are difficult to move, we visit your factory and carry out measurement on site.
We can get certificate from Notified Bodies under Annex III of EMC Directive according to your request.

◆Summary of EMC/On-site Testing

- For large-sized equipment (over 2.5 m width × 2.5 m height)
- For equipment weighted over two tons or having a problem on transport
- Large power capacity for operation of equipment
- For equipment operated in special environment, etc.

We carry out measurement at Watarai Site (EMC Site) for general equipment and facilities to which the above does not apply.

Typical Setup for On-site EMC Testing



◆Requests to customers

- Please be careful not to operate devices other than EUT during measuring EMI noise.
  This is required to eliminate radiated noise from peripheral devices. For this purpose, the measurement late at night or on holiday may be scheduled.
- We may insert a noise filter in order to cut noise coming from wirings in factory while measuring mains terminal disturbance voltage. Please prepare a power supply cord a few meters long.
- During measurement, please allow us to use EUT for measurement only. In addition, please set the EUT to be continuously operable.

◆Other necessary documents and items to be prepared by yourself

- Description of EUT (e.g. catalog, specifications, etc.)
- Electric circuit diagrams/wiring diagrams
- Layout diagrams for EUT (plan for arrangement in the factory)
- Power supply for the measuring devices (rated AC 100 V, single phase and supplied with extension cable, etc.)
- Table for the masuring devices (e.g. table for meeting, etc.)

Cosmos Corporation
URL https://www.safetyweb.co.jp TEL:+81-598-30-5225 FAX:+81-598-30-5571

VARIOUS ENVIRONMENTAL TESTS

We have many pieces of equipment meeting your specific needs and test conditions specified in several standards such as IEC, EN, UL, JIS, etc.

