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

Circulated to: Ex Management Committee, ExMC

TITLE: IECEx Re-Assessment Report of *Intertek Testing and Certification Ltd, UK* and Scope Extension for inclusion of IEC 60079-28

INTRODUCTION

This document contains the IECEx Re-Assessment Report for *Intertek Testing and Certification Ltd, UK* .

During the re-assessment, the IECE Assessment Team took the opportunity to also assess ITS facilities, equipment and competence to undertake testing and certification to

IEC 60079-28 – *Explosive atmospheres – Part 28: Protection of equipment and transmission systems using optical radiation*

Therefore, ExMC Members are requested to consider the recommendation of the IECEx Assessment Team for inclusion of IEC 60079-28 within the scope of ITS UK.

The re-assessment report is presented in the new combined ExCB / ExTL report format as prepared by WG4. Therefore the usual voting form has also been integrated to cover both ExCB and ExTL and hence only a single voting form is required.

This report is hereby submitted for voting.

Please consider this assessment report and return the completed voting form (separate - in Word Format) to the Secretariat by 1st July 2013. A speedy response to the voting process will be very much appreciated.

Chris Agius

IECEx Secretariat

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IECEx ExCB/ExTL ASSESSMENT REPORT FOR INTERTEK, UK

Contents

1 Assessment Information

1.1 Type of Body covered by this assessment:

ExCB for IECEx Certified Equipment Scheme	✓
ExTL for IECEx Certified Equipment Scheme	✓
ExCB for IECEx Certified Service Facilities Scheme	
ExCB for IECEx Conformity Mark Licensing System	✓

NOTE 1 ExCB - IECEx Certification Body

NOTE 2 ExTL - IECEx Testing Laboratory

1.2 Type of assessment:

Pre-assessment for candidate body	
Initial assessment for candidate body	
Re-assessment	✓
Scope extension	✓

1.3 Details of body

1.3.1 Country

GB

1.3.2 Name of body

Intertek Testing and Certification Ltd

1.3.3 Name and title of nominated principal contact

Name	Title	E-mail address
Andy Austin	HazLoc Technical Manager	andy.austin@intertek.com

1.4 Assessment information

1.4.1 Members of the assessment team

Name	Role (modify as necessary)
Jim Munro	IECEx Lead Assessor
Bernard Piquette	IECEx Expert Assessor

1.4.2 Places of assessment

Intertek House Cleeve Road Leatherhead Surrey KT22 7SB 28-29 May 2012	Deeside Lane Chester Cheshire, CH1 6DD 30-31 May 2012

1.4.3 Assessment date(s)

As above

1.5 Scopes

1.5.1 ExCB scope for equipment certification scheme

Number	Title
IEC 60079-0 Edition 6	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 Edition 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures “d”
IEC 60079-2 Edition 5	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure «p»
IEC 60079-5 Edition 3	Explosive atmospheres - Part 5: Equipment protection by powder filling «q»
IEC 60079-6 Edition 3	Explosive atmospheres - Part 6: Equipment protection by oil immersion «o»
IEC 60079-7 Edition 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
IEC 60079-11 Edition 6	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i”
IEC 60079-13 Edition 1	Explosive atmospheres - Part 13: Equipment protection by pressurized room 'p'
IEC 60079-15 Edition 4	Explosive atmospheres – Part 15: Equipment protection by type of protection "n"
IEC 60079-18 Edition 3	Explosive atmospheres – Part 18: Equipment protection by encapsulation “m”
IEC 60079-25 Edition 2	Explosive atmospheres – Part 25: Intrinsically safe electrical systems
IEC 60079-26 Edition 2	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga
*IEC 60079-27 Edition 2	Explosive atmospheres – Part 27: Fieldbus intrinsically safe concept (FISCO)
IEC 60079-28 Edition 1	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation – **SCOPE EXTENSION RECOMMENDED**
IEC 60079-30-1 Edition 1	Explosive atmospheres – Part 30-1: Electrical resistance trace heating – General and testing requirements
IEC 60079-31 Edition 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-35-1 Edition 1	Explosive atmospheres – Part 35-1: Caplights for use in mines susceptible to firedamp – General requirements – Construction and testing in relation to the risk of explosion
*IEC 61241-0 Edition 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
*IEC 61241-1 Edition 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosure “tD”
*IEC 61241-1-1 Edition 1	Electrical apparatus protected by enclosures and surface temperature limitation - Specification for apparatus
IEC 61241-4	Electrical apparatus for use in the presence of combustible dust - Part 4:

