

# JET

Introduction to JET Business



**JET, the Leader in Safety  
and Environment  
in the 21st Century**

JAPAN ELECTRICAL SAFETY & ENVIRONMENT TECHNOLOGY LABORATORIES

# JET Supports "Safety," "Quality," and "En

JET (Japan Electrical Safety & Environment Technology Laboratories) was founded in 1963 as an authorized testing body designated by the government of Japan based on the Electrical Appliance and Material Control Law, taking over the testing services that the government had conducted. Since then, JET has supported establishment of and advancement in the safety of electrical equipment and facilities in Japan in cooperation with manufacturers, importers, distributors and consumers. Based on that achievement, JET is actively promoting its business in product testing and inspection services, certification services, cooperation with overseas authorities, and the quality management system (ISO9001) registration services, and also contributes to environment conservation through the environmental management system (ISO14001) registration services. JET will continuously offer excellent services that support your business, featuring the concept "JET, the Leader in Safety and Environment in the 21st Century".

# JET



**Testing  
Inspection and  
Certification Services**



**Overseas Services**





# Environment Conservation"



## Researches Services



## Customer Assistance Services



## Assessment and Registration Services of Management System



Head Office, Tokyo Laboratory



Yokohama Laboratory



Kansai Laboratory



Research and Business Development Center

## History

### 1963

Founded as Japan Electrical Testing Laboratories of Japan Electric Association, taking over the testing service from national electrical testing laboratories. Designated by the government as an authorized testing body based on the Electrical Appliance and Material Control Law.

### 1964

Kansai branch (currently, Kansai Laboratory) and Nagoya branch (currently, Nagoya Office) were established.

### 1965

The name was changed to Japan Electrical Testing Laboratories.

### 1987

Yokohama Laboratory was established.

### 1995

Accredited by Japan Accreditation Board for Conformity Assessment (JAB) as a QMS registration body according to the ISO9000s. -- Quality Management Division

### 1997

Accredited by JAB as an EMS registration body according to the ISO14001. -- Environment Certification Division. The name was changed to Japan Electrical Safety & Environment Technology Laboratories.

### 1999

Accepted by the IECEE as an NCB (National Certification Body) of Japan based on the IECEE-CB Scheme.

### 2001

Accredited by the government of Japan as a designated inspection body based on the Electrical Appliance and Material Safety Law.

### 2003

Accredited by the government of Japan as a designated inspection body based on the Consumer Products Safety Law.

### 2005

Accredited by the government of Japan as a Third Party Certification body under The Pharmaceutical Affairs Law.

### 2006

Designated by the government of Japan as a Registered Certification body (under the New JIS Mark scheme) based on the Industrial Standardization Law.

JET's laboratories at TOKYO, YOKOHAMA and KANSAI have been designated as Accredited Testing Laboratories under JNLA (Japan National Laboratory Accreditation System), with MRA (Mutual Recognition Arrangement), by NITE (National Institute of Technology and Evaluation) based on the Industrial Standardization Law.

### 2010

Open up Kyusyu Office.

### 2012

Established Testing Center for wireless devices within Yokohama Laboratory.

### 2013

Started ECHONET Standard Conformity Certification Scheme.

### 2014

Kansai Laboratory Moved to Kobe-Shi (Rokko Island) in Hyogo prefecture.



# Testing Inspection and Certification Services



JET evaluates various products including electrical products, components and materials for the conformity to relevant standards. JET also provides product certification services through verification of the quality management system of the factories that manufacture the evaluated products. The certification marks, which demonstrate the conformity, are widely trusted in the Japanese market.

## Assessment services for the conformity to requirements based on Japanese laws.

JET performs tests and inspections based on laws to help safe products to be offered to the market.

### Conformity assessment of the "specified electrical appliances" based on the Electrical Appliance and Material Safety Law



JET is a registered conformity assessment body based on the Electrical Appliance and Material Safety Law and the sole organization in Japan that can perform conformity assessments for all the specified electrical appliances.

