

An Introduction to the IECEx Certified Service Facility Scheme



February 2018



Pillars of the IEC building



Standards

Development

and

Maintenance

Conformity

Assessment

to relevant

Standards



Pillars of the IEC building



Conformity

Assessment

to relevant

Standards



Standards put into practice...

Conformity Assessment systems provide independent verification of claims of compliance with Standards related to:

- safety
- performance
- reliability
- inter-operatability
- competence

on the basis of testing and assessment of production processes, people and management systems



IEC's Conformity Assessment Systems

24 Member IEC Board on Conformity Assessment (CAB)





IEC's Conformity Assessment Systems

24 Member IEC Board on Conformity Assessment (CAB)

IECEx

System for Certification to Standards Relating to Equipment for use in Explosive Atmospheres

Ex

Equipment

Ex Services

Ex Personnel



IECEx System & Schemes

IEC System for Certification to Standards Relating to Equipment for use in Explosive ('Ex') Atmospheres.















IECEx System & Schemes

IEC System for Certification to Standards Relating to Equipment for use in Explosive ("Ex") Atmospheres.















"Ex" is not an Industry of its own!

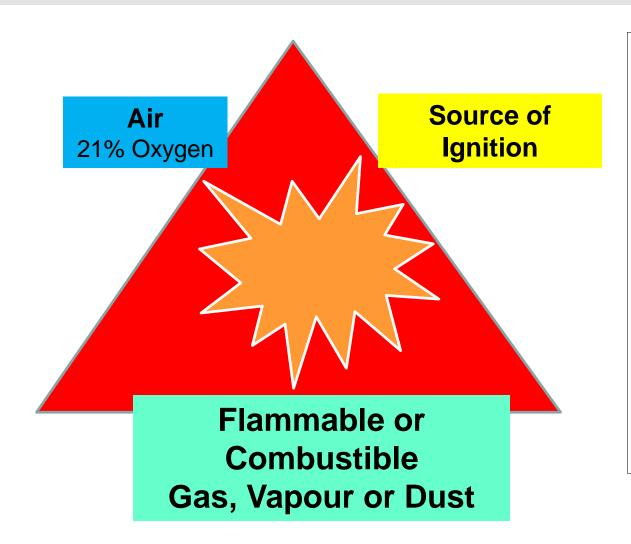
"Ex" is part of almost every Industry known to Man ... examples include:

- Automotive refuelling stations or petrol stations
- Oil + gas extraction
- Oil refineries, rigs and processing plants
- Gas pipelines and distribution centres
- Chemical processing plants
- Printing industries, paper and textiles
- Hospital operating theatres
- Aircraft refuelling and hangars
- Surface coating industries

- Coal mining
- Sewerage treatment plants
- Grain handling and storage
- Woodworking areas
- Sugar refineries, storage, packaging + distribution
- Metal surface grinding, eg aluminium dusts and particles.
- Transportation
- Pharmaceuticals
- Food processing
- Furniture manufacturer
- many others



Cause of explosions ...



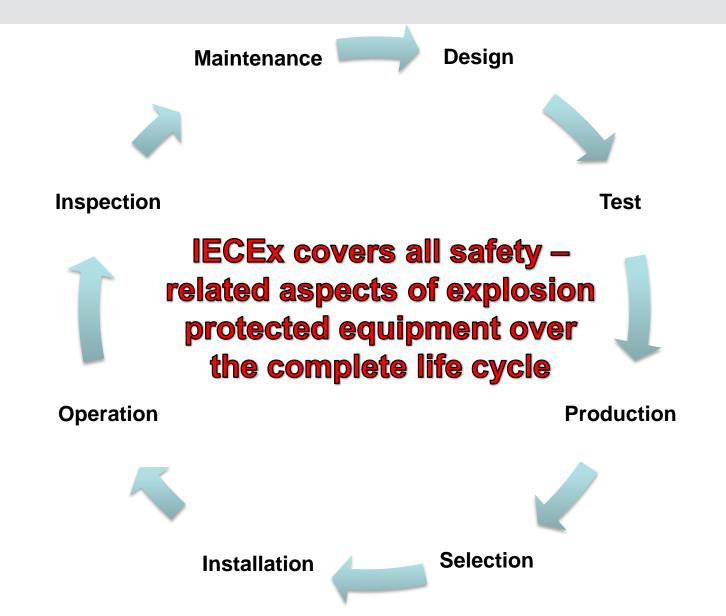
IGNITION SOURCES

Electrical Arcing and Sparking
Mechanical Sparks
Welding
Naked Flames
Hot Gases
Incandescent Materials
Hot Surfaces
Electromagnetic Radiation
Ionising Radiation
HF Radiation
Lasers
Exothermic Chemical Reactions