Test	Installation/Equipment		Specification of equipment	Available test
Dust-/water-proof test	IP test: Various kinds of probe		50 mmφ sphere/12.5 mmφ sphere/articulated test finger/ 2.5 mmφ steel rod/1.0 mmφ needle wire	IP1X to IP6X (IEC 60529/JIS C 0920/ISO 20653/JIS D 5020, etc.)
	IP test: Dust chamber	Large	Type of chamber: Free settling dust Size (inner dimension): 1500 (W) x 1500 (D) x 1500 (H) (in mm) (Frontage): 1400 (W) x 1400 (H) (in mm) Dust used: Talc powder	IP5X/IP6X (IEC 60529/JIS C 0920, etc.)
	IP test: Dust chamber	Small	Type of chamber: Free settling dust Size (inner dimension): 900 (W) x 900 (D) x 900 (H) (in mm) (Frontage): 850 (W) x 850 (H) (in mm) Dust used: Talc powder/Arizona powder/Kanto Loam, etc.	IP5KX/IP6KX (ISO 20653/JIS D 5020, etc.)
	IP test: Rain test		Amount: 1 to 3 mm/min. Test area: W550 x D650 (mm)	IPX1/IPX2 (IEC 60529/JIS C 0920/ISO 20653/JIS D 5020, etc.)
	IP test: Oscillating tube		① R600 mm pore size φ0.4mm x 37 ② R1000 mm pore size φ0.4mm x 62 ③ R1600 mm pore size φ0.4 mm x 100	IPX3/IPX4 (IEC 60529/JIS C 0920/ISO 20653/JIS D 5020, etc.)
	IP test: Sprinkling nozzle		Pore size φ0.5 mm x 37	IPX3/IPX4 (IEC 60529/JIS C 0920/ISO 20653/JIS D 5020, etc.)
	IP test: Spray nozzle		6.3 mm nozzle: 12.5 L/min. ± 5 % 12.5 mm nozzle: 100 L/min. ± 5 %	IPX5/IPX6/IPX6K (IEC 60529/JIS C 0920/ISO 20653/JIS D 5020, etc.)
	IP test: Tank for submerging test		① 300 mmφ x 1200 mm (H) ② 1000 mmφ x 1200 mm (H) ③ 1200 (W) x 1200 (D) x 1500 (H) (in mm)	IPX7/IPX8 (IEC 60529/JIS C 0920/ISO 20653/JIS D 5020, etc.) D1/D2/D3 (JIS D 0203)
	IP test: High-pressure/steam-jet cleaning test		14-16 L/min. 8000-10000 kPa 80 ℃ ± 5 ℃	IPX9/IPX9K (IEC 60529/ISO 20653/JIS D 5020 etc.)
	Dust tester for automotive components		Type of chamber: floating Size (inner dimension): 900 (W) x 900 (D) x 900 (H) (in mm) (Frontage): 850 (W) x 850 (H) (in mm) Dust used: Talc powder/Arizona powder/Kanto Loam, etc.	F1/F2/F3 (JIS D 0207)
	Water-proof tester for automotive components		R1: 0.01 MPa, 1.9 L/min. R2: 0.03 MPa, 3.2 L/min. S1: 0.1 MPa, 24.5 L/min. S2: 0.3 MPa, 39.2 L/min.	R1/R2/S1/S2 (JIS D 0203)
	Rain tester		3 spray head nozzles Hydraulic pressure: 34.5 kPa	NEMA 250/UL 50E
	Hose down tester		25 mm (1-inch) nozzle: 240 L/min.	NEMA 250/UL 50E
Vibration/ Impact test	Vibration/Impact tester		Frequency: 5-2000 Hz / Max. acceleration: 980 m/s2 Max. displacement: 51 mm p-p (with no load)	Vibration tests (sine wave/random wave/spot)
	Vibration/Impact tester		Acceleration: 100 m/s2, 30 - 980 m/s2, 6ms (with no load)	Impact tests (sine wave/trapezoidal wave/sawtooth wave)
	Complex environmental test equipment		Size (inner): W1000 x D1000 x H950 (mm) Temp.: -60 to 150℃/20 to 98%RH	Designed for conditions of control of temperature and humidity in various kinds of vibration and impact tests (JIS D 1601, etc.)
Salt spray test	Salt spray test		Size (inner): W1200 x D800 x H500 (mm) Salt spray: 35 to 50 ℃/Dry: (room temp. plus 10) to 70 ℃/Humid: 40 to 60 ℃, 50 to 95 %	ISO 9227/JIS Z 2371/JIS H 8502/IEC 60068-2-52 etc.
Temp. and humidity test	Large-sized temperature and humidity chamber (walk-in type)		Size (inner): W3020 x D1970 x H2100 (mm) Temp.: -40 to 80 ℃/Humidity: 20 to 95 %	Designed for high/low temperature test and temperature/humidity (cycle) test (for large sample)
	Mid-sized temperature and humidity chamber		Size (inner): W1000 x D800 x H1000 (mm) Temp.: -40 to 150 ℃/ Humidity: 20 to 98 %	Designed for high/low temperature test and temperature/humidity (cycle) test (for middle- and small-sized sample)
	Oven chamber		Size (inner): W400 x D400 x H400 (mm) Temp.: 40 to 210 ℃	Designed for various kinds of temperature test
	Small-sized extremely low constant temperature chamber		Size (inner): W400 x D400 x H400 (mm) Temp.: -85 to 180 ℃	Designed for various kinds of temperature test
	Vacuum uniform temperature drying equipment		Size (inner): W300 x D300 x H300 (mm) Temp.: 40 to 240 ℃	Designed for various kinds of temperature test
	HAST chamber		Size (inner): W255 x D318 x H255 (mm) Temp.: 105～160 ℃/Humidity: 75 to 100 %	Designed for various kinds of temperature test
	Thermal shock test chamber (elevator type)		Size (inner): W320 x D230 x H130 (mm) Temp.: 60 to 200 ℃, -65 to 0 ℃	Two-zone system designed for conditions for acute thermal shock test by elevating a sample up and down
	Thermal shock test chamber (damper type)		Size (inner): W650 x D370 x H460 (mm) Temp.: 60 to 200 ℃, -65 to 0 ℃	Damper switching method designed for conditions of various kinds of thermal shock test
Flammability test	Flammability test equipment		Propane gas/methane gas used	Designed for various flammability tests: UL94 (V-0/V-1/V-2/HB/5V, etc.)/IEC 60707 (FV/FH, etc.) IEC 60950-1 (Annex A1/Annex A2), etc.
	Glow wire test equipment		Temp.: 550 to 960 ℃	Designed for glow wire test (IEC/JIS C 60695-2-11, etc.)
Tracking test	Tracking test equipment		50 to 600 Vdc Material of electrode: platinum Comparative Tracking Index (CTI)/Proof Tracking Index (PTI)	Designed for tracking-proof test (IEC 60112/JIS C 2134/JWDS 0028, etc.)
Impulse test	Impulse tester		Voltage surge: 15 kV, 1.2/50 μs Current surge: 7500A, 8/20 μs	Designed for various kinds of lightning surge tolerance test (IEC 61000-4-5, etc.)