### Conformity assessments of the "designated specified products" based on the Consumer Products Safety Law



As a registered assessment body based on the Consumer Products Safety Law, JET performs the conformity assessments for electric hot water circulators for bathtubs.

### Certification based on the Industrial Standardization Law



JET performs assessment and certification for conformity to JIS product standards as a Registered Certification body based on Industrial Standardization Law in the following fields: B; Mechanical Engineering, C; Electronic and Electrical Engineering, G; Ferrous Materials and Metallurgy, K; Chemical Engineering, T; Medical Equipment and Safety Appliances.

### Certification for controlled medical devices based on The Pharmaceutical Affairs Law



As a registered third party certification body under the revised Japanese Pharmaceutical Affairs Law from April 2005, JET performs the certification service for controlled medical devices such as anesthesia and respiratory equipment, dental equipment, medical electrical equipment, clinical equipment, ophthalmic and visual equipment, reusable equipment, single use equipment, medical apparatus for home use and related products, hearing aid, and diagnostic imaging equipment.

### Technology Regulation Certification and Certification Service based on the Radio Law



JET provides Technology Regulation Certification and certification service for Design Appraisal for Specified Radio Equipment as Registered Certification Body based on the Radio Law, in addition, also conduct requested testing based on the other law at home and abroad.



# Fairly and Neutrally, JET Tests and Certifies Various Products for Quality and Reliability



## Certification services for components and products

To meet further needs for safety, JET provides third-party certification services.

### S-JET Certification



This is a service for testing, inspection and certification based on a contract between a manufacturer and JET. In this service, electrical products are tested for their safety and factories are inspected for their management systems, and also follow-up inspections are regularly conducted. A certified product is allowed to bear the certification mark to demonstrate the third-party certification. The mark helps distributors and consumers select and purchase safe products.

### Certification of circuit breakers for use in residences



This is a service for testing, inspection and certification based on a contract between a manufacturer and JET. Because earth leakage breakers and circuit protectors are critical components to ensure safety, JET performs not only the tests required by the Electrical Appliance and Material Safety Law but also stricter tests to verify their safety, quality and performance. A certified product is allowed to bear the certification mark to demonstrate the third-party certification. The mark helps users rely on the products.

### Registration of Components and Materials



JET's Registration Mark



CMJ Registration Mark

Some components and materials are required to undergo burdensome testing - burning, destructive, long-term and so on - according to the "Interpretation" (specification-based descriptions) of Technical requirements for the regulated electrical products by Ministerial ordinance for the Electrical Appliance and Material Safety Law.

Manufacturers of such components and/or materials can have JET test their products and register them with the results. Their test results can be utilized to the maximum degree for JET's testing of the final products.

Accordingly, by selecting the registered components/materials, assembling manufacturers can save testing time and costs, while manufacturers of components/materials can emphasize the benefits when marketing their products to assembling manufacturers. The test results of the registered components/materials are utilized for both the conformity assessment by JET and S-JET certification. The components/materials registered by JET can be registered by Council for Electrical & Electronic Components and Materials of Japan (hereinafter referred to as CMJ) according to prescribed conditions. The test results of the components/materials registered by CMJ can be utilized by some Japanese testing institutions other than JET as well: thus the benefit can be enhanced by broader applications. (JET coordinates activity with other testing institutions upon applicants' request.)



## Certification for water supply utensils



Water supply utensils that connect to municipal water supply systems are regulated by the Water Supply Law. JET tests those water supply utensils for the conformity to the performance standards and verifies the management system of the factories that manufacture those utensils. Certified products are allowed to bear the certification marks.

## JET certification for system interconnection equipment for small distributed generating systems



The label for photovoltaic power generation systems

This is the sole third-party certification scheme in Japan in which system interconnection equipment for photovoltaic power generation systems, gas engine cogeneration systems and polymer electrolyte fuel cell (PEFC) power systems can be certified for safety and performance. This service can help those generation systems interconnect smoothly to commercial power supply systems.

