ATEX and IECEx

Product Certification for equipment used in potentially explosive atmospheres

Eurofins TECH is appointed as Notified Body (ExNB 0477) to carry out conformity assessment as specified in the ATEX Directive, on behalf of European Union.

With many years of experience certifying equipment used in Hazardous Locations, **Eurofins TECH has successfully completed the IECEx assessment process** and is approved to operate within the IECEx Certified Equipment Scheme **(ExCB** and **ExTL).**

ATEX Directives apply to all electrical and mechanical equipment intended for use in explosive atmospheres, including protective systems. The aim of directive 94/9/EC is to allow the free trade of 'ATEX' equipment and protective systems within the European Union.

IECEx Equipment certification scheme is the voluntary system used to facilitate international trade in equipment for use in explosive atmospheres, by meeting the requirements of the applicable international standards.

For the Manufacturer

If products are intended for use in potentially explosive atmospheres, such as:

- mines,
- fixed offshore platforms,
- petrochemical plants,
- chemical and food plant
- flour mills,
- and other areas where an explosive atmosphere may be present,

the manufacturer must provide evidence that the equipment will not cause an explosion during specified operating conditions, assuring the compliance with the applicable standards

Products and Units

Can include as an example:
- Electrical motors;
- Enclosures, Junction Boxes
- Generator and Transformers;
- Switchgears components;
- Process control equipment;
- Sensors and transducers;
- Lamps and Luminaries;
- Heaters;
- Cable glands, adapter, bushings;
- Batteries;
- Solenoid Valves and Coils;
- Spray Guns;
- Fuel Dispensers;
- Pumps and fans;
- safety rupture disc, etc

Eurofins TECH is able to perform the tests needed to verify the conformity of products to the current harmonized standards. We deliver both ATEX and IECEx certification according to requirements of European ATEX regulations and international IEC standards (IECEx scheme).

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ATEX

IEC **IECEx**

Product Certification Process

The certification process go through the design check and testing of the product according to relevant harmonized standards by the directive, and additionally periodic factory surveillance where required by the directive.

Eurofins TECH Scope:

TECH is Test Laboratory and Notified Body for all type of products, following the main ones:

- Flameproof enclosures "d"
- Tight dust enclosures "t"
- Intrinsic safety equipment "I"
- Increased safety equipment "e"
- Encapsulated equipment "m"
- Oil immersed devices "o"
- Pressurized enclosures "p"
- Powder filling enclosures "q"
- Electrical devices with "n" protection mode
- Flow restricted enclosures "fr"
- Equipment protected by constructional safety "c"
- Equipments protected by liquid immersion "k"
- Equipments protected by control of ignition sources "b"
- Flame arresters
- Explosion venting device

Certified Equipment Program

requires manufacturers to successfully complete:
-Testing and assessment of samples for compliance with standards;
-Initial assessment and auditing at manufacturers premises with focus on the quality management system;
-On-going surveillance audits at manufacturers premises.

Eurofins TECH Scope:

TECH is IECEx Test Laboratory (ExTL) and IECEx Certifying Body (ExCB) for the following standards:

- IEC 60079-0 Part 0: Equipment General requirements
  IEC 60079-1 Part 1: Flameproof enclosures "d"
- IEC 60079-31 Part 31: Equipment dust ignition protection by enclosure "t".
- IEC 60079-11 Part 11: Intrinsic safety "I"
- IEC 60079-18 Part 18: Equipment protection by encapsulation "m"

Eurofins TECH is able to perform the tests needed to verify the conformity of products to the current harmonized standards delivering both ATEX and IECEx certification.

Our Services

Eurofins TECH is able to perform
the following activities:

- **Pre-audit of the project**
- **Testing laboratory**
- **Check of technical file**
- **Functional safety**
- **Type examination**
- **Factory surveillance audits**
- **ATEX and IECEx certification**
- **Technical file storage**

    …and also

- **Hazardous Area Health Checks**
- **Maintenance support**
- **Training**

List of main tests carried- out in our laboratory:

- Explosion Tests
- Mechanical test
- Degrees of protection (IP),volume up to 3 m^3
- Temperature measurement
- Thermal endurance
- Thermal shock test
- Torque tests
- Earth continuity
- Tests on cables glands
- Electrostatic tests
- Test on vents and flame arresters
- Spark ignition test for intrinsically safe apparatus
- Comparative tracking index assessment
- Tests on cells and batteries
- Dielectric strength test
- Test on electrostatic spraying guns