IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System)

Guidance for Applicants seeking IECEx Certification under the IECEx Certified Equipment Scheme, IECEx 02
IECEx PUBLICATION

IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System)

Guidance for Applicants seeking IECEx Certification under the IECEx Certified Equipment Scheme, IECEx 02
CONTENTS

INTRODUCTION ..................................................................................................................... 3

1 Overview .......................................................................................................................... 4
   1.1 Who do you apply to? .............................................................................................. 4
   1.2 Preparing an application ...................................................................................... 6
   1.3 Making the application ......................................................................................... 6

2 Manufacturing Quality Management System (QMS) ...................................................... 6

3 ISO/IEC 80079-34 + IECEx OD 005 Additional requirements to ISO 9001 ................ 7

4 Product documentation ................................................................................................ 7

5 Product type testing ...................................................................................................... 7
   5.1 ExCB and ExTL ................................................................................................... 8
   5.2 Test process ......................................................................................................... 8
   5.3 ExCB Scope ......................................................................................................... 8

6 Application to IECEx for certification .......................................................................... 8

Flowchart – Guide to applicants of IECEx product certification ...................................... 9
Table 1 – General guide to steps to obtain IECEx Product Certification ......................... 10
Table 2 – Specific steps to obtain IECEx Unit Verification Certification, according to  IECEx OD 033 .............................................................. 14
INTRODUCTION

This document provides guidance on the process for applicants seeking IECEx certification of Ex products. It shows the steps and processes required for manufacturers to gain IECEx CoC (Certificate of Conformity) or IECEx Unit Verification Certificate.

NOTE The details of the process are given on other IECEx documents. These will be referred to in the text.

<table>
<thead>
<tr>
<th>Date</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2008</td>
<td>Original Issue (Version 1)</td>
</tr>
<tr>
<td>October 2011</td>
<td>Amendment 1A</td>
</tr>
</tbody>
</table>

Address:
IECEx Secretariat
SAI Global Building
286 Sussex Street
Sydney NSW 2000
Australia

Contact Details:
Tel: +61 2 8206 6940
Fax: +61 2 8206 6272
e-mail: chris.agius@iecex.com
http://www.iecex.com
1 Overview

IECEx Certificate of Conformity (CoC)

This guide has been prepared to assist manufacturers understand that while technically rigorous, the process of achieving an IECEx Certificate of Conformity is rather straightforward.

Gaining an IECEx Certificate of Conformity for a product provides a manufacturer with an International Statement that:

- the product shown on the certificate is manufactured to meet the listed International IEC Standard; and
- the manufacturer is operating a dedicated quality management system, meeting the specific IECEx requirements; and
- the manufacturer is under on-going surveillance by an Internationally assessed and recognised IECEx Certification Body.

As proof of this achievement the International IECEx Certificate of Conformity is on FULL public display via the IECEx website http://www.iecex.com.

IECEx Unit Verification Certificate

In addition to an IECEx Certificate of Conformity (CoC), an IECEx Unit Verification Certificate covers a defined number of products/items that are produced under a single production run.

The principles of an IECEx Unit Verification Certificate:

- An IECEx Certificate covering Unit Verification can be issued for a Defined number of items under a single production run. IECEx Unit Verification Certificates do not cover “future” production runs
- No limit to the number of Units permitted to be covered, BUT all serial numbers or other individual identifications SHALL be listed or referenced on page 1 of the IECEx Certificate
- New issues of Issued Unit Verification CoC’s are NOT permitted
- Unit verification may cover repaired items but does not address the repair process

For further information concerning IECEx Unit Verification Certification please refer to IECEx Operational Document OD 033.

1.1 Who do you apply to?

Applications for an IECEx Certificate of Conformity or IECEx Unit Verification Certificate, under the IECEx Certified Equipment Scheme, are lodged directly with IECEx Certification Bodies (ExCBs) whom themselves have successfully undertaken the IECEx Peer Assessment program.
A full and up to date listing of ExCBs approved to operate under the IECEx Certified Equipment Scheme is maintained on the IECEx website http://www.iecex.com.
1.2 Preparing an application

The manufacturer must be able to satisfy the following general requirements. When the manufacturer is confident that the requirements have been met, then application can be made for certification. In readiness for the application, a manufacturer may decide to apply for a “pre-assessment” review with an IECEx Certification Body, prior to the formal application being lodged.