## Certification for photovoltaic modules (JET PV<sub>m</sub> Certification)



Quality & safety certification mark

This is the sole third-party certification scheme in Japan in which photovoltaic modules can be certified based on the international standards (IEC 61215/61646/61730).



## Test report issuing services that meet customers' needs

JET provides services to issue test reports that are useful for in-house verification, business transactions, technical proof, and other purposes across the processes of product designing, development and manufacturing.

### Testing based on the Electrical Appliance and Material Safety Law

JET performs compulsory tests, for example, tests to verify the conformity to the technical requirements and inspections that should be performed on specimens, required for products covered by the Electrical Appliance and Material Safety Law.



### Measurements of electromagnetic compatibility interference (EMC)

Using anechoic chambers approved by FCC, and VCCI, JET measures EMI, EMS and others.

### Testing for the CE Marking

JET performs tests required for the CE marking to the products intended to be offered to the European market, based on the Low Voltage Directive and the EMC Directive.

### Measurement of electromagnetic fields (EMF)

JET measures electromagnetic fields based on the Low Voltage Directive.

## Calibration of secondary reference solar cells

This is the sole calibration scheme operated commercially in Japan in which secondary reference solar cells, the reference for the evaluation of solar cell performance, can be calibrated with the calibration systems that are traceable to international standards.

## Measurements of the characteristics of photovoltaic modules used for comparison measurements

This is the sole measurement scheme operated commercially in Japan in which the characteristics of working photovoltaic modules, including those owned by power companies, can be measured.

## Measurements of air conditioner capacity

JET measures the cooling and heating capacity and air capacity of air conditioners based on IEC and JIS standards.

## Testing of medical equipment for electrical safety based on the Pharmaceutical Affairs Law of Japan

JET tests medical equipment for electrical safety and EMC for approval by the Ministry of Health, Labour and Welfare based on the Pharmaceutical Affairs Law.

## Testing for the dust and water proof

JET tests for the degree of dust and water proof based on IEC and JIS standards.

## Measurement of the total luminous flux of lamps

JET measures the total luminous flux, distribution temperatures, and energy consumption efficiency of fluorescent lamps and incandescent lamps.

## Testing based on standards including IEC, UL, JIS

JET performs various tests for products, components, insulating materials, and others based on relevant standards.

## Inspections based on the SG Mark Scheme

As an inspection body designated by the Consumer Product Safety Association, JET performs "one-stop-testing" of electric hot water circulators for bathtubs for the SG Mark approval through the combination with the conformity assessment.

## Other testing services that meet various needs

JET can offer various test services that meet your needs using JET-owned test equipment and facilities. Those tests include evaluation of solderability, evaluation of ecomaterials and verification of short circuit characteristics.

## JET performs assessment and registration services based on the fair and reliable ISO standards.

### Assessment and registration of quality management system (ISO9001)



Assessment and registration of quality management system

JET offers assessment and registration services based on ISO9001 under accreditation by JAB (JAPAN Accreditation Board for Conformity Assessment), and also by the Raad Voor Accreditatie (RvA) of the Netherlands, covering electrical, fabricated metal products, machinery and equipment, rubber and plastics products, and construction under both accreditations.

### Assessment and registration of environmental management system (ISO14001)



Assessment and registration of environmental management system

JET offers assessment and registration services based on ISO14001 under accreditation by JAB (JAPAN Accreditation Board for Conformity Assessment), and also by the Raad Voor Accreditatie (RvA) of the Netherlands, covering electrical, chemical, electricity supply, information technology, recycling, wholesale and retail trade, and service under both accreditations.