Ultrasonics
Lightning
Static Electricity
Adiabatic Compressions
Cathodic Protection Currents



Product Lifcycle Coverage





Schemes within the IECEx System

IECEx System

IECEx Equipment Scheme

Certification of Ex Equipment





IECEx Conformity Mark License Scheme







IECEx Services Scheme

Certification of Ex Service Providers





IECEx Certified Persons Scheme (CoPC)

Competency to work in Ex field







Scope and Standards for IECEx include ...

- Electrical Equipment Conformance to IEC 60079 Series and IEC 61241 Series requirements
- Non-electrical Equipment to ISO/IEC 80079 Series
- Hazardous Area Classification to IEC 60079-10
- Ex Equipment Installation and Inspection to IEC 60079-14 and IEC 60079-17 requirements
- Ex Equipment Maintenance, Repair, Overhaul and Reclamation to IEC 60079-19
- Personnel Competence to ISO/IEC 17024



Schemes within the IECEx System

IECEx System

IECEx Equipment Scheme

Certification of Ex Equipment





IECEx Conformity Mark License Scheme







IECEx Services Scheme

Certification of Ex Service Providers





IECEx Certified Persons Scheme (CoPC)

Competency to work in Ex field







IECEx Certified Service Facility Scheme

Certifying providers of

- Design
- Selection
- Installation
- Inspection
- Maintenance
- Repair
- Overhaul
- Reclamation

services on Ex Equipment







IECEx Services Scheme – Repair Workshops

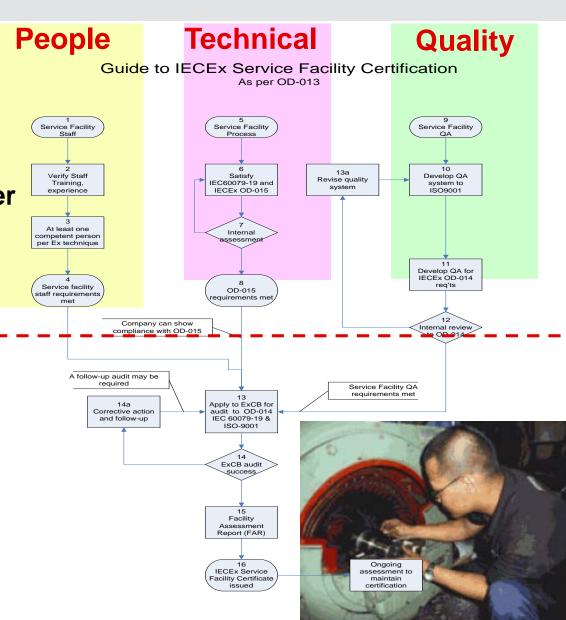
Ex Equipment High Capital cost

Ex Equipment usually Cheaper to Repair than Replace!

Incorrect Repairs can compromise inherent Ex protection

IECEx Certifies Workshops to IEC 60079-14, -17 and -19

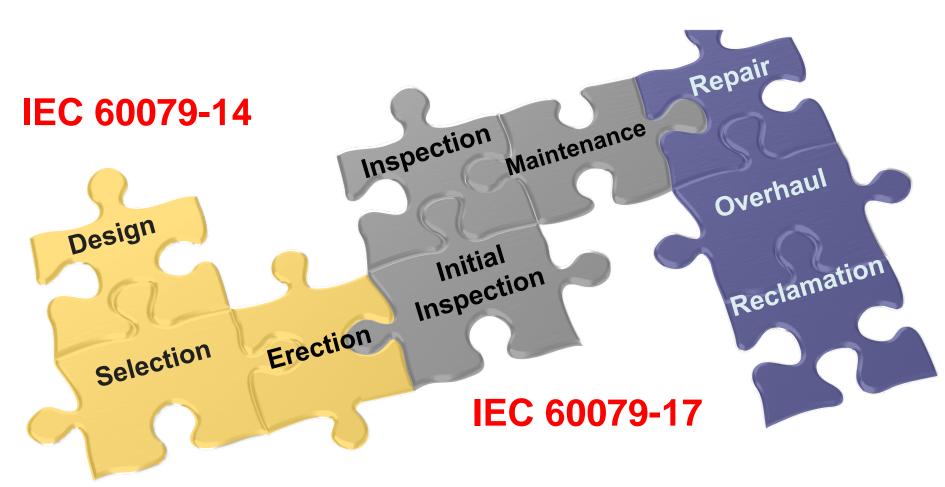
IECEx 03A Guide to Applicant Workshops www.iecex.com





