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HAZARDOUS LOCATIONS & EXPLOSIVE ATMOSPHERES

A GUIDE TO THE CERTIFICATION PROCESS

Streamline your Hazardous Location and Explosive Atmosphere products through the steps to certification with the expertise and support of Intertek.

Step 1: Project Proposal

Work together to define the project scope and produce an accurate and timely proposal

Intertek will guide you through defining the project scope, including the product description, intended markets, requested certifications, type of services, details of the intended application, and more. Materials needed may include technical drawings, relevant manuals, third-party test reports, and others.

Result: A proposal on the timeframe and costs for certification.

Step 2: Initial Documentation Review

Ensure all required documents are available for the Construction Review

Intertek will review the documentation you've provided to identify missing or incomplete information. Required materials include the following, and Intertek will advise on any additional or substitute information as needed:

- Bill of Materials (BOM)
- Component data sheets, with supplier cut sheets
- Compliance document, detailing compliance to applicable standards
- Technical drawings (for production/assembly/certification)
- Drawings in compliance to IECEx OD 017 (see www.iecex.com)
- Proposed product markings and labeling
- Installation and/or operation manual
- Product data sheet (or sales brochure)
- For ATEX and IECEx certification, Quality Assurance Notification (QAN) and/or Quality Assessment Report (QAR)

Result: A Letter Report from Intertek outlining any documentation issues and open items.

Step 3: Construction Review

Determine whether the product complies with the relevant standards and document the compliance/non-compliance

Intertek evaluates the product and supporting technical documentation against relevant standards, communicating compliance or non-compliance, as well as the product testing plan, via documentation. Clients provide relevant paperwork and information, as well as samples for testing:

Result: Construction review document or IECEx/ATEX Test Report document, test plan, and/or project change order, if required due to non-compliances.

Intertek will provide schedule & completion dates at the start of each of the activities that make up a phase, along with daily updates throughout the process.

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Step 4: Testing

Product(s) tested per the requirements of the applicable standards to determine compliance

Intertek tests the product per the requirements of all applicable standards in order to determine compliance. Clients provide needed information to run tests, provide feedback on the proposed test plan, and correct any non-compliances if identified

Tests can include, but are not limited to:

All-protection Techniques

- Temperature Rise
- Maximum Service Temperature

Ex d Tests

- Determination of Reference Pressure
- Overpressure
- Flame Transmission

Ex i Tests

- Battery
- Spark Ignition

Ex n/Ex e Tests

- Thermal Endurance
- Sealing for Built-in Protective Device
- Terminal Insulation Material

Ex m Tests

- Resettable Thermal

Protective Device

- Surface Resistance
- Water Absorption
- Dielectric Strength

Ex p Tests

- Overpressure
- Verification of Purge

Result: Completed test plan, with documentation of the results of all applicable tests and/or project change order, if required due to non-compliances.

Step 5: Report Writing

Required reports finalized per the certifications included in the project scope

Intertek creates the report documentation needed in order for certification to be issued. This may require updated documentation from customers, particularly addressing previous areas of non-compliance. All materials are required to be up to date and accurate.

Result: Drafts of certification report documents, such as the Listing Report for North American certification, test reports for IECEx or ATEX, and any associated documents required by technical and certification reviewers.

Step 6: Technical Review

Technical review of all testing and assessment reports

Intertek reviews all technical and assessment documents, targeting any issues that need to be resolved before moving to the certification review stage. All materials and reports are required to be in completed, finalized versions.

Result: Finalized certification documents.

Step 7: North American Certification/ ATEX Notified Body/IECEx CB Review

Certification issuance determined per the scope of the project

Intertek reviews all finalized project documents in order to determine the issuance of certifications based on the project scope already outlined.

Similar to the previous step, we may reach out to work with you to ensure we have the appropriate, finalized documentation.

Result: The Certification Officer provides the Recommendation for Certification on Successful Completion.

Step 8: Certificate Issuance

Client receives final certificate(s)

This is typically the last step. Intertek issues the Authorization to Mark (ATM) following an initial factory audit (if needed) for North American certification. For IECEx or ATEX certification, Intertek will provide certificates that have been made official by the relevant certification body.

Result: Authorization to Mark and/or final certificates.

FOR MORE INFORMATION

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