In preparing an application to be submitted to an ExCB, the manufacturer needs to be confident that the following is in place:

- Confidence that the product design will meet the specified IECEx Standard
- Development of QA system covering manufacture of the product according to ISO 9001 and ISO/IEC 80079-34 (previously IECEx Operational Document OD 005). Not required for applications involving IECEx Unit Verification Certificates, see IECEx Operational Document OD 033
- Product documentation that meets IECEx Operational Document OD 017 requirements
- The relevant application form from the ExCB duly completed

1.3 Making the application

The application for IECEx certification begins with contacting the ExCB, as required by the IECEx Rules, IECEx 02. A special form may not necessary, but the following information will generally be required by the ExCB:

- Letter requesting IECEx Certificate of Conformity or Ex Test Report (ExTR)
- Exact details of the product and its manufacturing location(s)
- Whether the manufacturer has an established quality management system
- List of design standards

The ExCB will estimate the time and cost to complete the certification project.

Refer to the flowchart in this document. It covers the process from the manufacturer’s viewpoint, and shows the typical activities needed to obtain a Certificate of Conformity.

2 Manufacturing Quality Management System (QMS)

The IECEx QMS requirements are modelled on the International Standard ISO 9001, with additional QMS requirements detailed in Item 3 below. This standard needs to be met by a manufacturer applying for IECEx certification of a product. While IECEx does NOT require that a manufacturer separately holds ISO 9001 Certification, this may be beneficial as a culture of QA compliance may exist throughout the manufacturing organisation.

Where ISO 9001 certification is held, some of the ExCBs also hold national accreditation to issue ISO 9001 Certification. This may be more convenient for the manufacturer because all certification work is done by one Certifying Body.

Where ISO 9001 Certification is not held, the ExCB will assess compliance to ISO 9001 as part of their assessment to ISO/IEC 80079-34 (previously IECEx OD 005).

NOTE The QMS needs to be maintained and audited at regular intervals. See Operational Document OD 025.
3 ISO/IEC 80079-34 + IECEx OD 005 Additional requirements to ISO 9001

With introduction of ISO/IEC 80079-34, in April 2011, previous requirements of IECEx Operational Document OD 005 are being replaced with this new Standard. There is a period of time where either ISO/IEC 80079-34 or OD 005 may be used as part of a transition phase to withdraw OD 005. Consult any of the IECEx Approved ExCBs to determine current status at time of application.

The requirements of ISO 9001 are generic in nature and apply to any organisation whether manufacturer or service provider. In the IECEx system, there are additional requirements for the QMS (see ISO/IEC 80079-34 and OD 005). The extra requirements are due to the need to carefully control traceability of material and to ensure that the competence of personnel working on Ex production can be proven.

The additional requirements are intended to ensure that no part of the manufacturing process can lead to a situation where certification is compromised.

For ease of use, ISO/IEC 80079-34 and OD 005 have been written using the same Clause numbering and headings as the generic ISO 9001 Standard, thereby making it easy to clearly identify the additional and more specific QMS requirements for Ex manufacturing. Annex A of both ISO/IEC 80079-34 and OD 005 providing assistance regarding critical areas of the QMS in relation to the various Ex Types of Protection.

NOTE All QMS requirements (ISO 9001, ISO/IEC 80079-34, OD 005) are focussed on assuring that the product is always produced to certification. The QMS system is expected to prevent any deviations in the process which may affect certification of the product.

Evaluation and assessment of a manufacturer’s quality management system to ISO 9001, ISO/IEC 80079-34 or OD 005 is NOT required for where manufacturers make application for an IECEx Unit Verification Certificate, as IECEx Unit Verification Certificates covers the specific items assessed by the ExTL and ExCB and are identified on the IECEx Unit Verification Certificate by serial number or other unique identifier. Refer to IECEx OD 033 for further details. Likewise a manufacturer is not required to hold ISO 9001 certification.