Cosmos Corporation

URL https://www.safetyweb.co.jp TEL：+81-598-30-5225 FAX：+81-598-30-5571

RESEARCH AND TRANSLATION SERVICES

Research Service

We provide research services for worldwide regulations on safety, radio equipment and EMC regulations.

◆Three features of our unique service

① More than 100 researches per year for many countries.
② Experienced professional staffs who have researched regulations of various kinds of electrical equipment in various countries.
③ Using our unique network developed from long experience.

◆Example of countries for research

Europe, Russia, etc.	EU countries, the United Kingdom, Norway, Switzerland, Turkey, Ukraine, Eurasian Economic Union (EAEU), etc.
North America	US, Canada
Central and South America	Mexico, Argentina, Brazil, etc.
Asia	China, Taiwan, Korea, Hong Kong, Singapore,Vietnam, Thailand, India, Indonesia, Malaysia, etc.
Middle East	UAE, Israel, Saudi Arabia, etc.
Africa	South Africa, etc.
Oceania	Australia, New Zealand, etc.

* We also provide research service for regulations in countries other than listed above.

◆Examples of research specifics

- "We plan to export our electrical appliance to China. Please research whether it is subject to relevant Chinese regulations."
- "We plan to export our electrical appliance to India. Please research whether it is subject to relevant Indian regulations."

Publication of translations and books

The UKCA regulations, European Low Voltage Directive, EMC Directive, Radio Equipment Directive, ErP Directive, RoHS Directive (RoHS2 and their implementing regulations and guidelines are published in their official language. We translate them into Japanese for sale. We can translate documents relevant to Japanese regulations into English for your reference.
We always aim at comprehensible and correct translation and quick delivery.
Click [Services] > [Publications] on our website.

◆Publications

We published World Product Safety Handbook I and II which summarize the pieces of information gathered through our applications for domestic and international product safety approvals.
These books are useful for not only persons working on product design and development and applications for product approvals, but also those who are interested in certification schemes in Japan and other countries in the world.
At present, we send them to you with our compliments upon request.

【Title】World Product Safety Approval Handbook I (in Japanese only)

Published in 2009 (A4-sized, 229 pages)
It is the revision of World Product Safety Handbook 2005. It outlines the regulations in countries over the world on safety and EMC of electric and electronic products.

【Title】World Product Safety Approval Handbook II (in Japanese only)

Published in 2007 (A4-sized, 256 pages)
It covers the information which could not be included in the 2005 Edition, for example, the U.S. In conjunction with the Handbook I, more regulations can be covered.

Translation Service

Applications for safety approvals require user manual, operation manual, labels and other information written in local language(s) which is acceptable in country(-ies) where your product is sold.
However, it takes very long for people engaged in product development to read laws and standards of those countries and prepare necessary documents in local language.
Recent progress of machine translation is remarkable, but it still requires improvement.
Our professional staffs translate manuals, specifications, other technical documents and regulations related to safety standards with computer-aided translation tools (CAT) to improve efficiency.

