Brief Guide on

Application to TIIS for Type Approval of Electrical Equipment for Use in Explosive Atmospheres

This guide has been prepared specifically for foreign manufacturers
of Ex-equipment who seek TIIS certificates.

8th Revision: February 2016

Technology Institution of Industrial Safety（TIIS）
（Testing/Certification Body Registered to the Minster of Health, Labour and Welfare）

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1. Ex-Certification Scheme in Japan

1.1 General

Under the current Industrial Safety and Health Act and the related regulations in Japan, any explosion-protected electrical equipment (referred to as "Ex-equipment") to be used in potentially explosive atmospheres of general industry shall not be transferred, leased or installed, should it not meet the relevant standards promulgated by the Minister of Health, Labour and Welfare of Japan (hereinafter referred to as "the Minister").

1.2 Regulation and Standard of Ex-equipment

"Structural Code for electrical equipment to be used in potentially explosive atmospheres" (referred to as "the Structural Code") of notification No.16 was issued for Ex-equipment from the Minister in 1969. The Article 5 of the Structural Code defines that an electrical equipment manufactured based on international standards and proved by tests and so on to have Ex-protection capabilities which are required for by the Code is deemed to be one complied with the Code. This time, Notification Kihatsu 0831 No.2 was issued from the Mistry on 31th August 2015. It says that "The Technical Recommendations of the National Institute of Occupational Safety and Health": JNIOSH-TR-46 is the standards conforming to the Article 5. JNIOSH-TR-46 contains IEC 60079 series. See Annex 7 for detail.

Note 1: JNIOSH-TR-46 is provided on the web site of National Institute of Occupational Safety and Health. The contents are Japanese translation of IEC 60079 series.

https://www.jniosh.go.jp/publication/tr.html

Note 2: JNIOSH-TR-46 contains translation version of IEC 60079-33. But it is out of scope of the Article 5. So it is not allowed to apply type "s" equipment based on the IEC 60079-33 in Japan.

Note 3: Ex-equipment of Group I is not subjected to mandatory certification scheme under the Industrial Safety and Health Act, but are required to comply with technical standards specified by the Ministry of Economy, Trade and Industry (METI). The standards are identical to applicable JIS or equivalent IEC Standards. At present there is only one coal mine working on commercial base in Japan.

1.3 Application

Industrial Safety and Health Act stipulates in Article 44-2 that any manufacturer or any importer of Ex-equipment shall apply to the Japanese testing/certification body registered by the Minister for a certificate on its equipment. Currently, so far TIIS is the sole registered body in the area of Ex-equipment.

Note 1: Ex Equipment cable gland, Ex blanking Element, Ex thread adapter and Ex component are out of scope of Ex-certification scheme in Japan. However, TIIS issues a certificate for these components. TIIS's component certificate can be used for Ex-equipment certificate scheme and treated like IECEx system or

ATEX. If there are a TIIS's component certificate number, type identification code and outline drawing, no detail drawing and test report are required in the process of Ex-certification. Any manufacturer or importer can apply to TIIS to get TIIS's component certificate.

Note 2: Any certificate issued on Ex-equipment, Ex Equipment cable gland, Ex blanking Element, Ex thread adapter or Ex component by a foreign authority or test house has no legal validity in Japan, and the equipment shall be tested and certified by TIIS before placing it on market in Japan.

Note 3: Junction boxes/connection boxes and similar fittings used for electrical wiring purpose only are outside of the scope of the mandatory certification scheme on Ex-equipment. However, they are required to have explosion protection features appropriate to the areas in which they are to be installed. TIIS issues certificates on such fittings, upon request, on voluntary base.

1.4 Certificates

After successful completion of examination of the application documents and tests on the sample products, TIIS issues a certificate of conformity in Japanese to the applicant in a form of a hard copy.

Note1: English translation of an original certificate will be available, for reference purpose only, upon request of the applicant, with extra charge. Please contact TIIS.

Note2: TIIS certificate and approved drawings are issued in a form of a hard copy. No electrical media type of the certificate and drawings are provided to applicant.

