

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

TITLE: Scope Extension Assessment Report for, Intertek Testing and Certification Ltd. an Accepted ExCB and Accepted ExTL within the IECEx Equipment Scheme 02, to include IEC 60079-33 in their scope

Circulation to: Members of the IECEx Management Committee, ExMC

INTRODUCTION

Intertek Testing and Certification Ltd, GB, an Accepted ExCB and an Accepted ExTL within the IECEx System, Equipment Scheme 02, has applied to include the following Standard within their scope.

	Scope extension covered by this
	report

A remote site assessment was arranged and conducted. This report details the assessment findings of this scope extension with the IECEx Assessment Team recommending the acceptance of the above scope extension.

This document is hereby submitted for ExMC approval via correspondence using the IECEx on-line voting system. ExMC Members are requested to submit their vote via the IECEx On-line Ballot System by the closing date 2021 01 28

Please refer to OD 050 for guidance on the "IECEx On-line voting system."

Chris Agius

IECEx Secretariat

IECEx Secretariat Australia Square Level 33, 264 George Street Sydney NSW 2000 Australia Tel: +61 2 4628 4690 Fax: +61 2 4625 3480 Email: chris.agius@iecex.com



December 2020 IEC System for certification to standards relating to equipment for use in Explosive Atmospheres (IECEx System)

IECEx Assessment Report Form

IECEx Assessment Report Form for use by IECEx Assessment Teams to report Assessments conducted according to the IECEx Assessment Procedures of

a) Operational Document IECEx OD003-2 for the Certified Equipment Scheme

IECEx ExCB/ExTL assessment report for Intertek Testing & Certification Limited UK (ITS)

INTERNATIONAL ELECTROTECHNICAL COMMISSION ExMC/1672/DV



CONTENTS

1	Assessment information5		
	1.1	Type of Body covered by this assessment:	5
	1.2	Type of assessment:	5
	1.3	Details of body	5
	1.3.1	Country	5
	1.3.2	•	
	1.3.3	•	
	1.4	Assessment information	
	1.4.1		
	1.4.2		
	1.4.3		
	1.5	Application information and background information on the assessment	
	1.6	Scopes	
	1.6.1		
	1.6.2		
2	Com	mon information	
	2.1	Legal entity of body	
	2.2	Financial support	
	2.2	History	
	2.3	Documentation	
	2.4.1		
	2.4.2	•	
	2.4.3		
	2.4.4		
	2.4.4		
	2.4.5	Confidentiality	
	2.6	Communication with public and customers (Hard copy and Electronic)	
	2.0	Recognitions and agreements	
	2.7	Internal audit	
	2.0	Management review	
	2.5	Contracting, subcontracting and witness testing	
	2.10		
	2.10.	-	
	2.10.	5	
	2.10.	Training and competence	
	2.11	Complaints and appeals (including appeals to IECEx)	
	2.12	Impartiality	
	2.13	Commenting on ExTAG Documents	
	2.15	Special facts to be noted	
	2.16	Supporting documentation	
	2.10	Recommendations	
3		B for IECEx Certified Equipment Scheme	
0			
	3.1 3.1.1	Assessment references	
	3.1.1		
	3.1.2	2 Additional references applied for this assessment Candidate ExCB persons interviewed	
	3.2		11



3.3	Associated ExTL(s)	11
3.4	Associated certification functions	12
3.5	National marks and certificates	12
3.6	Standards accepted	12
3.7	National differences to IEC standards	
3.8	Organisation	12
3.8.1	Names, titles and experience of the senior executives	12
3.8.2	Name, title and experience of the quality management representative	12
3.8.3	Name and title of signatories for certification	12
3.8.4	Other employees in ExCB activity	12
3.9	Organizational structure	
3.10	Indemnity insurance	
3.11	Resources	
3.12	Committees (such as governing or advisory boards)	
3.13	Certification operations	
3.13.		
3.13.		
3.13.		
3.13.		
3.13.	•	
3.14	Certificates issued	
3.15	National accreditation	
3.16	Assessment of manufacturers and issue of QARs	
3.17	Comments (including issues found during assessment)	
	for IECEx Certified Equipment Scheme	
4.1	Assessment references	
4.1.1	General references	
4.1.2		
4.2	Candidate ExTL persons interviewed	
4.3	Associated ExCB(s)	
4.4	Organisation	
4.4.1	Names, titles and experience of the senior executives	
4.4.2		
4.4.3		
4.5	Organizational structure	
4.6	Resources	
4.7	Test reports issued	
4.8	National accreditation	
4.9	Calibration	
4.10	Tests witnessed during the assessment visit	
4.11	Participation in IECEx Proficiency Testing Programs	
4.12	Comments (including issues found during assessment)	
	xes	
	Overall Organisation Chart	
	Drganisation Chart of ExCB and ExTL	
	Accreditation Certificate for ISO/IEC 17065	
Annex D /	Accreditation Certificate for ISO/IEC 17025	
	Page 4 of 2	21



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		
Surveillance		
Re-assessment		
Scope extension		

1.3 Details of body

1.3.1 Country

UK

1.3.2 Name of body

Intertek Testing & Certification Limited UK (ITS)

1.3.3 Name and title of nominated principal contact

Name	Title	E-mail address
Wesley Van Hill	Global Technical Manager Hazloc	wesley.vanhill@intertek.com

1.4 Assessment information

1.4.1 Members of the assessment team

Name	Role
Dr Jim Munro	IECEx Lead Assessor

1.4.2 Place(s) of assessment

This was an online assessment covering both Intertek operations in the UK as shown below.

