

# Electrical Apparatus Service Association Region 9 - European & World Chapter



## Training Course for the Repair and Overhaul of Explosive Atmosphere Equipment

**Reliable Solutions  
Today!**

### FAQs

#### What does it do?

It assesses the competency of individuals, to International Standard ISO/IEC 17024 : 2003, to repair hazardous area equipment, primarily motors, to BS IEC 60079-19 : 2006, ensuring that the requirements of the apparatus Protection Concept Standard is maintained.

#### What does this entail?

##### For an Operative?

Provided the person has a minimum of 3 years practical experience in industrial equipment repair they need to attend a 3 day training course followed by 2 days of assessment of knowledge and demonstrations of practical skills, knowledge and training.

##### For a Responsible Person?

Provided the person has a minimum of 3 years practical experience in Ex equipment repair they need to attend the same training and assessment as the craftsman but with a higher acceptance level on attainment of knowledge, together with evidence (certificate of attendance) of the 1 day Ex Managers and Responsible Persons, Awareness Course. There is No formal assessment on this course.

#### What is the Managers and Responsible Persons, Awareness Course?

This is a training course for Managers and Responsible Persons to ensure they fully understand their legal responsibilities and liabilities and the amended requirements within IEC 60079-19: 2006. This should be attended by all Repair Centre Managers, whether they do a lot or no Ex repair work together with prospective Responsible Persons.

The Managers need to understand the personnel surveillance requirements and the validation requirements for all recovery procedures and personnel carrying out those procedures. They also need to be aware of the change in the repair standard requiring a Responsible (Approved) Person and the requirement for demonstration of competency. This may assist them in understanding company decisions to concentrate resources in centres of excellence.

#### Why do it?

Business risk reduction: what evidence can you produce that you have taken all reasonable measures to ensure your employees are competent in the task you assign them? If you use in house assessment, what is the competency of the assessor?

End Users will have more confidence in your EASA Trained, Sira (Third Party) Assessed and Certified for Competency Operatives and Responsible Persons under a UKAS Accredited Scheme.

The EASA Ex Competency Assessment is carried out independent from the training by assessors, who are industry experts, approved by and assessed by Sira Certification Service (SCS).

This competency assessment provides 3<sup>rd</sup> party independent assessment that the personnel carrying out Ex repairs are competent and that you have taken all reasonable measures by having this independent assessment with annual surveillance and re-assessment every 3 years.

### **What needs to be done?**

Before attending candidates should be familiar with the requirements of:

- IEC 60079-19: 2006
- Scheme Rules
- Course Syllabus
- Course Assessment Criteria
- EASA/AEMT Rewind Study and Good Practice Guide to Maintain Motor Efficiency

The Course Assessment Criteria gives a sample written assessment and a sample practical assessment.

Candidates will need to be familiar with the following routine activities:

- Core flux tests, minimum EASA Technical Manual
- Round wire conversions i.e. from 4 in parallel to 5 in parallel
- Evaluation of test results resistance, locked rotor current & IR
- Identification of flame paths
- Measurement of flame path dimensions using micrometers
- Measurement of thread condition using GO / NO GO thread gauges
- Installation and testing of diamond thread inserts (Helicoil)
- Assessment of flame path surface finish using surface comparator
- Interpretation of manufacturers drawings to identify surface finishes, tolerances on lengths, maximum flame path gaps
- Identification of Protection Concept Standard used to certify the equipment
- Assessing maximum gaps and surface finish from Protection Concept Standard
- Measurement of winding projections
- Identification of appropriate reclamation procedures for worn components in accordance to IEC 60079-19: 2006

This course is much more demanding than any previous course and is the only course able to meet the requirements of the amended standard. It will only pass those who really know what they are doing and are capable of demonstrating to an independent expert assessor that they know what they are doing. It is essential to make sure anybody attending the course is aware they will be doing the practical sessions as individuals and assessed (fairly constant observation with evaluation of results) in their ability to demonstrate they can do and know, what they are supposed to know within a particular timescale. On the 1<sup>st</sup> course 4 out of 7 failed to be able to demonstrate that they had the practical knowledge as listed above, these are basic requirements and if individuals are out of practice they will need to refresh these skills fore they attend the course.

### **How do we register?**

Course documentation is available at [www.easa.com](http://www.easa.com) on the European & World Chapter Page or Contact Brian Gibbon on [brian.gibbon1@btconnect.com](mailto:brian.gibbon1@btconnect.com)  
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