◆Languages for translation

Contact us for translations in English, Germany, Spanish, French, Chinese (simplified/traditional), Korean and other languages.

Cosmos Newsletter (In Japanese Only)

We publish a monthly information magazine, "Cosmos Newsletter for EMC & Safety".
To assist our customers working on testing, certification, development and control of electronic devices to make their devices comply with applicable laws and regulations and to market compliant devices worldwide, Cosmos Newsletter provides information on standards, laws and regulations related to EMC and safety that we have widely researched, gathered and summarized.
Use Cosmos Newsletter to catch the latest information and trend.

Format: PDF File (A4-sized, about 40 pages)
It is sent to e-mail address you specify.
Frequency of issue: Once per month, 11 times per year
Not published in February.
Price: 2,000JPY for each issue
Annual subscription: 10,000JPY Back numbers are available.

◆Cosmos Newsletter EMC & Safety in DVD (for Windows only)

*** Windows is a Trademark of Microsoft Corporation.**

Consolidated editions (10 files, each consolidated per year) and bound edition (Cosmos Newsletters for 10 years bound into one file) are available in one DVD-ROM.
Easy to search, theme-specific integrated articles, convenient to follow the articles chronologically.

Price: 20,000JPY

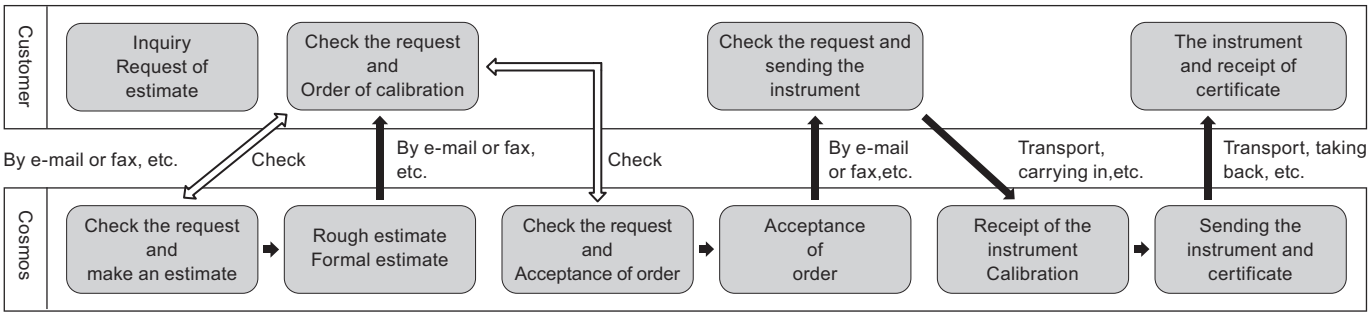
Cosmos Corporation

URL https://www.safetyweb.co.jp TEL:+81-598-30-5225 FAX:+81-598-30-5571

CALIBRATION OF MEASURING EQUIPMENT

To manufacture products subject to the Electrical Appliance and Material Safety Act and Pharmaceuticals and Medical Device Act, it is indispensable to calibrate measuring equipment used for tests.
Also, it is necessary to calibrate measuring equipment regularly for getting and maintaining certification according to ISO 9001 and ISO 13485, etc.
We calibrate various kinds of measuring equipment for a wide range of parameters including electricity, pressure, length, weight and temperature, etc. by using standards traceable to national standards. Our calibration service is valid for these certifications and quality assurance.

◆Calibration Flowchart



◆General Calibration Service

Calibration by using traceable standards to national standards. This is the most general calibration.
For this service, we issue calibration certificates (including results) with a traceability system chart.

