# Quality systems for Ex equipment

## New IEC Standard to be used as basis for IECEx certification

**In April, IEC TC (Technical Committee) 31 and SC (Sub-committee) 31M were proud to announce the publication of ISO/IEC 80079-34, the first standard to be developed by this unique subcommittee.**

### A bit of history

IEC SC 31M: Non-electrical equipment and protective systems for explosive atmospheres, was created in 2007, by decisions of both the IEC SMB (Standardization Management Board) and ISO (International Organization for Standardization) TMB (Technical Management Board). After a proposal to create a new ISO Technical Committee dealing with explosion protection of non-electrical equipment and protective systems, both organizations came to the conclusion that the optimal solution in terms of consistency of standardization for electrical and non-electrical equipment would be to create a subcommittee under IEC TC 31: Equipment for explosive atmospheres, dealing with non-electrical equipment and protective systems.

SC 31M is authorized to produce both ISO and ISO/IEC International Standards within IEC and IEC TC 31. The development process occurs according to IEC procedures but voting on CDV and FDIS documents is conducted in parallel, with each organization following its own rules for voting. It is worth noting that this first Standard received 100% approval by the P-members in IEC and by national committees in ISO.

### Quality systems for the Ex sector...

ISO/IEC 80079-34, *Explosive atmospheres – Part 34: Application of quality systems for equipment manufacture,* was written on the basis of the European Standard EN 13980:2002. Also taken into account was a very similar document: IECEx operational document OD005, IECEx Quality System Requirements for Manufacturers.

This new International Standard specifies requirements for a quality system that can be used by an organization for the production of equipment and protective systems for explosive atmospheres. This standard is written in the form of using ISO 9001 for the base requirements and format, and then adding additional specific requirements to relevant clauses for explosive atmospheres. It also contains a detailed informative annex with information relevant to particular types of protection and specific products.

### ...tested and certified by IECEx

IECEx (the IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres) has already announced that it will use the ISO/IEC 80079-34 as reference standard in the IECEx Certified Equipment scheme.

The IECEx Certified Equipment Scheme provides the assurance that products and systems listed on an IECEx CoC (Certificate of Conformity) conform to the international standards that are listed on the IECEx Certificate.

### From international to regional

ISO/IEC 80079-34, including a European Annex about non-electrical equipment,


*ISO/IEC 80079-34 specifies requirements for quality systems used for the production of equipment for explosive atmospheres*

will be also published as a European Standard and will be harmonized under 94/9/EC Directive ("ATEX-Directive"). This harmonized standard will give presumption of conformity to Annex IV and VII of the 94/9/EC Directive.

*Equipment includes miners' protective gear...*

*...or headlamps*