Edition 1	Protection by pressurization "pD"
*IEC 61241-11 Edition 1	Electrical apparatus for use in the presence of combustible dust – Part 11: Protection by intrinsic safety 'iD'
*IEC 61241-18 Edition 1	Electrical apparatus for use in the presence of combustible dust - Part 18: Protection by encapsulation "mD"
*IEC 62013-1 Edition 2	Caplights for use in mines susceptible to firedamp - Part 1: General requirements - Construction and testing in relation to the risk of explosion
*IEC 62013-2 Edition 2	Caplights for use in mines susceptible to firedamp - Part 2: Performance and other safety-related matters
*IEC 62086-1 Edition 1	Electrical resistance trace heating – Part 1: General and testing requirements

NOTE 1 Standards shown with an asterisk (*) are superseded standards

NOTE 2 Unless otherwise indicated, earlier editions of standards (even if with a different number) are considered to be covered in the above scope for the purposes of the assessment.

NOTE 3 The above list highlights any extension of scope in the list above for new standards or later editions of standards already in scope.

The scope extension for IEC 60079-28 excludes the ignition tests.

A scope extension for IEC 60079-35-1 was sought. This is the next edition of IEC 62013-1 which is already in the scope.

Intertek have agreed to delete from their scope IEC 62013-2 as they do not have the capability to do the testing required by this standard.

1.5.2 ExTL scope

The ExTL scope is the same as for the ExCB. Leatherhead and Chester have similar capabilities. However, the capability for testing to IEC 60079-28 for optical radiation is only at the Leatherhead site. Also only the Leatherhead site is set up for testing to IEC 60079-30 for electrical resistance trace heating.

1.5.3 ExCB scope for ExMark Scheme

Full scope as shown for ExCB above.

2 Common information

2.1 Legal entity of body

Intertek Testing and Certification Ltd is a listed company in the UK, company number 03272281. This was checked on the UK Companies House website. It is part of the Intertek Group PLC which is a publicly listed company.

2.2 Financial support

The ExCB and ExTL operations are fully funded from the income from testing and certification.

2.3 History

Intertek Testing and Certification Limited was formed on the 1st July 1999 subsequent to the purchase by ITS of ERA Technology's Product Assessment Division. The purchase involved the merging of ITS Cranleigh (UK) Limited and the Product Assessment Division of ERA Technology Ltd. to form Intertek Testing and Certification Limited to be based on the ERA Technology site at Leatherhead, Surrey. A further site at Milton Keynes was added with the purchase of the Consumers' Association Research & Testing Centre. The name was changed to Intertek Testing & Certification on 1 September 2003. The company subsequently purchased the Ex operation in Chester from Epsilon Technical Services Ltd in February 2008.

2.4 Documentation

2.4.1 Quality manual

There is a quality manual QM 1.9 issued 15 August 2007 and last revised before the assessment visit on19 May 2011. This covers all the Intertek operations in the UK. But there will be a new top level manual for the whole global organisation later in the year (possibly August 2012). The existing manual will then be revised to drop material covered in the global manual. There will also be new global standard operating procedures (SOPs).

2.4.2 Procedures

There is an operation manual that sits below the quality manual. In addition there are SOPs that define the procedures in more detail. There are about 50 of these and cover IECEx requirements.

2.4.3 Work instructions

There are a variety of work instructions that apply to both certification and testing processes.

Many of the testing work instructions from Leatherhead are now used as global instructions covering both sites. However, the original work instructions used for Chester that are equipment specific are still retained and available on the company intranet.

2.4.4 Records (including test records where relevant)

All recent assessment and test records are stored in electronic form. Earlier records are still retained in hard copy form. There is still provision to make records by hand, but these are later scanned for storage into the electronic system.

The records procedure is SOP-R.1.6. It specifies that the minimum retention period is 10 years, but it recognises that in some circumstances national requirements might apply.

There are slightly different systems for the two sites in that Leatherhead makes use of project notebooks and Chester uses test data sheets.

2.4.5 Document change control

The only controlled documents are those on the intranet. SOP-DC 1.8 covers document control.