2. Documentation and Test Samples for New Certification

2.1 Essential Documents

When making an application to TIIS, an applicant (i.e. a manufacturer or an importer) shall submit those documents stated in 2.1.1 to 2.1.7 below:

Note: The documents in 2.1.2 to 2.1.5 are stamped with a specific TIIS tally seal and returned back to the applicant as integral parts of the certificate issued by TIIS.

2.1.1 An application form, prepared in Japanese except for the applicant's name and address, in the form of Annex 1.

Note: When the applicant needs a proof of acceptance of application by TIIS, he/she is required to submit a duplicate copy of the application form, together with postage stamps (or the equivalent) for sending it back.

2.1.2 One copy of a list of any variants of the equipment specified in the application form, in Japanese, as exemplified in Annex 2.

Note 1: "Variant" denotes a variation range of products whose explosion-protected features are considered equivalent to those of the samples to be tested, based only

on test results of the samples and also on common technical understandings. Such variations would be included in one certificate. Where additional testing is deemed necessary, such products shall not be included in one certificate, and separate certificate(s) would be applied.
TIIS conducts tests/evaluation only on test samples, whose type identification code is specified by the applicant in the application form.
For further information on acceptable variations, please contact TIIS engineers.

Note 2: In most cases, variations of products covered by a certificate issued by any foreign certification body may not be accepted by TIIS because of differences in certification system. Remind that most of certification time for foreign products are, in fact, spent for discussion on "the range of variations". The applicant is required to explain clearly differences in detail between the test samples and the variations to them, in terms of electrical ratings, constructional details and materials used. This will result in the reduction of processing time for certification.

2.1.3 One copy of a list of the drawings, in Japanese, as exemplified in Annex 3. Descriptions in original language may be accepted in some cases (see 2.1.4).

2.1.4 One copy of a set of drawings, bound in the order of a list given in 2.1.3, each drawing with a title and other details translated into Japanese, alongside the original. Incorporate a drawing(s) of variants, if any, where these are to be included in one application, i.e. in one certificate (see 2.1.2).

Note 1: The applicant is particularly requested to ensure that the sample products conform to the drawings and descriptions in the application form. This is critical to avoid delays incurred in testing and certification work by TIIS.

Note 2: Drawings described in original language may be accepted in a case where Japanese translation is provided alongside each original description, upon the request of TIIS.

Note 3: Each drawing shall carry a title and an identification number, which coincide with the list referred to in 2.1.3. The name of the applicant is also essential in each drawing, for the purpose of applicant identification.

Note 4: Additionally, a drawing is also required, which describes the items specified in the Japanese standards to be marked on each product. Material and dimensions of a marking label and a method of fixing it on the product shall also be shown in that drawing.

The marking in a label shall include, at least, the following:

a) Ex coding

"Ex" + Type of protection + Group + Temperature class, and EPL as exemplified below:

Ex e II T3 Gb

Ex d IIB T4 Gb

Ex ia IIC T6 Ga

Ex IIIB T130°C DB

b) Specified ambient temperature, where appropriate

c) Type identification code of the product

d) Name of the manufacturer

e) In case of IS-equipment, such essential parameters as U_o, I_o, P_o, etc., as well as identification of the definitive documents to be referred to by users

Note 5: In a case where the applicant desires to make full use of a test report or test data issued by a foreign body designated by the Minister, the applicant shall submit a whole set of copy of drawings listed, or cited, in the test report.

Note 6: Only clear and easy-to-read drawings are acceptable. Any duplicated drawings with excessively reduced scale will be rejected because of photo-electronic recording system used by TIIS.

Note 7: External dimensions of the equipment (other than IS-equipment) shall be shown in one of the drawings, based on which certification fee is calculated by TIIS. In case of IS-equipment, drawings shall be prepared in such a manner that makes TIIS to count up the whole number of electronic and electric components involved in the test samples.