## Support to your globalization through the "one-stop-testing"

JET provides worldwide customers with various services to help them obtain certifications for Japan and other countries. Participating in the IECEE-CB scheme, JET issues and recognizes CB certificates. Global certifications, including certifications for Japan, can be obtained through the services JET offers.

### ■ Certification Service for Japanese market

For customers outside Japan who hope to obtain certification based on the Electrical Appliance and Material Safety Law of Japan, such as PSE conformity assessment certificates and S-JET certificate, JET uses test reports and CB certificates issued by testing bodies outside Japan that have exchanged partnership agreements with JET. With this scheme, JET supports quick certification. JET accepts the results of factory surveillances conducted by those testing bodies according to JET's request. Those procedures allow you to handle your certification processes efficiently.

### ■ Application agent services

JET makes applications on your behalf for the certification in the countries other than Japan, such as China and Korea, by using test reports and CB certificates JET issues. These services enable you to obtain desired certification quickly. By using this service in conjunction with the PSE conformity assessment certificate and S-JET certificate, you can expect global certification.

### ■ Comprehensive support services

Based on our extensive experiences, JET offers you advice on the Electrical Appliance and Material Safety Law of Japan, including procedures associated with the law, interpretation of technical requirements, and determination of covered/non-covered product categories. In addition, by taking advantage of the network of partner certification bodies in various countries, JET helps you have information, such as regulations of each country, procedures for certification, and applicable standards.

## Overseas Services Customer Assistance Services





# JET Supports Testing and Certification under Safety Standards of Numerous Countries



## ■ Issue and recognition of CB certificates with CB test reports

JET issues CB certificates with CB test reports based on the IECEE-CB scheme. Also, JET recognizes CB certificates with CB test reports issued by other NCBs and uses them for PSE conformity assessment certification and S-JET certification to accelerate certification in Japan.

**Product categories that JET can issue or recognize CB certificates under the IECEE-CB scheme are household appliances, audio-video equipment, IT equipment, photovoltaic (PV) products, luminaire, cables and cords, power tools, isolating transformers and others.**

## ■ Factory surveillance

According to JET's request, partner certification bodies in various countries conduct factory surveillances for PSE conformity assessment certification and S-JET certification of Japan. Also, JET conducts factory surveillances for certification of countries other than Japan, such as for CQC and KTL.

## *Global Cooperation with overseas bodies*



Partnership with testing and certification bodies in 19 countries is active.



## Long Experience Enables JET to Provide Extensive Services.



By the request by the government and various bodies, JET researches electrical safety, technologies related to new energy, energy-saving and environmental issues, and others.

### ■ Research on technologies related to new energy

By the request by government agencies, JET carries out the research and development on the technologies for conformity evaluation and complex deterioration tests of solar cell modules. JET also researches the evaluation of photovoltaic power generation systems with the similar request. Those researches and developments are carried out in cooperation with national laboratories.

### ■ Testing of electrical products purchased from market place

By the request by the government agencies, JET conducts testing of electrical products purchased from market place for market surveillance.

### ■ Investigation about the establishment of internationally-harmonized standards

JET carries out the investigation about the establishment of national safety standards that are harmonized with international standards.