4 Product documentation

To obtain IECEx certification, the documentation supporting the product must be submitted for review. Product documentation requirements are given in IECEx Operational Document OD 017. Documentation to be provided by the manufacturer covers the life cycle of the product (installation and use instructions, service information, overhaul and repair data and test data for some items).

The manufacturer is responsible for providing the documentation only. The user of a product is responsible for following the manufacturer’s instructions and for maintaining the product in compliance with Standards and manufacturer’s instructions.

5 Product type testing

Type testing of sample(s) representative of production is conducted by IECEx approved Testing Laboratories (ExTLs), operating under the control of ExCBs. The manufacturer arranges for the product to be tested to the applicable IEC standard by first contacting the ExCB to whom application is made. The ExCB passes the project to the chosen ExTL with any necessary instruction for testing. Refer to the list of approved ExCBs located on the IECEx website http://www.iecex.com.
A product may be covered by one or more IEC Standards. The ExCB will determine the correct standard(s) which apply to a product and will suggest a suitable ExTL (IECEx test laboratory).

NOTE IECEx Operational document OD 009 covers this process.

5.1 ExCB and ExTL

ExCBs have a number of associated ExTL. Both the ExCB and ExTL must be assessed by the IECEx to operate in the IECEx System.

The Scope of the ExTL must include all standards (including editions) required for certification.

When testing is complete, an ExTR (IECEx Test Report) will be prepared. This is a test report covering the product. OD 009 describes the process of issuing and approving ExTRs.

5.2 Test process

Samples must be prepared by the manufacturer in consultation with the ExTL. These samples may include special modifications to enable tests to be completed.

The ExTL will specify any special requirements for samples.

Testing can take some time and, in some cases, may involve interpretation of a particular clause in a standard. This is why the ExCB remains involved in the test process throughout testing.

NOTE Some materials require conditioning prior to test, early consultation with the ExCB and ExTL is helpful.

5.3 ExCB Scope

The ExCB can only certify product covered in their IECEx Scope of Acceptance. The Scope is a list of standards where both the certifying body and at least one associated test laboratory have been assessed as having the competence and correct equipment to test and certify to that standard. In some cases an extension of scope can be made.

Scope includes the standard itself and the edition of the standard.

6 Application to IECEx for certification

Refer to the following Flowchart and Tables of explanatory notes.
Guide to applicants of IECEx product certification