2.5 Confidentiality

In addition to confidentiality agreements signed as part of employment contracts, staff sign an agreement on confidentiality and impartiality for each project. This includes the evaluation engineers, report checker and certificate signatory. An example of this was viewed.

There is a confidentiality and ethics undertaking that is completed by all members of the Safeguarding Committee. An example of a signed agreement was viewed.

2.6 Publications

There is a guidance document for manufacturers who sign up for certification marks in areas not related to Ex. Globally there is a satellite policy for acceptance of manufacturers or other test laboratories but this is also not for Ex. The website is now used as the main means of conveying information.

2.7 Recognition and agreements

There is an agreement with Labtest in Canada but this not used for testing IECEx purposes.

2.8 Internal audit and periodic management review

A variety of internal audits are done each year.

An example of a vertical audit in the Ex area was viewed. Four projects were considered for the Leatherhead site. It was noted that one NCR (CEG/NCR/026) was raised said that there was no evidence in the project folder whether the reports had been sent to the client. This was similar to an issue raised at this assessment. In total there were 10 NCRs. It was noted that 8 of the NCRs had not been closed out at the time of the assessment visit even though the close out date was end of March 2012. Evidence was subsequently provided of close out all NCRs. Other audits, both end-to-end and vertical technical were planned for later in the year. Also planned were audits against specific tests in the Ex standards. The system of internal audit appears very comprehensive.

Management review occurs annually covering all sites. The minutes and agenda of the most recent meeting on 14 December 2011 were viewed. There were no matters of specific

relevance to IECEx discussed but it was advised that the current assessment is expected to be covered at the next meeting.

2.9 Subcontracting, use of other labs and use of other locations

The procedure for subcontracting is SOP-SCS. 1.6. This states that subcontracting for testing will only be to laboratories holding ISO/IEC 17025 accreditation. It also defines the procedures for evaluating a subcontractor and putting in place a formal agreement. Subcontractors appear in an 'Approved Supplier' list but there is also reference to a 'Sub-contract register' which is effectively a subset of the other list.

The only work that is subcontracted for IECEx purposes is the resistance to light test of IEC 60079-0 which is subcontracted to Fisher Scientific UK Ltd.

Work instruction CWI-8xIECEx09 1.2 addresses Acceptance of Customer Supplied Test Results and On-Site Inspection and Testing. It includes reference to OD024. However, it was noted that for CoC IECEX ITS 12.0002X there was no evidence that specific requirements for OD 024 such as an agreement with the applicant had been signed. These issues were subsequently resolved to the satisfaction of the assessment team.

2.10 Training and competence

There is a comprehensive matrix covering competencies of staff for assessment, training and auditing activities supported by appropriate procedures.

2.11 Complaints and appeals (including appeals to IECEx)

The main procedure for complaints appeals is SOP-C.1.4. There are formal letters for acknowledgement and final response on complaints. There is also a register for complaints and complements.

The main procedure for appeals is SOP-AD.1.7. There have not been any appeals. This procedure includes a section specific on appeals to the IECEx Scheme. The customer is advised of the right to appeal to IECEx in the "Application for 'Ex' Services" when an application is made.

2.12 Special facts to be noted

2.12.1 Supporting documentation

Copies of additional supporting information for this assessment have been provided to the applicant and the IECEx Secretariat. These are included in a site assessment report and include:

- Details of issues raised and how these have been resolved
- Checklist for ISO/IEC Guide 65
- Checklist for ISO/IEC 17025
- Completed technical guidance note (TGD) for optical radiation
- Assessors' notes
- Photos of the facilities/tests witnessed

2.13 Recommendations

Based on the assessment performed on 28-31 June 2012, Intertek is recommended for continued acceptance in the IECEx scheme as:

- An *ExCB in the IECEx Certified Equipment Scheme*
- *An ExTL in the IECEx Certified Equipment Scheme*
- *An ExCB in the IECEx Conformity Mark Licensing System*

This is ac*cording* to the scope of the standards listed in this document (including the extension of scope), subject to resolution of the issues found during the assessment.

