

IECEX System



In addition to the preparation of international standards, the International Electrotechnical Commission (IEC) facilitates the operation of Conformity Assessment Systems. One such system is the IECEX System.

The objective of the IECEX System is to facilitate international trade in equipment and services for use in explosive atmospheres (hazardous locations). The goals of the IECEX System are:

- reduced testing and certification costs to manufacturer
- reduced time to market
- international confidence in the product assessment process
- one international database listing
- maintaining international confidence in equipment and services covered by IECEX certification

The IECEX System comprises several systems. At the current time the United States only participates in the IECEX Certified Equipment Scheme. FM Approvals participates as both an Ex Certification Body (ExCB) and an Ex Testing Laboratory (ExTL).

The IECEX Certified Equipment Scheme

This IECEX Scheme is an international certification scheme covering equipment that meet the requirements of International Standards; generally the IEC 60079 series of standards prepared by IEC Technical Committee 31.

The IECEX Certified Equipment Scheme can provide:

a) A single international Certificate of Conformity (CoC) that requires manufacturers to successfully complete:

- Testing and Assessment of samples for compliance with Standards resulting in a Test and Assessment Report (ExTR)
- Assessment and auditing of manufacturers facilities resulting in a Quality Assessment Report (QAR)
- Ongoing surveillance audits of manufacturers facilities

Certificates issued by the IECEX Certified Equipment Scheme are issued as “electronic certificates” and are maintained on the IECEX web site. This enables full public access for viewing and printing. For more information, visit the IECEX online certificate system <http://iecex.iec.ch/>.

Currently only Australia, New Zealand, and Singapore accept the IECEx CoC as meeting all of the National requirements for Ex Certification. No further national certification is required.

or

b) For other countries that do not accept the IECEx CoC, but require national certification or approval, a “fast-track” process can be used to achieve national certification.

This is achieved by way of a national certification body, who is also an IECEx ExCB (<http://www.iecex.com/directory/bodies/bodies1.asp?id=5>), accepting an IECEx ExTR prepared for the equipment to support the national certification.

Applications

Ex equipment manufacturers seeking an IECEx CoC can apply to FM Approvals, an IECEx Certification Body. FM Approvals can prepare the ExTR, conduct the QAR and issue the CoC.

FM Approvals can also assist manufacturers that:

- already have a QAR and need an ExTR
- already have an ExTR and need a QAR
- already have an ExTR and need FM Approval of the product for the United States or Canada
- already have an ExTR and ATEX Certification for Europe

More information is available using the IECEx/ATEX comparison guide. <http://www.iecex.com/docs/iecex01A%7bed1.0%7den.pdf>

For additional guidance on the IECEx process, refer to the IECEx guidelines for manufacturers. <http://www.iecex.com/docs/iecex02A%7bed1.0%7den.pdf>

Rules of the IECEx System including rules of procedures, are available, free of charge, from the IECEx Web site. <http://www.iecex.com/rules.htm>