



Explosion Safety

Explosion Safety Revisited

It is now nearing Twenty years since SHAPA published their Practical Guide for Suppliers and Operators of Solids Handling Equipment for Potentially Explosive Dusts, or in short, compliance with ATEX. The guide demonstrated good practice and was endorsed by a foreword by HSE. After a long gestation period, kicking off in 1992, with the “users directive” following a little later in the form of 1999/92/EC, regulations were gradually implemented, with July 2006 having been set for final compliance.

The ATEX Directives (ATmosphere EXplosiv) were innovative, as dust explosions had not been tackled comprehensively until then. Most explosive atmosphere regulations had been concerned with electrical equipment and indeed these were used as the model for the developing ATEX Directives.

Finally, the EC Directives formed the basis of the coming safety legislation, the “manufacturer’s directive” 94/9/EC which has been superseded by 2014/34/EU in 2016

Recently the SHAPA technical committee have reviewed the information available and updated the advice given in the two publications within the SHAPA technical library available at <https://www.shapa.co.uk/technical.php> these being Compliance with Legislation Implementing the Atex directive and an Atex PowerPoint presentation. The main changes for manufacturers of equipment are, The EC declaration of Conformity must be replaced by an EU declaration of conformity, the EC examination certificate must be replaced by an EU examination certificate, importers are now required to put their names and addresses on the products, and manufacturers, importers and distributors responsibilities for traceability and markets surveillance are more precisely defined. Unfortunately with the UK removing itself from the European Union there is still a little uncertainty as to when UK documentation will be required, currently the government has a target of changing over regulations by the end of 2023, but this may change.

In addition to the above regulations in 2016 IECEx standards ISO/IEC 80079-36 and ISO/IEC 80079-37 were published, meaning that for the first time non-electrical equipment for use explosive atmospheres can achieve IECEx certification. IEC 80079-36 is the standard which covers the basic method and requirements for non-electrical equipment and IEC 80079-37 covers non-electrical equipment for types of protection ‘constructional safety’ (“c”), ‘control of ignition sources’ (“b”) and ‘liquid immersion’ (“k”).

Information on all of these changes and how best to apply them to your products, projects and installations can now be accessed through the updated documents within the Shapa technical library at [Atex-Updated](#) and [Atex Certification of Equipment](#) .



Further reading and information can also be found on the HSE website

<https://www.hse.gov.uk/fireandexplosion/atex.htm>

ATEX compliance is obviously just one of many legislative and technical subjects that must be considered within the design of any materials handling, storage or processing installation and it has long been the aim of the Association to furnish member companies with clear, concise information to promote the science behind every successful process. The Technical and Marketing committees strive constantly to educate and inform for the benefit of all in our industry. Please email info@shapa.co.uk or visit www.shapa.co.uk for further enlightenment. or call 01904 373040