Jim Munro	Bernard Piquette
Lead Assessor	Expert Assessor

Date: 16 May 2013

3 ExCB for IECEx Certified Equipment Scheme

3.1 Assessment references

a) IECEx02 Edition 4, IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres – Rules of Procedure

b) OD005-1 Edition1, IECEx Quality System Requirements for Manufacturers – Part 1: Guidance on the establishment and maintenance of a quality system

c) OD005-2 Edition 2, IECEx Quality System Requirements for Manufacturers – Part 2: Audit Checklist. (This is available in a Word format for use by ExCBs)

d) ISO/IEC 80079-34 Edition 1, Explosive atmospheres – Part 34: Application of quality systems for equipment manufacture

e) OD009 Edition 2, Issuing of CoCs, ExTRs and QARs

f) IECEx Document OD 025 Edition 2, Guidelines on the Management of Assessment and Surveillance programs for the assessment of Manufacturer's Quality Systems in accordance with the IECEx Scheme

g) OD 026 Edition1, IECEx Certified Equipment Scheme – Guidelines for the qualification of Lead Auditor and Auditors, in accordance with the IECEx System

h) ISO/IEC Guide 65:1996, Edition 1, General requirements for bodies operating product certification systems

i) IECEx Document OD17 Edition3, Drawing and documentation guidance

j) IECEx Technical Guidance Documents (TGDs)

k) ExTAG decision sheets (DSs)

3.2 Candidate ExCB persons interviewed

Name	Position
Andy Austin	HazLoc Technical Manager
Bruce Gill	UK Quality Manager
Adrian Smart	Principal Engineer
Mark Day	Project Manager, Leatherhead
Peter Rawlinson	Hazloc Operations Manager
Paul Moss	Principal Engineer

3.3 Associated ExTL(s)

The ExTL is integral with the ExCB.

3.4 Associated certification functions

Intertek also carries out certification for a broad range of other electrical products, such as medical devices, EMC and electrical appliances.

3.5 National marks and certificates

Intertek has a mark but it is not used for Ex products.

3.6 Standards accepted

See clause 1.6 of this report

3.7 National differences to IEC standards

National differences to IEC standards are those for the European differences listed in the latest version of the IECEx Scheme Bulletin.

3.8 Organisation

3.8.1 Names, titles and experience of the senior executives

Name	Title	Experience
Talban Sohi	Regional Director	None relevant to Ex
Andy Austin	HazLoc Technical Manager	33 years in Ex
Peter Rawlinson	HazLoc Operations Manager	17 years in Ex
Craig Smith	Project Manager, Chester	None in Ex
Mark Day	Project Manager, Leatherhead	5 years in Ex

3.8.2 Name, title and experience of the quality management representative

Name	Title	Experience
Bruce McGill	Commercial &Electrical UK Quality Manager	31 years in quality

3.8.3 Name and title of signatories for certification

Name	Title	Comments
Andy Austin	HazLoc Technical Manager	Operating as a 'Certification Officer'
Adrian Smart	Principal Engineer	As above
Peter Rawlinson	HazLoc Technical Manager	As above
Vijay Varma	Principal Engineer	As above
Paul Moss	Principal Engineer	As above

3.8.4 Other employees in ExCB activity

There are 8 Hazloc engineers in Leatherhead (with a total experience of 69 years in Ex) and 13 Hazloc engineers in Chester (with a total experience of 83 years in Ex) who are employed in both an ExCB and ExTL capacity.

3.9 Organizational structure

See Annex A for the structure. Project managers report to the Operations Manager. They are responsible for managing the business side of the projects and engineers handle the technical side. The engineers may be involved in both ExCB and ExTL activities. The procedures make it clear that they cannot work on a project in an ExCB role if they have been involved in an ExTL role for a project. This applies for both ExTRs and QARs.

3.10 Administration

3.10.1 Administrative structure

The operation is supported by appropriate administrative staff and support systems, such as a companywide intranet.

3.10.2 Indemnity insurance

There is an insurance policy for professional indemnity insurance which was viewed. It has a value of GBP 10,000,000 and is for the global company. It has an excess of GBP 2,000,000. This is valid until 30 September 2012.

3.11 Resources

The operation is well resourced with appropriate facilities, procedures and experienced staff.

3.12 Committees (such as governing or advisory boards)

The Safeguarding Committee meets once a year but can meet more often if required. It ensures that the certification schemes are impartial and that the interest of no single party dominates. A member of the committee chairs the Certification and Appeal Panel.