Note 8: In case of IS-equipment or associated equipment, additional drawing may be required to know its system configuration, which shows the location and mutual electrical connection of relevant equipment in hazardous and non-hazardous area.

2.1.5 One copy of each of the following documents, in Japanese:

1) A list of equipment/facilities to be possessed and used by the manufacture when manufacturing, inspecting and testing the products (see Annex 4).
2) The name and qualifications of a person responsible for manufacturing the Ex- products concerned.
3) An applicant's organization chart, which identifies departments or sections responsible for inspection and testing of Ex-products concerned.
4) The applicant's procedures or manuals for inspection and testing of the products before placing them on the market, so as to ensure the quality of those products.

Important note:
A copy of Ex-certificate on the products, or a quality assurance certificate on the manufacturing process of the products concerned, issued by a reputable foreign certification body, may be accepted in place of all the documents required in 2.1.5.

2.1.6 One copy of a document, in Japanese (or in English in case of well-known electrical equipment), that provides the testing/certification personnel of TIIS with information necessary for conducting adequate tests/evaluation, including explosion- protection features, performance and operation of the product, together with the titles and editions of the Ex-standards on which the products are based. A copy of a manual for users on the products may be used for this purpose, if appropriate.

2.1.7 One copy of results of preliminary testing carried out on the products by the applicant him-/herself, in accordance with the Japanese standards. In addition, the result of routine tests is required if the implementation of routine tests is prescribed

in JNIOSH's Technical Recommendations. Factory Audit Report, for example QAR of IECEx, is treated as the result of routine tests.

Important note:
If the applicant submits a copy of a complete test report issued by a foreign testing body which is designated by the Minister and the test report includes all required test data, such test report will be accepted as a substitute for test results prepared by the applicant him-/herself. In this case, some of the relevant tests will be waived by TIIS, provided that the test report satisfies the conditions of designation specified by the Minister and also proves the compliance of the products with the Minister's standards.
In addition, a test report issued by an ExCB under IECEx system will also be accepted in accordance with the rules of IECEx system. Any shortage of test data from the requirements of Japanese standards shall be fulfilled upon the request of TIIS, or be followed by supplementary testing by TIIS.

2.2 Additional Documents

In addition to documents cited in 2.1, an applicant is required to submit such documents in Japanese, as described in 2.2.1 to 2.2.3, in order to assist TIIS in performing efficient and prompt certification work:

2.2.1 One copy of an explanatory description of type identification codes applied to all products included in the application, in which the meaning of each alphabetical or numerical character, or of their combination, shall be explained.

2.2.2 One copy of a document explaining the applicant's opinion as to why variants, if any, can be assessed to have the level of safety equal to the sample products, based only on the results of tests conducted on the sample products（see Notes of 2.1.2）.

2.2.3 One copy of a list of contact persons whom TIIS will communicate with, or ask inquiries about the documents and/or sample products. Facsimile number and e-mail address will be helpful. Where any agent is used by the applicant, TIIS needs to be informed of contact persons of the agent（see Clause 8）.

Note: All documents described in 2.1 and 2.2 shall be in A4-size, excepting those in 2.1.4; drawings of larger sizes shall be folded to A4-size.

2.3 Sample Products

2.3.1 As a rule, relevant number of test samples required by the test standards shall be submitted at the time of application. TIIS may request additional samples or parts/ components of the equipment, so as to carry out adequate testing/evaluation. Where the equipment has been certified by any foreign body, the test samples shall carry a label which identifies the name of certification body and the reference certificate number.

2.3.2 Cable entries for external connections or blanking plugs for entries, shall be specified in the drawings and be incorporated in the test samples. Remind that only the completed electrical equipment is accepted for testing/evaluation. Test samples without cable glands or blanking plugs are never acceptable.

2.3.3 As regards the shipping and customs clearance processes for test samples, TIIS regrets that it can provide no information and assistance. The applicant shall pay

import tax, which is not included in certification fee.

3. Certification Fees and Other Associated Expenses

3.1 General

Certification fees are listed in Annex 5. Any shortage or overpayment of fee may result in delayed acceptance of the application.