◆Estimated Completion Date

For general calibration service, we fix the completion date after discussing or confirming it with the customer. If you are in a hurry, we can return calibrated instrument first and send its calibration certificate via mail later, which may be subject to the postage. If you hurry to receive both the instrument and the calibration certificate, please ask us. We can provide express services.

◆Calibration fee

Calibration fee includes the cost for calibration and issue of a calibration certificate set.
A calibration certificate set consists of:

① Calibration certificate
② Calibration results
③ Traceability system chart (in case of general calibration or including the points of general calibration)

◆JCSS Calibration Services

JCSS calibration is provided only by organizations registered according to the Metrology Act. The JCSS calibration certificate can bear the "JCSS" logo, that is evidence to ensure traceability to national standards, thus not requiring the traceability system chart.
Cosmos Corporation is registered as a JCSS registered calibration laboratory according to ISO/IEC 17025 and also a calibration provided authorized under the International Mutual Recognition Arrangement (MRA). JCSS 0144 is the registration number of Cosmos Corporation.

◆A2LA Calibration Services

This calibration is provided only by accreditation bodies approved to ISO/IEC 17025, and their calibration certificates may bear "A2LA"and "ILAC" symbols. The "A2LA" and "ILAC" symbols prove the traceability to international standards, and therefore, traceability system charts are not required.
Cosmos Corporation was accredited by A2LA in 2011 (Cert. No. 2900.02) to issue calibration certificates with A2LA and ILAC symbols for measuring equipment with regards to voltage, current, power, high-frequency, etc.

Reliability of inspection and test results is important for check of compliance with various domestic and overseas regulations as well as manufacture of products complying with applicable standards, and requires control of accuracy of measuring equipment. Our calibration services can help you assure the quality of your products.

◆Main product categories to be calibrateda

<table>
<tr><th>Electronic measuring instruments</th><th>Measuring instruments for safety testing</th><th>Measuring instruments for weight, length, force</th></tr>
<tr><td rowspan="3">High voltage meter, voltmeter (DC, low-frequency), ammeter (DC, low-frequency), digital multimeter, analog voltmeter, analog ammeter, milliohm hi-tester, voltage and current generator, power meter, universal counter, clamp meter, frequency counter, electronic load, etc.</td><td>Withstand voltage tester, Insulation resistance tester, AC low resistance tester, leakage current tester, etc.</td><td>Vernier caliper, micrometer, scale, height gauge, push-pull gauge, force gauge, etc.</td></tr>
<tr><th>Measuring instruments for temperature</th><th>Other</th></tr>
<tr><td>Hybrid recorder, digital thermometer, soldering iron thermometer, dip tester, bar thermometer, etc.</td><td>Stop watch, etc.</td></tr>
</table>

* We may limit the range of calibration depending on the type and specification (the range of measurement) of your instrument.
If your instrument is not included in the above table, please inform us of its name, manufacturer and model.
We will confirm whether we can calibrate it.

Cosmos Corporation

URL https://www.safetyweb.co.jp TEL:+81-598-30-5225 FAX:+81-598-30-5571

IT SECURITY

As the use of internet and computer increases, it is very important for us to take information security measures to prevent information leakage and viral infection.
Evaluation of the security capability of IT products according to the international standard ISO/IEC 15408 may be required for procurement of products.
As a Japanese local partner of TÜV Informationstechnik GmbH (TÜViT), a German certification body, we can provide various services such as Common Criteria (ISO/IEC 15408) evaluation, audit and certification of certification authorities, security evaluation of smartcard.
In addition, we provide research and translation services related to IT security and hold various seminars regarding IT security.

◆Evaluation according to ISO/IEC 15408 [Common Criteria (CC)]

CC evaluation covers the security functions of IT equipment and systems. TÜViT is accredited under CC schemes of both Germany and Japan and has long experience and achievements in security evaluation especially for biometric authentication devices, database management systems and smart cards.
Also, TÜViT provides CC evaluation of smart meters essential to smart grids.