Relevant IEC "Service" Standards

IEC 60079-19





IECEx Certified Service Facilities Scheme

Assesses and certifies that organizations and workshops that provide Ex equipment installation, inspection, repairs, maintenance, overhaul and reclamation services to the Ex industry work in accordance with the requirements of IEC International Standards IEC 60079-14 and IEC 60079-19.

The system includes on-site audits prior to issuing the IECEx Certificate and periodic audits to ensure Repair and Overhaul processes continue to comply with requirements and provides a:

- Facility Assessment Report (FAR)
- IECEx Service Facility Certificate of Conformity (CoC)

and is supported by the IECEx CoPC Scheme



IECEx On-Line Certificate System





INTERNATIONAL ELECTROTECHNICAL COMMISSION SYSTEM FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEX SYSTEM)



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Explosions avoided

IECEx, UNECE and IEC Brazilian NC conference on safety in the Ex field

Preventing dust explosions

IECEx certification provides high level of protection

Mining: A high-risk activity

IECEx ensures protection and safety for Ex equipment and workforce

Competitive advantages

IECEx present at Australasian Oil and Gas Exhibition and Conference

IECEx launches first mobile app

to show international certificates for equipment used in explosive atmospheres

IECEx-AFSEC seminar in Africa



IECEx Malaysia 2014

Kuala Lumpur 19-20 February 2014

Organized by the IEC and IECEx, together with Department of Standards Malaysia, and in conjunction with UNECE (United Nations Economic Commission for Europe), the 2014 IECEx International Conference will take place on 19 and 20 February 2014.

More information from the meeting website

Quick Links

IECEx Certificates and Licences

Certification Bodies (ExCBs) - Equipment

Certification Bodies (ExCBs) - Service Facilities

Certification Bodies (ExCBs) - Certified Persons

Certification Bodies (ExCBs) - Conformity Mark

ExTAG Decision Sheets List

IEC TC31 & IECEx Meeting Schedule

Featured



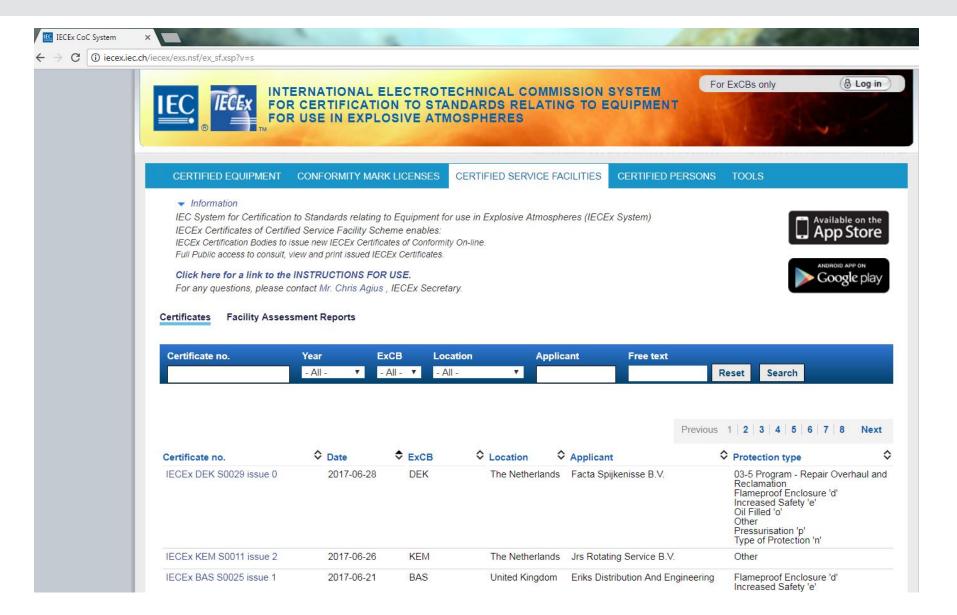
IECEx systems endorsed by UNECE



IECEx mobile apps



IECEx Certified Service Facility Scheme







Thank you for your attention



www.iecex.com

mark.amos@iecex.com