3.2 Expenses for Witness Testing

An applicant is required to pay additional expenses, when he/she desires witness testing at the manufacturer's or end-user's premises. In case of witness testing conducted at places outside Japan, the following expenses are charged based on TIIS's rules.

Daily allowances;

1) Accommodation fees, which depend on the area/city where the hotel locates, and are charged also for overnight staying in airplane;
2) Air fares and other travel expenses including local transportation expenses to airport; air fares are proposed by TIIS, taking into account the most direct flight. Air tickets arranged by the applicant may, in most cases, be accepted by TIIS.
3) Other expenses may be charged, depending on cases, so as to compensate the opportunity cost of TIIS engineer(s) due to their absence from the office.

3.3 Sending-back of Certification Documents and Samples

The certificate and attached documents are sent back to the applicant upon request, if the applicant pays the cost for mailing, in advance.
The cost and arrangements for sending-back test samples shall be borne by the applicant.
Applicants are obliged to pick up sample products as soon as possible after the completion of tests by TIIS.

3.4 Remittance of Certification Fee

Certification fee (see Annex 5) shall be paid in Japanese Yen only, at the time of, or prior to, the application. The remittance shall be made to the following bank account, taking into consideration the bank charge for currency exchange:
Bank account of TIIS

- Name of bank: MIZUHO CORPORATE Bank, SHIN-TOKOROZAWA Branch
- Bank account: savings account No. 4012659
- SWIFT CODE/BIC (BANK IDENTIFIER CODE) MHCBJPJT
- Remittee: Technology Institution of Industrial Safety

Note: Other associated expenses, such as the expenses of witness testing or sending-back test samples, are to be paid to separate bank account because of TIIS accounting reason. Please contact TIIS, where appropriate.

4. Change/Modification of Application

4.1 Change/Modification at the Acceptance of Application

The application may be requested to correct or modify at the request of TIIS, so that the application conforms to TIIS requirements and is covered by the scope of certification of Japan.

4.2 Change/Modification after the Acceptance

Changes/modifications of the following items are not acceptable, in principle, after the acceptance registration of the application, and are never acceptable after starting of tests/evaluation process by TIIS:

1) Sample products
2) Group (IIA, IIB, IIC, IIIA, IIIB, IIIC) of the equipment
3) Temperature class (T1 to T6) and/or the specified ambient temperature
4) Maximum surface temperature for Group III (e.g. T 90°C, T_{500}320°C)
5) EPL (Ga, Gb, Gc, Da, Db, Dc)
6) Ratings
7) Materials and constructional details

5. Follow-up of Certification

There is no follow-up of certification in the TIIS approval system; as a general rule, no factory inspection and audit are performed.

Note 1: The documents in 2.1.5 are required to ensure the quality of certified products.

Note 2: TIIS is authorized, at its discretion, to inspect the manufacturer's quality management system, in accordance with those documents in 2.1.5.

Note 3: Inspectors of the Ministry of Health, Labour and Welfare inspect the compliance of Ex-products used in industrial sites with conditions of Japanese certification.

6. Renewal Certification and Other Processes

6.1 Renewal Certification

The term of validity of TIIS certificate on Ex-equipment is three years. If a manufacturer or an importer holding a certificate desires to continue to manufacture or import the products after the end of validity term of the certificate, it is necessary to apply for renewal certification before expiration of the validity term. Renewal certification offers two options, giving an opportunity for the addition of new variants, with or without changing the validity term cycle. Those options are described below. Certification fee renewal is also listed in Annex 5.

6.1.1 If a manufacturer or an importer holding a certificate wishes to add any variants to the certificate, it can be applied to TIIS at the time of renewal certification; in this case, the certificate including the new variants are valid for a further period of 3 years thereafter.

6.1.2 In a case where a certificate holder needs to add any variants well in advance of the end of validity term of the certificate, apply for a renewal certification at any time before the expiration date; in this case, the validity term of the certificate that includes the new variants starts on the issuing date of the renewed certificate.