TÜViT's approved scope of assured components under Japanese scheme		Main product categories to be evaluated
Software	Evaluation of protection profile: Class APE Evaluation of security target: Class ASE Evaluation assurance level: EAL1/EAL2/EAL3/EAL4	Multifunction printer (MFP), firewall, Intrusion detection/Prevention system (IDS/IPS), OS (Sever OS), database management system (DBMS), USB memory
Hardware	Evaluation of protection profile: Class APE Evaluation assurance level: EAL1/EAL2/EAL3/EAL4/EAL5, ALC_DAS.2, AVA_VAN.5	

◆Certification of Certification Authority (CA)

TÜViT is accredited by Deutsche Akkreditierungsstelle GmbH (Dakks) which is an accreditation body in Germany, and it is possible to certify Trust Service according to eIDAS Regulations. Also, TÜViT implements audits of network security and performs network intrusion tests according to “Baseline Requirement for the Issuance and Management of Publicly-Trusted Certificates (BRG)” of CA/Browser Forum.

◆Security Evaluation of Smart Cards

For smart cards, we can hold the workshop, and conduct security evaluation of the provision for latest vulnerability and evaluation of cards for financial system (such as VISA, Master and Europay, etc.) as well as evaluation according to CC (Common Criteria).

◆Security Evaluation of Data Center

TÜViT have issued own standard for the security of data center, TSI (Trusted Site Infrastructure). We can conduct third party evaluation of data center.
We have experience of security evaluation of the data center in D-TRUST, IBM and Munich Airport in Germany, etc.

◆Test to check compatibility of e-passport according to Technische RichtLinie (TR: Technical Guideline) by Bundesamt für Sicherheit in der Informationstechnik (BSI) in Germany

TÜViT is registered as a testing laboratory for Technische Richtlinie published by BSI. We carry out conformity assessments test according to BSI-TR03104 and BSI-TR03105. We also support issue of certificate after issue of test report.

◆Various seminars

We hold seminars and workshops related to above services.
【Example of available seminars】
- Latest trend of evaluation of smart meters
- Latest trend in Europe for electronic signatures *Contact us for details.

◆Others

We investigate the trend about IT security in the world such as e-ID system and smart grid, etc.
In addition, we offer translation of technical documents and standards related to IT security (from English to Japanese, from Japanese to English).

Cosmos Corporation
URL https://www.safetyweb.co.jp TEL：+81-598-30-5225 FAX：+81-598-30-5571

OTHERS

Delivery of Cosmos News by e-mail

We deliver e-mails including the latest information about worldwide regulations, laws and standards at any time and at no fee.
If you wish to receive Cosmos News, please register your e-mail address etc. on our website by clicking " コスモス・ニュース " (Cosmos News) -> " コスモス・ニュース配信希望の方はこちら " (Subscribe).

【Brief examples of news】
- Notice of implementation of laws in various countries
- Revisions and updates of regulations/standards in countries

Seminar Information

We regularly hold seminars in Tokyo, Osaka, Nagoya and Mie, or remotely.
For schedules and information, see "Seminar" on our website.
On-site seminar in your office is also available at any time. Contact us if you are interested in it.

Accreditations

<International>

- Accredited as a National Certification Body under IECEE CB Scheme (for MED and MEAS)
- Nemko Group AS, Norway (CBTL)
- Nemko North America-authorized laboratory
- American Association for Laboratory Accreditation (A2LA) accredited laboratory
- Eurofins E&E (MET) authorized laboratory
- Registered by the U.S. Federal Communications Commission (FCC)
- Germany TÜV Rheinland Appointed Test Lab.
- ISED Canada
- Taiwan BSMI-designated EMI testing laboratory
- South African Bureau of Standards (SABS) authorized laboratory (for EMC)

<Domestic>

- Registered certification body for specially controlled medical devices according to Japanese Pharmaceutical and Medical Device Act
- Registered Inspection Body under the Electrical Appliances and Materials Safety Act
- Registered Certification Body under the Radio Act
- Registered Certification Body under the Japanese Telecommunications Act
- JNLA authorized testing laboratory
- Voluntary EMC Laboratory Accreditation Center Inc. (VLAC) accredited laboratory
- Registered by Voluntary Control Council for Information Technology Equipment (VCCI)
- JCSS accredited calibration laboratory