1. Manufacturer designer
   - 2. Design product to IEC standard
   - 3. Design complete
     - 4. Apply to ExCB for testing
       - 5. Supply samples for test
         - 6. Samples are tested
           - 7. Product passes tests?
             - 8. ExTR issued
               - 9. ExTR forwarded to ExCB
                 - 10. Product documentation
                   - 11. Prepare full documentation for product
                     - 12. Satisfy OD-017
                       - 13. Documentation complete
                         - 14. Manufacturer QA
                           - 15. Develop QA system to ISO9001
                             - 16. Internal review
                               - 17. Basic QA complete
                                 - 18. Develop QA for OD-005 req'ts
                                   - 19. Apply to ExCB for OD-005 & ISO-9001
                                     - 20. Corrective action and follow-up
                                       - 20a. Revise quality system
                                         - 21. QAR issued QA certified
                                           - 22. ExCB Reviews ExTR, Product documentation, QAR
                                             - 23. IECEx Certificate of Conformity issued
<table>
<thead>
<tr>
<th>Step</th>
<th>Manufacturer’s activities for obtaining an IECEx Certificate of Conformity</th>
<th>Related documents</th>
<th>By whom</th>
<th>Applicable to IECEx Unit Verification</th>
<th>Notes/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The design project is started.</td>
<td>Manufacturer’s design control procedure.</td>
<td>Manufacturer</td>
<td>Yes</td>
<td>Manufacturer set the goals for the design.</td>
</tr>
<tr>
<td>2</td>
<td>Design standards are decided.</td>
<td>IEC or ISO Standards Legislation in target markets</td>
<td>Manufacturer</td>
<td>Yes</td>
<td>New IECEx CoCs are issued according to the latest edition of Standards or 1 edition prior.</td>
</tr>
<tr>
<td></td>
<td>This step will influence design due to need consider testing and what standards will be referenced on IECEx certificate of Conformity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Design complete</td>
<td></td>
<td>Manufacturer</td>
<td>Yes</td>
<td>Design review and validation should be clearly documented for review by certification team.</td>
</tr>
<tr>
<td>4</td>
<td>Apply to ExCB for testing.</td>
<td>IECEx 02 IECEx OD 033 for Unit Verification Certificate</td>
<td>Manufacturer</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The ExCB has associated ExTL (test laboratories).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The ExCB will suggest an ExTL.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ExTL agreed between manufacturer and ExCB.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Supply Test Samples.</td>
<td>ExCB and ExTL</td>
<td>Yes</td>
<td></td>
<td>Samples may need special preparation for testing. Discussions with the ExCB will resolve test and certification issues.</td>
</tr>
<tr>
<td>6</td>
<td>Testing</td>
<td>IECEx 02 IECEx OD 010</td>
<td>ExTL</td>
<td>Yes</td>
<td>The ExTL should check the list of ExTAG Decision Sheets to see if there are any that relate to the product under test.</td>
</tr>
<tr>
<td>7</td>
<td>Product passes test.</td>
<td>ExTL</td>
<td>Yes</td>
<td></td>
<td>Certification data and supporting documents must be available for ExCB prior to issue of certificate.</td>
</tr>
<tr>
<td>Step</td>
<td>Manufacturer's activities for obtaining an IECEx Certificate of Conformity</td>
<td>Related documents</td>
<td>By whom</td>
<td>Applicable to IECEx Unit Verification</td>
<td>Notes/Comments</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>--------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>8</td>
<td>IECEx Test Report (ExTR) is prepared using the appropriate blank report form. An ExTR shall also be compiled when utilising previously obtained test data.</td>
<td>See IECEx website <a href="http://www.iecex.com">http://www.iecex.com</a></td>
<td>ExTL</td>
<td>Yes</td>
<td>ExTL may transfer information from previous reports if required.</td>
</tr>
<tr>
<td>9</td>
<td>ExTR to be reviewed by the ExCB prior to being issued by the ExCB. The endorsement of this ExTR is shown by the ExCB issuing an ExTR Cover Sheet or their own cover page but shall not use the word CERTIFICATE anywhere on the document, as this may given the impression that the endorsement page is a certificate thereby detracting from the real IECEx Certificate of Conformity.</td>
<td></td>
<td>ExCB</td>
<td>Yes</td>
<td>When ExCBs and ExTLs are within the one organisation, the ExTR review shall be conducted by a staff member not involved or responsible for the tests/assessments.</td>
</tr>
<tr>
<td>10 to 13</td>
<td>Product documentation. The document package can be prepared in parallel with the design activity. Documentation must be reviewed in order to issue a Certificate of Conformity.</td>
<td>IECEx OD 017</td>
<td>Manufacturer</td>
<td>Yes</td>
<td>The manufacturer should discuss the product documentation requirements with the ExCB as early as possible.</td>
</tr>
<tr>
<td>14</td>
<td>Preparation for the IECEx Quality Assessment The work on quality assurance can be done in parallel with the design and product documentation work.</td>
<td>ISO 9001 ISO/IEC 80079-34 or IECEx OD 005 IECEx OD 033 for Unit Verification Certification</td>
<td>Manufacturer</td>
<td>No</td>
<td>QA Assessment does not apply – refer to IECEx OD 033.</td>
</tr>
<tr>
<td>Step</td>
<td>Manufacturer’s activities for obtaining an IECEx Certificate of Conformity</td>
<td>Related documents</td>
<td>By whom</td>
<td>Applicable to IECEx Unit Verification</td>
<td>Notes/Comments</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>--------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>15 to 18</td>
<td>QA system development</td>
<td>ISO 9001</td>
<td>ExCB</td>
<td>No</td>
<td>OD 025 includes a checklist of OD 005 documentation requirements.</td>
</tr>
<tr>
<td></td>
<td>The QA system requires ISO 9001, plus the additional requirements of the IECEx System (OD 005). Relevant manufacturer’s quality system documentation is to be reviewed to verify that documentation complies with the requirements of IECEx OD 005 and ISO 9001.</td>
<td>ISO/IEC 80079-34 or IECEx OD 005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 to 20</td>
<td>Application for QA assessment of the manufacturer</td>
<td>ISO/IEC 80079-34 or IECEx OD 005</td>
<td>See above.</td>
<td>No</td>
<td>Where the Ex product is manufactured in different locations, especially different countries each location shall be audited, prior to the issuing of the IECEx Certificate of Conformity.</td>
</tr>
<tr>
<td></td>
<td>An application from the manufacturer to the ExCB will result in an audit being scheduled, and the findings collated as a QAR. The ExCB conducts the on-site audit.</td>
<td>IECEx OD 025</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>To issue a Quality Assessment Report (QAR) the following are required:</td>
<td>ISO/IEC 80079-34 or IECEx OD 005</td>
<td>IECEx auditing body</td>
<td>No</td>
<td>Generally the ExCB to whom the application has been made will audit and endorse the QAR.</td>
</tr>
<tr>
<td></td>
<td>- Auditor’s assessment/audit report of the manufacturer’s quality system, including site audit.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Endorsement by the ExCB to whom the original application was made, once any outstanding matters are dealt with.</td>
<td>IECEx OD 025</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step</td>
<td>Manufacturer’s activities for obtaining an IECEx Certificate of Conformity</td>
<td>Related documents</td>
<td>By whom</td>
<td>Applicable to IECEx Unit Verification</td>
<td>Notes/Comments</td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>-------------------------------------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
| 22   | The ExCB to which the application for an IECEx CoC will need to review the following for the certificate to be issued:  
• Manufacturer complies with IECEx rules and procedures  
• Manufacturer’s quality system complies with OD 005  
• ExCB's own quality management system requirements are met and ExTR and QAR relate to the same product(s)  
• Audit NCRs are closed so that the QAR can be issued  
• The ExTR clearly shows that the products covered by the ExTR(s), comply with standards listed on the application.  
• The documentation package complies with OD 017. This ensures that service to the product has sufficient information to keep the product within certification limits.  
• Manufacturer has signed an agreement with the ExCB to maintain the QA system through surveillance audits | IECEx 02  
ISO/IEC 80079-34 or  
IECEx OD 005  
IECEx OD 025  
IECEx OD 017  
ExCB’s own quality management system | Final decision being taken by the ExCB to which the original application has been made | Yes  
However there is no QAR applicable for Unit Verification Certification. | The review should also ensure that the principles and guidelines of OD 025 have been followed. |
| 23   | IECEx Certificate of Conformity shall be compiled using the IECEx “on-line” system via the password protected system.  
Certificate is issued via the IECEx “on-line” registration system with the applicant being informed in writing by the ExCB, via letter, fax or E-mail. | Refer to IECEx website http://www.iecex.com | ExCB personnel authorized to issue IECEx Certificates of Conformity (must be ExCB who received the original application) | Yes  
However, the On-Line certificate system provides for the entering of product serial numbers to identify the actual items covered. Refer to IECEx OD 033. | Contact the IECEx Secretariat for any questions or concerns. |
Table 2 below provides specific steps to obtain IECEx Unit Verification Certification to cover “one off” or limited numbered items.