6.1.3 The concept of "variant" is exactly the same as that for new certification.

6.1.4 Application form and required documents for renewal certification are somewhat different from those for new certification. Please contact TIIS for advice. No test is applied to renewal certification, and test samples are, as a rule, not required. If the implementation of routine tests is prescribed in JNIOSH’s Technical

Recommendations, submission of the result of routine tests is required.

Note: Factory Audit Report, for example QAR of IECEx system, is treated as the result of the routine tests.

6.2 Amendments to Issued Certificate and Re-Issue of Certificate

6.2.1 In a case where a certificate holder (an applicant), or a manufacturer specified in the certificate, has changed the name or address, the certificate holder shall send the certificate, not later than two weeks after the change, to TIIS for amendment (s) of the certificate, so as to maintain validity of the certificate.

Note: "Change of the name" is not applicable to changes in its name due to "merger or acquisition". In the case of a change in juridical situation of the certificate holder or manufacturer, the certificate loses its validity. A new application will be accepted, in most cases, and a new certificate will be issued in a shorter time.

6.2.2 Lost or impaired certificate can be re-issued upon request of the certificate holder.

6.2.3 Certification fee for amendments to a certificate or re-issue of a certificate are listed in Annex 5. Regarding the application form and required documents, please contact with TIIS.

7. Certification Label

Before putting into service or placing on market in Japan, any Ex-product certified by TIIS shall be attached with a label which denotes that the product has been certified in Japan. The form and colour of the label shall be in accordance with the relevant ministerial ordinance (see Annex 6).

8. Authorization of Agent

An agent (or a company), particularly residing in Japan, may act on behalf of the applicant for application procedures. In such a case, the applicant, shall submit to TIIS a letter or a "power of attorney", in which the applicant declares the jobs entrusted to the agent; one of the most important matters of TIIS concerned is whether the agent is entrusted with handling of the applicant's documents and drawings of the equipment, or they shall not be disclosed to the agent. TIIS specifies no fixed form of the power of attorney.

Note: An application form shall be signed by the applicant himself. No agent is entitled to sign on an application form on behalf of the applicant.

9. Designated Foreign Bodies

TIIS has been required by the Minister to accept a test report issued by either one of the bodies designated by the Minister, and to make full use of it in issuing TIIS certificate, provided that the report proves compliance of the product with Japanese standards.
If the applicant submits a satisfactory test report at the time of application, TIIS will omit tests on the sample products, except for the inspection to identify the sample products being the same as described in the test report. Designated bodies are obliged to submit a business report each year, and to apply for renewal of designation for every 3 years, so as to maintain the status of designation. TIIS refrains from listing the names of designated bodies here,

because the list will not be correct when this Brief Guide is read. Any applicant, who wishes to make full use of a test report issued by the designated body, is advised to ask the body if it is currently designated or not (see also "Important note" to 2.1.7).

10. Guidebook for Application Procedures

The details of application procedures are described in the "Guidelines on the application for certification of Ex-equipment". Although the Guidelines are available only in Japanese, they will be helpful in accelerating the certification process.

Note: The guidelines can be downloaded from TIIS web site.

11. National Differences

Japanese National Differences compared with IEC standards are shown on TIIS web site.

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Annex 1　Example of "Application Form"

（English descriptions are only for explanatory purpose, and do not appear in the form.）

Ex *1

防爆構造電気機械器具新規検定申請書

（New Application for Ex-equipment）

品名 (Name of Product)	三相かご形誘導電動機*2 （3-phase induction motor）
型式の名称 (Type Identification Code)	NGW-090LB-05F(枠番号 90L)*3 (Frame size 90L) （同一型式は別表のとおり）*4 （Variants are as listed on a separate sheet）
防爆構造の種類 （Type of Protection）	本体　耐圧防爆構造 (Main enclosure)　(Flameproof enclosure) 端子箱　安全増防爆構造*5 （Terminal box）　（Increased safety）
対象ガス又は蒸気の発火度及び爆発等級 （Group, Temperature Class and EPL）	IIB T3 Gb
定格 （Rating）	0.75kW　6P　50Hz　200V　4.25A 連続定格　耐熱クラスＦ*6 (Continuous)　(Class F insulation) （同一型式は別表のとおり）*7 （Variants are as listed on a separate sheet）
製造者の氏名及び住所 (Name and Address of manufacturing company)	
新規検定希望地及びその理由*8 （Testing site other than TIIS and reason for it）	