3.13 Certification operations

3.13.1 National approval/certification methods

In the Ex field Intertek operates as a notified body for ATEX.

3.13.2 Certification policy

The certification policy is included in the Quality Manual, section 2.2.1. It covers the various aspects of certification and includes reference to IECEx.

3.13.3 Application for certification

There is an application form that is used to apply for certification and comprehensive procedures covering the process as noted elsewhere in this report.

3.13.4 Certification decision

The certification decision is taken by a Certification Officer. Those people authorised to operate in that role are defined in the competency matrix. These officers are authorised to use the level 2 IECEx password to make a certificate current. The document on competence, scope, standards ATEX, IECEX CM-ATEXIECEX01 3.3 defines Andy Austin as the certification officer and said the competency matrix defines the deputy certification officers. But the term deputy certification officer does not appear in the competency matrix. The document was subsequently revised to remove this anomaly.

3.13.5 Suspension and cancellation of certificates

Document CWI-OD-IECEx01 2.1 contains procedures for cancellation of IECEx certificates, but there was no mention of suspension in this procedure. The procedure was subsequently revised to remove this anomaly.

3.14 Certificates issued

The following table shows the number of certificates issued for the preceding four years for each type of protection.

Standard numbers	Type of protection or other identifying information	Number of issued certificates				
IEC		2009	2010	2011	2012	Total
60079-1	Ex d	15	29	27	30	101
60079-7	E x e	4	10	7	6	27
60079-11 & -25	Ex i	18	18	33	26	95
60079-15	Ex n	6	2	6	7	21
60079-2 & -13	Ex p	3	5	6	3	17
60079-18	Ex m	1	0	1	4	6
60079-6	Ex o	0	0	1	1	2
60079-31	Ex t	5	6	10	11	32

NOTE Above include certificates to IEC 60079-0

3.15 National accreditation

Intertek holds accreditation from UKAS to EN 45011:1998 (ISO/IEC Guide 65:1996), certificate number 010 (see Annex B). The scope includes 'electrical apparatus for explosive atmospheres'. The latest issue of the certificate was on 23 March 2012. It was advised that UKAS no longer show validity dates on their certificates. The certificate includes the sites in Leatherhead and Chester.

3.1 Assessment of manufacturers and issue of QARs

Paul Moss at Chester looks after the scheduling of audits for manufacturers at present. This is planning to change with integration in the BEAB certification data base with the process being managed from the Leatherhead.

Procedure CM-ATEXIECEx02 1.0 documents the approach for determining the suitability of auditors to carry out Ex audits at manufacturers. The Hazloc Technical Manager is responsible for this activity.

The procedure for audits is CWI-EX-05 3.0. It still showed reference to OD005. ISO/IEC 80079-34, including if necessary the transition to it should be shown in the procedures. The procedure was subsequently revised to address these issues.

3.2 Comments (including issues found during assessment)

Some issues were found with the ExCB, some of which have been included earlier. The following is a summary of the issues, all of which were addressed to the satisfaction of the assessment team:

- In consistency in terminology for key positions
- Lack of incorporation of IEC 80079-34
- Documentation issues
- Some problems with an issued certificate and supporting ExTR

4 ExTL for IECEx Certified Equipment Scheme

4.1 Assessment references

a) IECEx02 Edition 4, IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres – Rules of Procedure

b) IECEx OD003-2 Edition 1, Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme

c) OD005-1 Edition1, IECEx Quality System Requirements for Manufacturers – Part 1: Guidance on the establishment and maintenance of a quality system

d) IECEx OD009 Edition 2, Issuing of CoCs, ExTRs and QARs

e) ISO/IEC 17025:2005 Edition 2, General requirements for the competence of testing and calibration laboratories

f) IECEx Technical Guidance Documents (TGDs)

g) ExTAG decision sheets (DSs)

4.2 Candidate ExTL persons interviewed

Name	Position
Andy Austin	HazLoc Technical Manager
Bruce Gill	UK Quality Manager
Adrian Smart	Principal Engineer
Peter Rawlinson	Hazloc Operations Manager
Paul Moss	Principal Engineer

4.3 Associated ExCB(s)

The ExCB is integral with the ExTL.