<table>
<thead>
<tr>
<th>Step</th>
<th>Procedures for the issuing of an IECEx Unit Verification Certificate of Conformity - Description of activity</th>
<th>Related documents</th>
<th>By whom</th>
<th>Notes/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ex Manufacturer receives a contract to design and build a “one-off” or limited quantity/batch, usually for a special purpose or application. Standards for design should be specified in the original contract.</td>
<td>IEC Standards National codes for electrical and mechanical safety</td>
<td>The Applicant (or agent)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The design is approved by the Ex Manufacturer. The end user may review and approve the design before applying for IECEx certification.</td>
<td>All design documents</td>
<td>The Applicant (and their customer)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Product design documents are defined as a “package”.</td>
<td>Design</td>
<td>The Applicant</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Documentation covering the design is prepared.</td>
<td>Design</td>
<td>The Applicant</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Ex Manufacturer reviews documents to requirements of IECEx OD 017.</td>
<td>OD 017</td>
<td>The Applicant</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Documentation package has been reviewed by the Applicant as being complete and now prepared for submission with the application to an ExCB.</td>
<td></td>
<td>The Applicant</td>
<td>The Manufacturer should contact the ExCB once documentation is complete.</td>
</tr>
<tr>
<td>7</td>
<td>Application is submitted to an ExCB. Where the Ex Manufacturer is located in a non-IECEx participating country, the ExCB shall in conjunction with the ExMC Secretary, arrange for payment to the IECEx account of the surcharge, in accordance with OD 019.</td>
<td>IECEx 02 OD 019 (finance)</td>
<td>The Applicant</td>
<td>Applications for an IECEx Unit Verification Certificate of Conformity will verify compliance with the requirements of the IECEx Scheme and relevant Operational Documents, e.g. OD 009 for the purposes of generating an ExTR.</td>
</tr>
<tr>
<td>Step</td>
<td>Procedures for the issuing of an IECEx Unit Verification Certificate of Conformity - Description of activity</td>
<td>Related documents</td>
<td>By whom</td>
<td>Notes/Comments</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------</td>
<td>--------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
| 8    | Contract review is conducted by the ExCB receiving the application, in accordance with the ExCB’s own Quality System and as required by ISO/IEC Guide 65. Contract review shall include:  
• A review to ensure that the application is within the scope of acceptance of the ExCB, eg protection techniques  
• The application package is complete  
• Whether a surcharge applies for applicants or Manufacturers from non IECEx member countries  
• Estimated time and costs to complete project  
• Determination of any special requirements  
• Agreement on method and system of payment by applicant  
ExCB shall only proceed where the contract review has been successfully completed. Change of ExCB’s may be required if the equipment to be certified is not covered by the ExCB scope of operation. | ExCBs own Certification procedures as included in their Quality System and ISO/IEC Guide 65 | ExCB | The results of the contract review shall be documented and recorded. Annex A can be used as a summary of the documents supplied. |
| 9    | The product (unit) is prepared for testing.  
The ExCB and their associated ExTL will prepare a Test Plan as required.  
**NOTE** The Test Plan is a controlled document.  
Any Plastic components are thermally conditioned before testing, as required by the Standard.  
Test samples of critical items are submitted for destructive test. Some components which are not certified may need testing. | Test Plan | ExCB | ExTL conducts the testing. A Test Plan may not always be required. Testing may follow the headings given in the ExTR (test report form). Where destructive testing is required additional samples or materials, representative of the completed item(s), may be required to prevent destruction to the completed item(s). |
### TABLE 2
Specific steps to obtain IECEx Unit Verification Certification, according to IECEx OD 033