平成 28 年 1 月 11 日(Date in Japanese era: year, month, day)

住所　(Applicant address)

申請者

氏名　(Applicant name)*9

（Type-written and signed）

公益社団法人 産業安全技術協会長 殿

（To The President of TIIS）

Annex 2　Example of "Schedule of Variants"

(English descriptions are only for explanatory purpose, and do not appear in the form.)

同一型式一覧表

(Schedule of Variants)

型式の名称 (Type identification code of sample products)	枠番号 (Frame size)	出力 (Rated output) (kW)	極数 (Pole number)	周波数 (Frequency) (Hz)	電圧 (Rated voltage) (V)	電流 (Rated current) (A)	時間定格 (Duty cycle)	絶縁の種類 (Insulation class)
NGW-090LB-05F	90L	0.75	6	50	200	4.25	連続 (Continuous)	F
					400	2.15		
NGW-090LB-06F				60	220	3.80		
					440	1.90		

備考：□は検定申請供試品を示す。

(Note: Descriptions in □ denote those for the sample products and those without □ for variants.)

Annex 3　Example of "List of Drawings"

(English descriptions are only for explanatory purpose, and do not appear in the form.)

添付図面一覧表

（List of Drawings）

順番号 (Serial number)	図面名称 (Name of drawing)	図面番号 (Identification number of drawing)	備考 (Remarks)
１	三相モータ構造図１ (Construction of motor, part 1)	ＸＹ０００Ｂ０２０１②	
２	三相モータ構造図２ (Construction of motor, part 2)	ＸＹ０００Ｄ０２０１－１	
３	端子箱 (Terminal box)	ＸＹ１０８Ｃ１５３－０５	

Explanatory remarks on Annexes 1 to 3

Explanatory remarks to Annex 1 to Annex 3, and advices for filling-in each column are described below:

- ○ Size of each column will be at the discretion of the applicant.
- ○ English descriptions are translation of corresponding Japanese language.
- ○ Name/address of company/personnel shall be in original language.

Annex 1 (Application Form)

*1 A marking to identify that the application is for New Standards.
*2 Put a common name of the equipment. No commercial name is acceptable.
*3 Put the identification code of the sample products to be tested/evaluated by TIIS. Any variants included in the application shall be appear in a separate sheet(s).
*4 Put this sentence only when any variants in terms of type identification code are included in the application.
*5 When the equipment is composed of different types of protection, the type of protection applied to each portion shall be specified respectively.
*6 In case of IS-equipment, all relevant parameters shall be stated here.
Put the specified ambient temperature in this column, only if it is below -20 °C or over 40 °C.
*7 Put this sentence only when any variations of rating are included in the application.
*8 This column is filled when witness testing is proposed by the applicant, who is required to show that the same level of tests as TIIS will be conducted at the proposed site. How-to-fill the column in Japanese will be advised by TIIS.
*9 "Applicant name" should include the name of company and the name of responsible person together with his/her position in the company.

Annex 2 (Schedule of Variants)

Those descriptions enclosed in rectangular shall be in exact coincidence with descriptions in the application form shown in Annex 1.

Annex 3 (List of Drawings)

Name or title of each drawing, whether in Japanese or in the original language, shall be identical to that appeared in the corresponding drawing.

Annex 4　List of facilities/equipment to be possessed by the manufacturer

（English descriptions are only for explanatory purpose, and do not appeared in the form.）

製造検査設備の概要届

（Brief descriptions on manufacturer's facilities/equipment）

区分 (Item)	設備の名称と仕様の概略 (Names and specifications of facilities/equipment)
製造設備 (Facilities for manufacturing)	List the names and major specifications of the facilities used for manufacturing the products.
検査設備 (Equipment for testing and inspecting)	List the names of the equipment used for testing and inspecting the products. Equipment required depends on the type of protection of the products, as shown in Note below.

