

Knowledge supports safety in Ex areas

Chris Agius presents at the ATEX Forum in Denmark



Chris Agius talks in-depth about IECEx at the Forum in November 2013

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It is important that the people working in explosive areas are competent and have the most up-to-date knowledge. Not having this knowledge could have serious repercussions, including costing lives.

A Forum that educates

The Danish Forum and mailing list was set up nine years ago. It's a network of about 350 participants who are registered on a mailing list and are invited to each Forum. The Forum is held twice a year, once in the Eastern part of Denmark and once in the Western part.

The purpose of the Forum is to give participants a place to exchange experiences and knowledge and urge them to give a presentation on what they do in their company to comply with Ex related regulations in Europe. Much of what is covered involves the health and safety aspects of working in explosive atmospheres: how to work in Ex areas, what should be worn and so on. It also covers the framework of the products encompassed by IEC International Standards through TC (Technical Committee) 31: Equipment

for explosive atmospheres, as well as European Standards.

The Forum is to act as a primary contact point in Denmark for those who work in any Ex or explosive area. They might work in the offshore or oil and gas industry, consult in the Ex areas, be a Danish producer of any of a number of different types of equipment, on the railways, in a cement factory (they install their own energy supply based on coal which makes it an explosive area) or as a regulator. As Denmark has a large number of SMEs (small and medium enterprises) there is also a drive to involve them.

"We are focusing on areas like static electricity and others that get less attention. Static electricity can make it all go up in the air. The consequences of an accident are major. You can have a plant destroyed, people killed and so on," says René Nielsen, the manager of the Forum as a result of his position as Senior Consultant in the department of International Leadership and University Cooperation at Danish Standards.

He uses the example of taking a handful of flour, throwing it up in the air and

sparking your lighter. Given the right mixture of oxygen and the ignition, you can have a disaster. While this probably won't happen in an ordinary kitchen, in large industrial bakeries there will be hot surfaces and it's vital that you know how to take proper precautions.

Presentation on IECEx

In his presentation to Forum participants, Chris Agius, the Executive Secretary of IECEx (IEC System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres), dug deeply into the subject of how IECEx can help those working in the Ex sectors in Denmark to increase safety. Agius explained that in the 1990s, standards, certification and approval régimes that aimed to control the risks inherent to Ex areas differed from one country to the next. This meant that if a manufacturer wanted to sell a product in more than one country, they would have to get approval/certification in each one. For many manufacturers, the need to repeat testing was expensive and time consuming.

Based on industry requests, the IEC developed a unique international System that today covers all of the certification needs of the explosive atmosphere sector. It includes individual devices and systems; location evaluation; inspection; installation; maintenance and repair and assessment of the competence of personnel working in this highly specialized area. One of the key advantages the System offers is that testing and assessment only need to be conducted once and are thereafter accepted by all members of the System.

Agius went on to talk about how IECEx has an open and transparent process and clear rules and that industry is able to provide direct input into the way the System works.

CONFORMITY ASSESSMENT



Many surprising industries have potentially Ex environments: sugar refineries; flour mills; and grain silos, to name a few

the assessment of the competence of persons that work in Ex areas.

One of the most important aspects of the IECEx System is its “On-Line” Certificates of Conformity. All IECEx Certificates issued by IECEx approved Certification Bodies have the master version in electronic form live on the IECEx website; any paper or downloaded electronic version is considered an uncontrolled copy of that master IECEx Certificate. The electronic version of any valid IECEx Certificate is fully accessible to the public and allows instant verification of claims made by a vendor.



Chris Agius talks to the Danish ATEX Forum about the history of IECEx

Agius explained that at the beginning IECEx only covered the International certification of Ex equipment. Industry

soon realized that these benefits could equally apply to Ex related services such as repair and overhaul as well as to

A place to discuss Ex issues

Though Agius’ presentation took up a large part of the day, other topics such as how to be sure ATEX (Atmosphères Explosibles) certificates are updated when there is a change in standards and how to deal with gas installations in relation to ATEX regulations were also covered.

“The Forum is an exchange of experience and knowledge. We have people from all sectors of Ex coming to these Forums. When we started out in 2005 we hit on something that people were looking for,” said Nielsen who is also a member of the IEC SMB/JDMT (Standardization Management Board/ Joint Directives Maintenance Team) and has been the IEC NC (National Committee) Secretary of Denmark since 1999.