<table>
<thead>
<tr>
<th>Step</th>
<th>Procedures for the issuing of an IECEx Unit Verification Certificate of Conformity - Description of activity</th>
<th>Related documents</th>
<th>By whom</th>
<th>Notes/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>The product is tested according to the Test Plan. Testing is carried out by the ExTL associated with the ExCB. The Test Plan ensures that all tests are agreed and cover all certification issues. A record of all tests performed is kept in the Test Log. The tests performed are listed with pass/fail criteria and have provision for comments on the report.</td>
<td>Test Plan, Test Log, ExTR</td>
<td>ExTL</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The ExTR shall be prepared by the ExTL, using the standard IECEx ExTR blank templates. The ExTR is then reviewed by the ExCB for endorsement. Where the product fails tests listed in the Test Plan, the Ex Applicant/Manufacturer will be notified so that the product may be modified to pass the test which failed. For re-tested items, please refer to step 9 in this table. Failed tests which require correction or further action must be re-tested in full, to obtain a &quot;pass&quot; result in the ExTR.</td>
<td>Test Plan, ExTR</td>
<td>ExCB monitors all testing. Standard ExTR blank templates are available from the IECEx website.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>A draft of the ExTR may be issued to the Applicant/Manufacturer for their review prior to being formally issued.</td>
<td>Draft ExTR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Upon review and endorsement by the ExCB the ExTR is issued. The ExCB endorsing the ExTR shall “Register” the ExTR on the IECEx “On-Line” Certificate of Conformity System.</td>
<td>ExTR</td>
<td>ExTL issues report ExCB registers the test report “on-line”. Guidance given in OD 011 Part 2</td>
<td></td>
</tr>
<tr>
<td>Step</td>
<td>Procedures for the issuing of an IECEx Unit Verification Certificate of Conformity - Description of activity</td>
<td>Related documents</td>
<td>By whom</td>
<td>Notes/Comments</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------</td>
<td>---------</td>
<td>----------------</td>
</tr>
<tr>
<td>14</td>
<td>The draft IECEx Unit Verification Certificate is prepared and may be issued as a draft to the applicant for a review for any errors. All test documents, design data and design drawings are filed. Once satisfied that the test data and the supporting documentation are adequate the Certificate shall be issued, by the ExCB with the original sent to the Applicant and a copy retained on the ExCB file.</td>
<td>IECEx Unit Verification Certificate</td>
<td>ExCB certification panel reviews the draft certificate.</td>
<td>ExCB shall be assigned a unique password to allow entry of the ExTR and certificate details. The data is entered &quot;On-Line&quot;. Contact the IECEx Secretariat for any questions or concerns. OD 011 Part 2 provides guidance to ExCBs on the registering of issued ExTR and also the compiling and issuing of On-Line Certificates of Conformity under the IECEx Unit Verification Program.</td>
</tr>
<tr>
<td>15</td>
<td>The ExCB to whom the application for an IECEx Unit Verification Certificate was made shall conduct a certification review, in accordance with their quality management system, ensuring among others that: • All stages of the certification process have been documented and followed • The ExCB have a signed commitment by the Applicant to abide by the rules of the IECEx Scheme and ExCB’s certification conditions • The Applicant is aware of his/her obligations under the IECEx Scheme</td>
<td>IECEx 02 ExCB’s own quality management system</td>
<td>The person authorized to conduct such review within the ExCB to whom the original application was made</td>
<td>Contact the IECEx Secretariat for any questions or concerns.</td>
</tr>
<tr>
<td>15a</td>
<td>Where the review undertaken in step 15 is not successful, the ExCB management shall refer the matter to ExCB staff or Applicant personnel as appropriate.</td>
<td></td>
<td>Management of the ExCB to whom the original application was made</td>
<td>Contact the IECEx Secretariat for any questions or concerns.</td>
</tr>
</tbody>
</table>
### TABLE 2
Specific steps to obtain IECEx Unit Verification Certification, according to IECEx OD 033