Note: Facilities/equipment required to be possessed by the manufacturer for testing and inspection of the products are listed in the following table. Facilities/equipment used for tests marked with "*" may be possessed by other company, provided that the manufacturer can use the equipment at his/her disposal based on a written agreement between the manufacturer and the owner of the equipment.

Type of protection	Test/inspection to which facilities/equipment are used
All types of protection	Temperature rise test, and impact test on glass parts
Flameproof enclosure (d)	Pressure test and flame transmission test *
Pressurization (p)	Pressurization test
Increased safety (e)	Stalled test ('locking test') for motors with cage rotor
Oil-immersed (o)	Ignition test for switchgear and the likes
Intrinsic safety (i)	Spark test and voltage test
Encapsulation (m)	Thermal stability test
Non-sparking (n)	Impact test

Remarks to the table:
The table is extracted from the ministerial ordinance on certification of Ex-products and is modified to apply for the New Standards to which most of foreign products are manufactured;
e.g. requirement on dust-protection equipment or equipment for outdoor use is not included.

Annex 5 Certification Fees

(as of August 31, 2015; including tax)

1. Fee for new certification (per one application)

1.1 Type of protection "i"

Certification fee for intrinsically safe equipment or associated equipment depends on the number of circuit components involved in the test sample.

Category	Number of components	With no variant	With any variants
ia	up to 49 50 - 149 150 or more	228,300 Yen 364,100 Yen 467,000 Yen	267,400 Yen 432,000 Yen 555,400 Yen
ib/ic	up to 49 50 - 149 150 or more	189,300 Yen 300,300 Yen 382,600 Yen	222,200 Yen 353,800 Yen 454,600 Yen

1.2 Types of protection other than "i"

Certification fee depends on the size, or an "equivalent volume *V*", of the test sample, which is calculated by the following formula:

$$V\,(\mathrm{cm}^3) = \text{height (cm)} \times \text{width (cm)} \times \text{length (cm)}$$

Sub-group	Equivalent volume $V(\mathrm{cm}^3)$	With no variant	With any variants
Other than IIC	$V < 64{,}000$ $64{,}000 \leq V < 1{,}000{,}000$ $V \geq 1{,}000{,}000$	139,900 Yen 211,900 Yen 277,700 Yen	162,500 Yen 248,900 Yen 327,100 Yen
IIC	$V < 64{,}000$ $64{,}000 \leq V < 1{,}000{,}000$ $V \geq 1{,}000{,}000$	197,500 Yen 308,600 Yen 409,400 Yen	230,400 Yen 364,100 Yen 483,400 Yen

Note: In case of "d" + "e", for example, *V* is calculated from the external dimensions of the assembled enclosures.

1.3 A certification fee for the equipment with a combination of "i" and any other types of protection

A certification fee for the equipment with a combination of "i" and any other types of protection is the sum of each fee specified in 1.1 and 1.2 above.

1.4 Utilization of test report issued by Designated Body

When an applicant submits a satisfactory test report on the product issued by the body designated by the Minister, the following fee is applied, irrespective of category, sub-group, number of components involved and the size of test sample.

Type of protection	With or without variants
Type of protection "i" Any other types than "i" Combination of "i" and any other types	218,600 Yen 163,300 Yen 381,900 Yen

1.5 In the case of an application followed by witness testing

When witness testing is conducted upon request of the applicant, the fee specified in 1.1 to 1.3 above is reduced by 10 % (An amount less than 100 Yen is rounded off) for each application; i.e. multiply 0.9 by the fee specified in 1.1 to 1.3 above by (see also Clause 3.2 of the text for additional expenses of witness testing).

1.6 In the case of supplemental standards applied

When supplemental standard(s) is(are) applied, an application fee is calculated by the following formula shown below.