4.4 Organisation

4.4.1 Names, titles and experience of the senior executives

Name	Title	Experience
Talban Sohi	Regional Director	None relevant to Ex
Andy Austin	HazLoc Technical Manager	33 years in Ex
Peter Rawlinson	HazLoc Operations Manager	17 years in Ex
Craig Smith	Project Manager, Chester	None in Ex
Mark Day	Project Manager, Leatherhead	None in Ex

4.4.2 Name, title and experience of the quality management representative

Name	Title	Experience
Bruce McGill	Commercial &Electrical UK Quality Manager	31 years in quality

4.4.3 Other employees in ExTL activity

There are 8 Hazloc engineers in Leatherhead (with a total experience of 69 years in Ex) and 13 Hazloc engineers in Chester (with a total experience of 83 years in Ex) who are employed in both an ExCB and ExTL capacity.

4.4.4 Organizational structure

See Annex A for the structure. Project managers report to the Operations Manager. They are responsible for managing the business side of the projects and engineers handle the technical

side. The engineers may be involved in both ExCB and ExTL activities. The procedures make it clear that they cannot work on a project in an ExCB role if they have been involved in an EXTL role for a project. This applies for both ExTRs and QARs.

4.5 Resources

The operation is well resourced with appropriate facilities, test equipment, procedures and experienced staff at both Leatherhead and Chester.

4.6 Test reports issued

The following table shows the number of test reports (ExTRs) issued for the preceding four years for each type of protection.

Standard numbers	Type of protection or other identifying information	Number of issued reports (ExTRs)				
IEC		2009	2010	2011	2012	Total
60079-1	Ex d	17	23	21	30	91
60079-7	E x e	4	12	10	6	32
60079-11 & -25	Ex i	15	26	33	26	100
60079-15	Ex n	7	2	6	7	22
60079-2 & -13	Ex p	3	5	7	3	18
60079-18	Ex m	1	0	1	4	6
60079-6	Ex o	0	0	1	1	2
60079-31	Ex t	5	7	11	11	34

NOTE Above include reports to IEC 60079-0

National accreditation

Intertek holds accreditation from UKAS to ISO/IEC 17025:2005, certificate number 029 (see Annex C). The scope includes 'Electrical Apparatus, Systems, Components, Accessories and Enclosures for use in Potentially Explosive Atmospheres' (see also Annex D). The latest issue of the certificate was on 30 November 2011. It was advised that UKAS no longer show validity dates on their certificates. The certificate includes the sites in Leatherhead and Chester but the scope excludes Chester for IEC 60079-5 and 6, and some of the superseded dust protection standards.

4.7 Calibration

For Leatherhead, the external calibration is done by Tescal. This company provides a complete service of maintaining the data base for the calibrated equipment, providing reports each month of equipment due for calibration and providing a transport service for the equipment to be calibrated at Tescal. All equipment checked was in calibration. However, one instrument was found to have a calibration period of 18 months rather the expected 12 months. This was subsequently changed to 12 months.

For Chester, the external calibration is mostly done by Lambda Calibration Ltd. They have a service that calls every Wednesday to deliver or pickup equipment for calibration. The schedule of equipment requiring calibration is maintained at the Intertek site not by the calibration body. The hygrometer used for measuring conditions in the environmental chambers was calibrated at the National Physical Laboratory and had appropriate calibration for temperate and humidity. All equipment viewed was in calibration.

4.8 Comments (including issues found during assessment)

Some issues were found with the ExCB, some of which have been included earlier. The following is a summary of the issues, all of which were addressed to the satisfaction of the assessment team:

- Calibration of oxygen analyser and calibration periods
- Use of protective coating in pressure transducers and methods of introducing and exhausting has for Ex d testing
- Provision of an operational spark test apparatus
- Achieving effective dust circulation in the dust chamber