<table>
<thead>
<tr>
<th>Step</th>
<th>Procedures for the issuing of an IECEx Unit Verification Certificate of Conformity - Description of activity</th>
<th>Related documents</th>
<th>By whom</th>
<th>Notes/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>IECEx Unit Verification Certificate shall be now be completed, taking account of any adjustments arising from the review in step 15 using the IECEx “On-Line” system via the password protected system.</td>
<td>Refer to IECEx website <a href="http://www.iecex.com">http://www.iecex.com</a> OD 011 Part 2</td>
<td>The person authorized to issue IECEx Certificates of Conformity within the ExCB to whom the original application was made.</td>
<td>Contact the IECEx Secretariat for any questions or concerns.</td>
</tr>
<tr>
<td>17</td>
<td>Prior to issue a final draft of the IECEx Unit Verification Certificate is to be reviewed for errors. While the Draft Certificate is created “On-Line” the ExCB may create a protected PDF copy and send this to the Applicant, refer to OD 011 Part 2 for guidance.</td>
<td>Original application form submitted by the Applicant OD 011 Part 2</td>
<td>The person authorized to issue IECEx Certificates of Conformity within the ExCB to whom the original application was made. The Applicant</td>
<td>The Electronic version residing on the IECEx “On-Line” System remains the master version. Any printing or copying is considered an “un-controlled” copy. Contact the IECEx Secretariat for any questions or concerns.</td>
</tr>
<tr>
<td>18</td>
<td>Certificate is issued via the IECEx “On-Line” registration system with the Applicant being informed in writing by the ExCB, via letter, fax or E-mail.</td>
<td></td>
<td>The person authorized to issue IECEx Unit Verification Certificate within the ExCB to whom the original application was made</td>
<td>Contact the IECEx Secretariat for any questions or concerns.</td>
</tr>
</tbody>
</table>