Qualifications (excerpt)

【iNARTE-EMC / iNARTE-PS】
Qualifications to assure the engineering and skills of electromagnetic compatibility (EMC) or PS (product safety), established by iNARTE in the U.S.
【Safety Assessor (SA)】
Qualification provided by a third party to certify specified knowledge and ability with respect to mechanical safety based on international safety standards.
【First-Class Technical Radio Operator for On-the-Ground Services】
Qualification to admit to carry out technical operation of radio equipment in all radio stations such as broadcasting station, fixed station for telecommunication service, and radio determination station.

Software Sale

We sell our unique software for supporting product safety.
【Cosmos Safety Standard Support】
Software to calculate insulation distance on a printed wiring board, which is one of concerns in product development.

Cosmos Corporation
URL https://www.safetyweb.co.jp　TEL：+81-598-30-5225　FAX：+81-598-30-5571

ONE-STOP SERVICES

One-stop service for worldwide product standards !!

EU

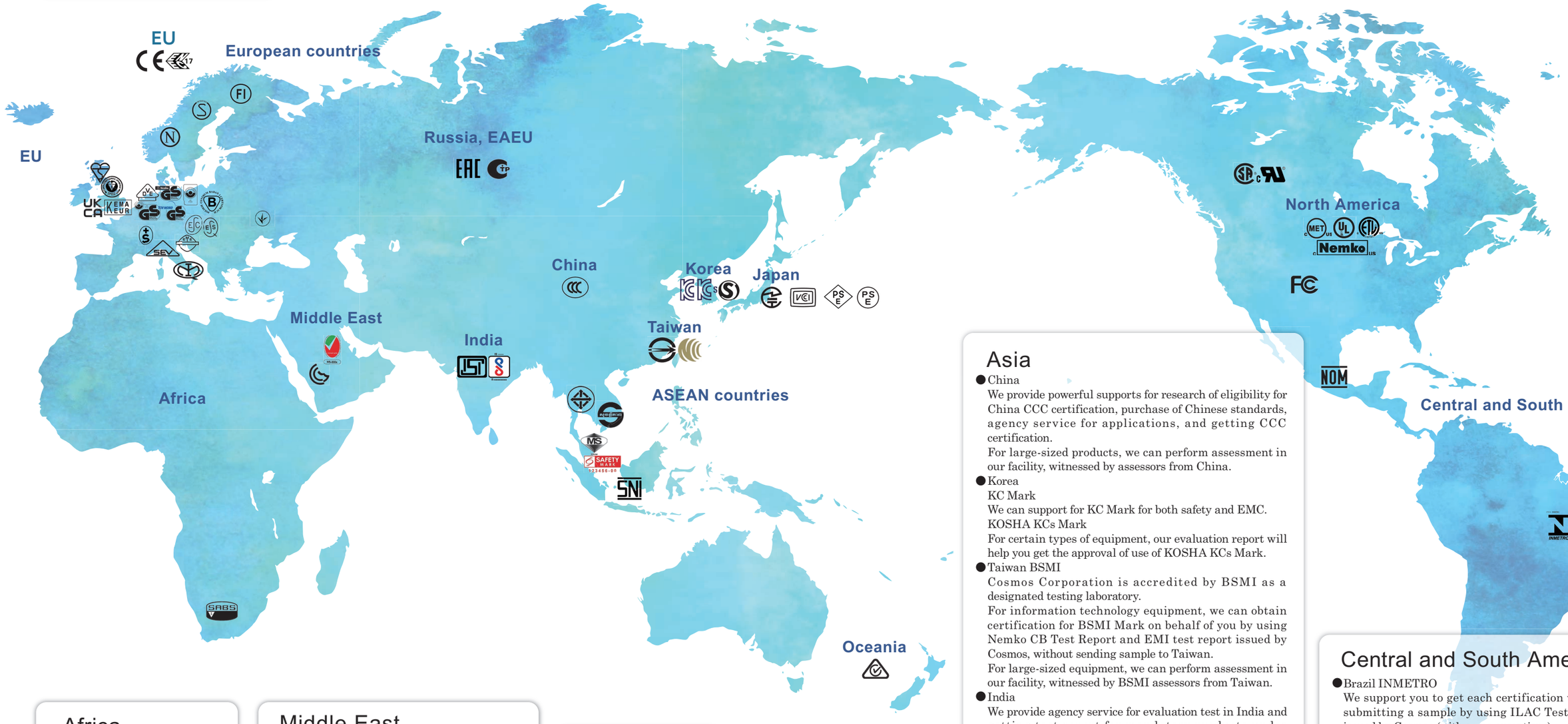
We provide evaluation services for your CE and UKCA marking, agency services for applications for getting approval to use European certification marks, and research services.