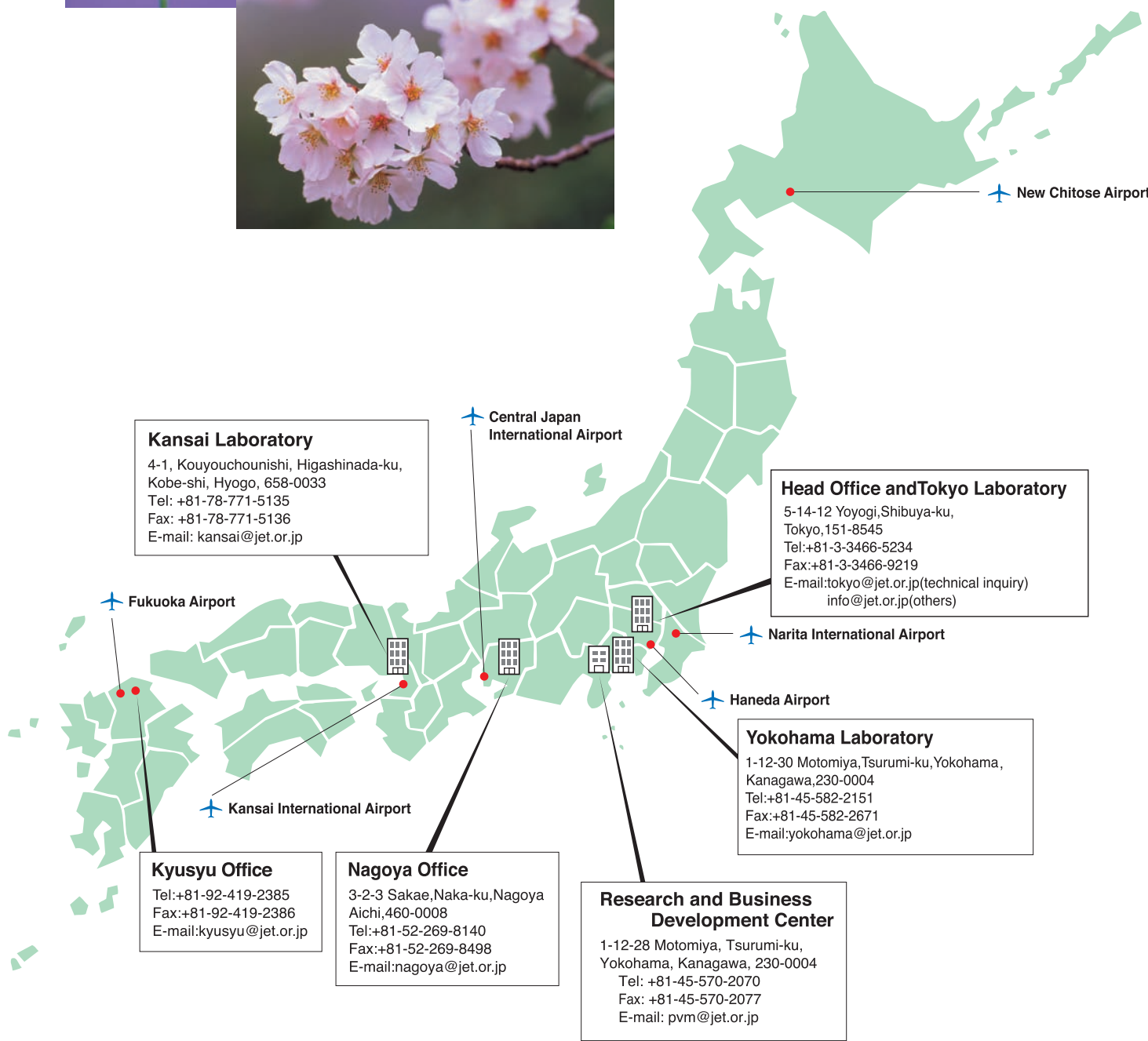
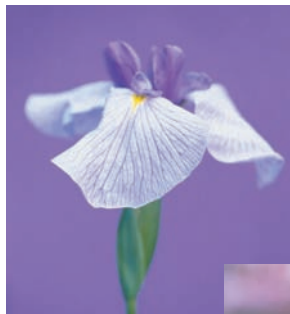
### ■ Activities to promote understanding of electrical safety

From the view of proper manufacturing, import/export, distribution and use of electrical products, JET publishes brochures to promote electrical safety and holds seminars to provide valuable information for domestic and overseas business entities (manufacturers, importers/exporters, and distributors), users (consumers) and municipal authorities. Thus, JET contributes to the society.

## Researches Services



# Guidance in Offices





**JET**

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**<http://www.jet.or.jp/>**