Approval Services for Equipment used in Explosive Atmospheres

Definition of a potentially explosive atmosphere

Potentially explosive atmospheres (hazardous locations in the USA/Canada) have the potential to be explosive if an ignition source is present. National codes and standards require that electrical equipment used in locations under these conditions have to be designed and tested to help reduce the incidence of explosions.

QPS can test and certify all products used in a potentially explosive atmosphere, using any of the known protection methods.

Classifications

For North America, potentially explosive atmospheres were always defined by a combination of a Class and a Division:

Class	*Division*
I - Covers flammable gases, vapours or liquids	1 - An area where an explosive atmosphere is likely to exist under normal conditions
II - Covers combustible or electrically conductive dust	2 - An area where an explosive atmosphere does not normally exist but is possible under abnormal conditions
III - Covers ignitable fibers and flyings	

North American transition to the zone system

The USA and Canada have adopted the international 3-Zone area classification system:

Zone 0 – An area in which an explosive atmosphere is continuously present for a long period of time in normal operation
Zone 1 – An area in which an explosive atmosphere is likely to exist in normal operation
Zone 2 - An area in which an explosive atmosphere is not likely to exist.

For the **USA**, all installations (both new and existing) can either continue using the 2-Division system or re-classify using the 3-Zone system. In **Canada**, for all new installations the 3-Zone system applies. Existing installations may continue to use the 2-Division system, or opt to re-classify using the 3-Zone system.

The QPS Difference

In the Industry, QPS is recognised as 'the Pro-Business' third-party testing and certification organisation. We are your trusted service-partner and our goal is to facilitate your access to the USA and Canada. We offer you one-stop product approval services for North America and many other countries around the world.

Customers, around the globe, choose QPS because of our:

TIME-TO-MARKET
we work in partnership with customers to meet their deadlines

PRICE
we offer competitive rates

QUALITY
our staff's competence and experience is unmatched

SERVICE
our customised service and flexible solutions for customers' needs are unique

QPS Evaluation Services Inc. EUROPE • www.qpscertification.eu • sales@qpscertification.eu • Phone +31 85 0030 144

Exporting to the USA and Canada

QPS is one of the very few certification bodies that are accredited in the USA and Canada to test and certify equipment used in explosive atmospheres. The QPS Mark/Label is recognised and accepted by the regulatory authorities throughout the USA and Canada.

The IECEx System

The IECEx System is an International Certification System based on the use of the IEC standards for equipment used in explosive atmospheres. Two of the five Schemes that comprise the System are: The *IECEx Equipment Certification Scheme,* and the *IECEx Certification of Personnel Competency (CoPC) Scheme.*

QPS is accredited in the IECEx Equipment Certification Scheme as a Certification Body (ExCB), and as a Test Laboratory (ExTL). This means you can have your products tested/evaluated by QPS to obtain:

- An IECEx Test Report (ExTR)
- A Quality Assurance Report (QAR)
- An IECEx Certificate of Conformity (IECEx CoC)

You can then use the above reports/certificates to obtain national certification in over 35 member countries participating in the IECEx Scheme.

Being accredited in the IECEx Certification of Personnel Competencies Scheme as well, QPS can assess and certify your personnel. You may wish to use this service to prove staff's competence to install and work with equipment used in, or associated with explosive atmospheres, and to demonstrate compliance with the applicable Health and Safety regulations.

Save time and money

By using QPS services to combine testing and certification for both the North American and the international markets we can help you save time and money.

QPS Evaluation Services Inc. EUROPE • www.qpscertification.eu • sales@qpscertification.eu • Phone +31 85 0030 144