Russia, EAEU

We supports your applications for EAC Mark of the Eurasian Economic Committee (EEC) and country-specific approval.

North America

It is general to get certification marks provided by NRTL (National Recognized Testing Laboratories) accredited by the Department of Labor according to OSHA (Occupational Safety and Health Act).
We provide agency service for approval of any of NRTLs such as Eurofins E&E, Nemko North America Inc., etc. according to your request.
Also, we prepare the U.S. FDA's Product Report of your laser, X-ray and ultrasonic equipment and submit the Report to FDA on behalf of you. If you are a medical device manufacturer, we also prepare documents for Premarket Notification (510k) and act as your agent for 510(k).



Africa

- Republic of South Africa NRCS/SABS
  Use of Nemko CB Test Report issued by Cosmos helps you get the Letter of Authority (LOA) without sending samples.
  For EMC, use EMC test report issued by us to get COC.

Middle East

- G-Mark in Gulf countries
  Use of Nemko CB Test Report issued by Cosmos helps you get registration certificate and UAE ECAS Mark approval (with some exceptions).
- Israel SII
  Use of Nemko CB Test Report helps you get SII Test Certificate without sending samples.

Oceania

We support you to get Australian and New Zealand product safety approvals and provide EMC measurement for your use of RCM Mark.

Asia

- China
  We provide powerful supports for research of eligibility for China CCC certification, purchase of Chinese standards, agency service for applications, and getting CCC certification.
  For large-sized products, we can perform assessment in our facility, witnessed by assessors from China.
- Korea
  KC Mark
  We can support for KC Mark for both safety and EMC.
  KOSHA KCs Mark
  For certain types of equipment, our evaluation report will help you get the approval of use of KOSHA KCs Mark.
- Taiwan BSMI
  Cosmos Corporation is accredited by BSMI as a designated testing laboratory.
  For information technology equipment, we can obtain certification for BSMI Mark on behalf of you by using Nemko CB Test Report and EMI test report issued by Cosmos, without sending sample to Taiwan.
  For large-sized equipment, we can perform assessment in our facility, witnessed by BSMI assessors from Taiwan.
- India
  We provide agency service for evaluation test in India and getting test report for mandatory products under Compulsory Registration Scheme (CRS) for electronic information technology products.
- Others
  We can provide research services for approvals in other Asian countries such as Malaysia, Singapore, Thailand.
  For radio and telecommunication equipment, we submit applications for radio and telecommunication approvals and research eligibility for approval in these countries.

Central and South America

- Brazil INMETRO
  We support you to get each certification without submitting a sample by using ILAC Test Report issued by Cosmos (with some exceptions).
- Mexico NOM
  We provide agency services for getting NOM mark certification.
  * We can support you for Mexican regulations through MET Lab, etc.

IDEAS FOR PRODUCT SAFETY.
COSMOS CORPORATION