5 IECEx Conformity Mark Licensing System

5.1 Comments

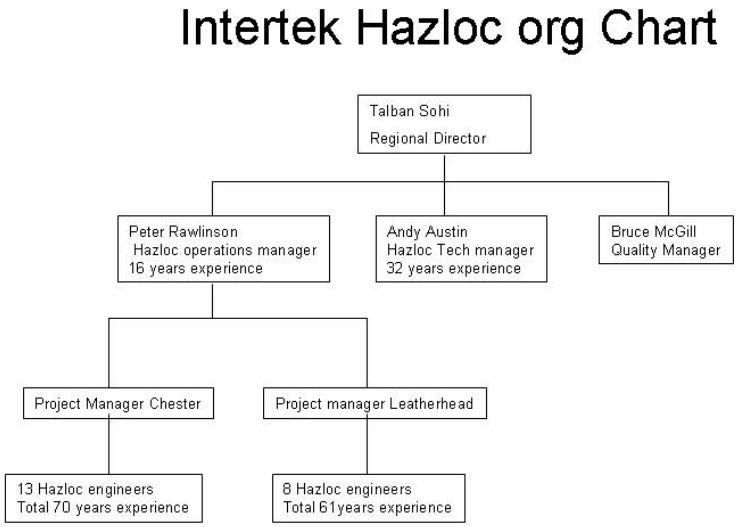
Work instruction CWI-EX-10_1.0 covers the IECEx conformity mark. The procedure is based on IECEx document OD022. The procedure addresses all requirements for the mark licensing system. It has not changed since Intertek was accepted for this activity. No licences have been issued for the mark.

6 Annexes

See Contents. (add, modify or delete annexes as necessary). Please note the following instructions for the IEC template:

NOTE When creating a new annex **DO NOT** type the word Annex, just create a new empty page and then apply the styles ANNEX_title to the first (empty) line. The word "Annex" followed by the letter "A" or "B", etc will automatically appear.

Annex A
Intertek Hazloc Organisation Chart for ExCB and ExTL



Annex B
Accreditation Certificate for Product Certification

United Kingdom Accreditation Service

ACCREDITATION CERTIFICATE

Copy

UKAS
UNITED KINGDOM ACCREDITATION SERVICE

CERTIFICATION BODY
No. 010

Intertek Testing & Certification Ltd

is accredited in accordance with the recognised European Standard
EN 45011:1998 (ISO/IEC Guide 65:1996) *General Requirements for bodies operating product certification systems.*

This accreditation demonstrates technical competence for a defined scope as detailed in and at the locations specified in the schedule to this certificate.

The schedule to this certificate is an essential accreditation document and from time to time may be revised and reissued by the United Kingdom Accreditation Service. The most recent issue of the schedule of accreditation, which bears the same accreditation number as this certificate, is available from the UKAS website www.ukas.com.

This accreditation is subject to continuing conformity with United Kingdom Accreditation Service requirements. The absence of a schedule on the UKAS website indicates that the accreditation is no longer in force.

Accreditation Manager, United Kingdom Accreditation Service

Initial Accreditation date
01 May 1992

This certificate issued on
28 September 2006

The Department for Innovation, Universities and Skills (DIUS) has entered into a memorandum of understanding with the United Kingdom Accreditation Service (UKAS) through which UKAS is recognised as the national body responsible for assessing and accrediting the competence of organisations in the fields of calibration, testing, inspection and certification of systems, products and persons.

Annex C
Accreditation Certificate to ISO/IEC 17025

United Kingdom Accreditation Service

ACCREDITATION CERTIFICATE

UKAS
UNITED KINGDOM ACCREDITATION SERVICE

TESTING LABORATORY
No. 0029

Intertek Testing & Certification Ltd

is accredited in accordance with the recognised International Standard ISO/IEC 17025:2005
General Requirements for the competence of testing and calibration laboratories.

This accreditation demonstrates technical competence for a defined scope as detailed in and at the locations specified in the schedule to this certificate, and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated 18 June 2005).

The schedule to this certificate is an essential accreditation document and from time to time may be revised and reissued by the United Kingdom Accreditation Service. The most recent issue of the schedule of accreditation, which bears the same accreditation number as this certificate, is available from the UKAS website www.ukas.org.

This accreditation is subject to continuing conformity with United Kingdom Accreditation Service requirements. The absence of a schedule on the UKAS website indicates that the accreditation is no longer in force.

Accreditation Manager, United Kingdom Accreditation Service

Initial Accreditation date
22 February 1982

This certificate issued on
18 September 2006

The Department of Trade and Industry (DTI) has entered into a memorandum of understanding with the United Kingdom Accreditation Service (UKAS) through which UKAS is recognised as the national body responsible for assessing and accrediting the competence of organisations in the fields of calibration, testing, inspection and certification of systems, products and persons