Fee = (the amount of fee specified in 1.1 to 1.5 above) x (1+0.5 x (number of supplemental standards applied))

The supplemental standards are as follows;

IEC 60079-25 : Intrinsically safe systems
IEC 60079-28 : Protection of equipment and transmission systems using optical radiation
IEC 60529 : Degrees of protection provided by enclosures (IP Code)
IEC 60034-5 : Classifications of degrees of protection provide by the enclosures of rotating electrical machines (IP Code)

1.7 In the case of IEC 60079-26 applied

When IEC 60079-26 is applied, an application fee is calculated by the following formula shown below.

Fee = (the amount of fee calculated in accordance with clauses 1.1 to 1.5 above) x 1.5

1.8 In the case of the application of equipment classified as Group II and III

When equipment applied is classified as Group II and III at the same time, an application fee is calculated by the following formula shown below.

Fee = (the amount of fee calculated in accordance with clauses 1.1 to 1.7 above) x 2.0

Note: In a case that the name of the certificate holder (applicant) or the manufacturer listed in the certificate changed to others as a result of "merger or acquisition", or, that the holder noticed the exceeding of a period of validity for a certificate within 3 months after expiration date, a new certificate will be issued at a discounted rate, with several

conditions. Please contact TIIS for further information.

2. Fee for renewal certification（per one certificate）

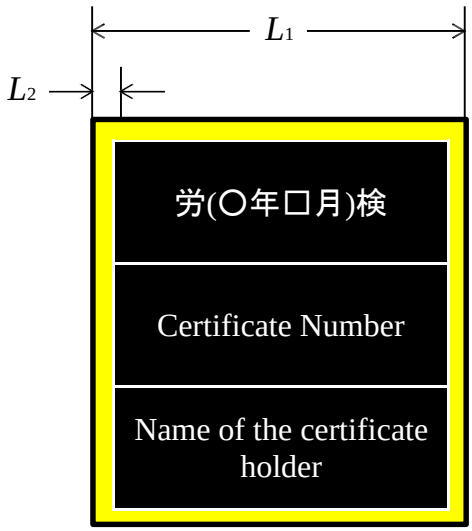
Ordinary renewal of the validity term for further 3 years, with no addition of variants at the renewal certification	24,400 Yen
In a case where the applicant desires to add new variants to the certificate at the opportunity of renewal certification	55,300 Yen

3. Other Fees（per one certificate）

Re-issue of a certificate, for the lost or impaired certificate	4,100 Yen
Changes of the name and address in the issued certificate	4,100 Yen

Annex 6 Certification label

Applicants who have been granted TIIS certificates are required, upon regulation, to fix a certification label on each of certified products, in accordance with the following;



Year(〇)and month(□)of the date of certificate issue, in accordance with the Japanese naming of the era.
After the renewal certification, the date is changed accordingly.

Sample (not coloured)

1) Shape of a label shall be in square, with dimensions of either of the following combinations, taking into account the size of product.

L_1 in mm	L_2 in mm
13	1
20	1
32	2
50	2
80	3

2) A label shall be made of metal or other durable materials.
3) Base colour of a label shall be in black; the letters, the hem of a label and lines shall be in yellow or light-yellow colour.

Annex 7 Applicable IEC standards

(as of August 31, 2015)

Current Japanese standards (i.e. New Standards) on Ex-equipment, promulgated by the Minister of Health, Labour and Welfare, are harmonized with the following IEC standards.

IEC 60079-0 (General)	edition 6 (2011)
IEC 60079-1 (d)	edition 6 (2007)
IEC 60079-2 (p)	edition 5 (2007)
IEC 60079-6 (o)	edition 3 (2007)
IEC 60079-7 (e)	edition 4 (2006)
IEC 60079-11 (i)	edition 6 (2011)
IEC 60079-15 (n)	edition 4 (2010)
IEC 60079-18 (m)	edition 3 (2009)
IEC 60079-31 (t)	edition 1 (2008)

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