



INTERNATIONAL ELECTROTECHNICAL COMMISSION SCHEME FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEX SCHEME)

Brief Comparison between IECEx and ATEX

Introductory Note

Since the introduction of the IECEx On-Line Certificate of Conformity, late 2003, there has been a constant flow of inquires seeking an explanation of the differences between the IECEx Scheme and European ATEX System.

This document aims to provide a brief overview of the differences between the IECEx and the ATEX Systems relating to specific items that are commonly raised.

This document is not a full listing of the differences and the reader is encouraged to consult an appropriate organization, body or individual when in need of a more detailed explanation of such differences.

Likewise, the information contained in this document is for information purposes with the rules of the IECEx Scheme and ATEX system taking precedence at all times.

Document History

| Date | Summary |
|---------|----------------------------|
| 2008 08 | Original Issue (Version 1) |

| | |
|---|---|
| Address: IECEX Secretariat SAI Global Building 286 Sussex Street Sydney NSW 2000 Australia | Tel: +61 2 8206 6940 Fax: +61 2 8206 6272 Email: chris.agius@iecex.com Internet: www.iecex.com |
|---|---|



IECEX Guide
An Informative Guide comparing various elements of both
IECEX and ATEX

Brief Table of Comparison

| ITEM | IECEX | ATEX |
|----------------------------------|---|---|
| Organisation / Management | Industry Representatives (Manufacturers, Certification Bodies, Ex Equipment End Users, Regulators, Community interests) | E. U. Commission (Government Regulatory) |
| Aim | One Single Certificate, for any hazardous area product and Services recognised and accepted worldwide (Market Acceptance) | Covers Equipment, Remove barriers to trade and improve safety for equipment and workers |
| Validity / Legal | Today: <ul style="list-style-type: none"> - Products with IECEx Certificate accepted in several countries - Alternatively a single test report (ExTR) can be sent to any IECEx Certifier to issue locally accepted certification | ATEX Directive is Law in all the E. U. Countries (Mandatory application) Limited to Europe |
| Field of Application | Current: <ul style="list-style-type: none"> - Electrical and Non electrical products and systems - Gas / Dust Industries - Now Covering SERVICE INDUSTRIES, e.g. Repair and Overhaul | <ul style="list-style-type: none"> - Electrical and non electrical products and systems - Gas / Dust Industries - Equipment ONLY |
| Standards Used | International Standards only , e.g. IEC Compliance to Standards is mandatory | Any recognised Standard may be applied provided it meets the Essential Health and Safety Requirements of the Directive. However, the E.U. Commission approves list of Harmonised Standards. Allows for Interpretation Compliance to Standards not mandatory but is |



IECEX Guide
An Informative Guide comparing various elements of both
IECEX and ATEX

| ITEM | IECEX | ATEX |
|--------------------------------|--|---|
| | | generally used to assess products |
| Certification Procedure | <p>ExCBs issue [for Certified Equipment Program]:</p> <ul style="list-style-type: none"> - ExTR (Product Type) - Ex QAR (production facility quality audit) - IECEX CoC (Certificate of Conformity) <p>ExCBs issue [for Certified Service Facilities Program]</p> <ul style="list-style-type: none"> - CAR (IEC 60079-19 Compliance Report Form) - FAR (Facilities Audit Report Form) - IECEX CoC (Certificate of Conformity) <p>On-Line Certificate of Conformity System -</p> <ul style="list-style-type: none"> - Reports are officially registered on IECEX website - Electronic On-Line CoC available for full public view, acts as master controlled version <p>Common Rules applicable to all applications</p> <ul style="list-style-type: none"> - Rules of Procedure for each Program (IECEX 02, IECEX 03, IECEX 04) - Operational Document ODs provide Standard operating procedures to be followed by all ExCBs - Technical Decision Sheets - Accessible full listing along with all Scheme documents maintained and available via single IECEX website location - Single appeals body available - Decisions of the Management Committee are binding on all ExCBs, Certificate Holders etc. | <p>ExNBs issue</p> <ul style="list-style-type: none"> - EC Type examination certificate - Ex QAN (Quality Assessment notification for production facility) |



IECEX Guide
An Informative Guide comparing various elements of both
IECEX and ATEX

| ITEM | IECEX | ATEX |
|---|--|--|
| <p>Conformity Assessment</p> | <p>For IECEX Certified Equipment Program:</p> <p>ExTR + QAR = IECEX Certificate of Conformity (CoC)</p> <p><i>ExTR = IECEX Test Report</i> <i>QAR = IECEX Quality Assessment Report</i></p> <p>Applicable to ALL products, no difference between Zones or products</p> <p>CoC issued via Secure IEC Website ensures FULL Public access to issued Certificates</p> <p>Self Certification <u>not</u> permitted</p> <hr/> <p>For IECEX Certified Services:-</p> <p>FAR + Assessment of Competencies = IECEX Certificate</p> <p><i>FAR = Facilities Audit Report</i></p> <p>Applicable to ALL Services</p> <p>CoC issued via Secure IEC Website ensures FULL Public access to issued Certificates</p> <p>Self Certification not permitted</p> | <p>Declaration of Conformity by Manufacturer to declare that he is in possession of necessary documents and reports.</p> <ul style="list-style-type: none"> - Certificate issued by ExNB only for category 1 / 2 and M 1 / 2 electrical equipment - Self certification allowed for Category 3 and Category 2 Mechanical. <hr/> <p>Does not cover service facilities.</p> |
| <p>Organisms for Certification</p> | <p>All ExCBs and ExTLs are subject to the following assessment:</p> | <p>ATEX Notified Bodies (ExNBs) appointed by individual nomination of the governments of</p> |



IECEX Guide
An Informative Guide comparing various elements of both
IECEX and ATEX

| ITEM | IECEX | ATEX |
|---|--|--|
| | <ul style="list-style-type: none"> - Initial Peer Assessment by a 3 member IECEx Assessment Team, prior to entry to IECEx - Annual Surveillance of ExCBs and ExTLs - 5 Year re-assessment for all ExCBs and ExTLs <p>Dedicated IECEx Technical Secretariat to manage day to day operations of the IECEx Scheme</p> <p>IECEX Management Committee (ExMC)</p> <p>IECEX Technical Assessment Group (ExTAG)</p> <p>IECEX Conformity Mark Committee (ExMarkCo)</p> | <p>their countries.</p> <p>A common assessment system does not exist.</p> <p>Surveillance of ExNBs dependant upon national governments</p> |
| Manufacturer Surveillance | ExCB maintains the Status of the IECEx Certificate of Conformity based on the outcome of follow up Quality Audits, QARs | ExNBs conduct regular audits of manufacturers |
| Work place Requirements | Nothing – Refers to National regulations | ATEX Directive 137 contains special requirements for workers and management. |
| Putting IECEx and ATEX Together | | |
| <p>The Key Elements:</p> <ul style="list-style-type: none"> - Technically Identical Standards for Electrical Equipment since 2005 (very few exceptions) - When using IEC Standards a single set of Tests and assessments can be used for both IECEx and ATEX, in accordance with the respective rules - An ATEX EC Type Examination can be based on an IECEx ExTR BUT ATEX documentation alone is not sufficient for IECEx - QA audits are the same for both IECEx and ATEX. | | |



IECEX Guide
An Informative Guide comparing various elements of both
IECEX and ATEX

| ITEM | IECEX | ATEX |
|------|-------|------|
| | | |