Intertek Testing and Certification Ltd – Leatherhead, Surrey, UK	Intertek Testing and Certification Ltd – Chester, Cheshire UK

1.4.3 Assessment date(s)

Online meetings of approximately a day's duration each took place on 28 to 29 July 2020 (for both scope extension and mid-term assessment). A remote closing meeting was held at the end of the second day.

1.5 Application information and background information on the assessment

Intertek UK made an application for the scope extension for IEC 60079-33 to the IECEx Secretariat on 27 April 2020. This report addresses that scope extension. The assessment focussed on the competence of staff, introduction of appropriate procedures and the approach used regarding independent verifiers. Due to travel restrictions because of COVID-19, the



provisions of OD 060 and OD 233 were utilised to carry out this assessment remotely with a combination of offline review of documentation and online meetings using Microsoft Teams.

A mid-term assessment was carried out in conjunction with this assessment and the results of this assessment appear in a separate report to the IECEx Secretariat (using form OD 204).

1.6 Scopes

1.6.1 ExCB scope for equipment certification scheme

The table below shows the Intertek UK ExCB existing scope and proposed scope extension.

Number	Title	Comments, eg if scope change
IEC 60079-0 Edition 7.0	Explosive atmospheres - Part 0: Equipment - General requirements	
IEC 60079-1 Edition 7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"	
IEC 60079-2 Edition 6.0	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure «p»	
IEC 60079-5 Edition 4.0	Explosive atmospheres - Part 5: Equipment protection by powder filling «q»	
IEC 60079-6 Edition 4.0	Explosive atmospheres - Part 6: Equipment protection by oil immersion «o»	
IEC 60079-7 Edition 5.1	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"	
IEC 60079-11 Edition 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"	
IEC 60079-13 Edition 2.0	Explosive atmospheres - Part 13: Equipment protection by pressurized room 'p'	
IEC 60079-15 Edition 5.0	Explosive atmospheres – Part 15: Equipment protection by type of protection "n"	
IEC 60079-18 Edition 4.1	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"	
IEC 60079-25 Edition 2.0	Explosive atmospheres – Part 25: Intrinsically safe electrical systems	
IEC 60079-26 Edition 3.0	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga	
*IEC 60079-27 Edition 2.0	Explosive atmospheres – Part 27: Fieldbus intrinsically safe concept (FISCO)	
IEC 60079-28 Edition 2.0	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation	
IEC/IEEE 60079-30-1 Edition 1.0	Explosive atmospheres – Part 30-1: Electrical resistance trace heating – General and testing requirements	
IEC 60079-31 Edition 2.0	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"	



		December 2020
Number	Title	Comments, eg if scope change
IEC 60079-33 Edition 1.0	Explosive atmospheres – Part 33: Equipment protection by special protection "s"	Scope extension covered by this report
IEC 60079-35-1 Edition 1.0	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	
IS0 80079-36 Edition 1.0	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements	
ISO 80079-37 Edition 1.0	Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres – Non electrical type of protection constructional safety "c" control of ignition source "b", liquid immersion "k"	
IEC TS 60079-46 Edition 1.0	Explosive atmospheres – Part 46: Equipment assemblies	
*IEC 61241-0 Edition 1.0	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements	
*IEC 61241-1 Edition 1.0	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosure "tD"	
*IEC 61241-4 Edition 1.0	Electrical apparatus for use in the presence of combustible dust - Part 4: Protection by pressurization "pD"	
*IEC 61241-11 Edition 1.0	Electrical apparatus for use in the presence of combustible dust – Part 11: Protection by intrinsic safety 'iD'	
*IEC 61241-18 Edition 1.0	Electrical apparatus for use in the presence of combustible dust - Part 18: Protection by encapsulation "mD"	
*IEC 62013-1 Edition 2.0	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 2.0	Caplights for use in mines susceptible to firedamp - Part 2: Performance and other safety-related matters	
IECEx DS2015/001A 2015 10 09	Equipment assemblies	

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.

1.6.2 ExTL scope

The ExTL scope is the same as the ExCB and this scope extension report also covers the ExTL which is based in two locations in the UK, Leatherhead and Chester.

2 Common information

2.1 Legal entity of body

Not relevant as this is a scope extension assessment. This was covered in re-assessment report ExMC/1480/R. Other entries below shown as not relevant are also covered in the re-assessment report.



2.2 Financial support

Not relevant as this is a scope extension assessment.

2.3 History

Not relevant as this is a scope extension assessment.

2.4 Documentation

2.4.1 Quality manual

The quality system consists of four levels:

Level 1: Global Quality Manual (GMS documents)

Level 2: Procedures (GMS for global, SMS for Scheme specific, RMS for regional and LMS for local)

Level 3: Work instructions (WI)

Level 4: Forms and templates (GFT for global, SFT for Scheme specific, RFT for regional and LFT for local)

Documents are available on the Intranet.

Global requirements are covered in the levels described above. IECEx specific requirements are covered in SMS-IECEx-OP-19.

The same quality manual is relevant for the ExCB and the two locations of the ExTLs. Relevant documents were reviewed during the assessment and found to meet the requirements of the IECEx. Revised or additional documents were produced for the scope extension for IEC 60079-33. At the time of the initial review and during the online session these were still in draft. The relevant documents are described below. After the online assessment, the documents were finalised and issued. Training was also provided to staff on IEC 60079-33, OD 233 and the application of the Intertek documentation.

The issued documentation package was found to meet the requirements of IEC 60079-33 and IECEx.

2.4.2 Procedures

Procedures are stored electronically and are available on the Intertek Intranet.

For the scope extension, a modified form of procedure SMS-IECEx-OP-19 was reviewed. It included reference to OD 233 *IECEx Certified Equipment Scheme - Assessment of Ex "s" Equipment.*

2.4.3 Work instructions

Work instructions are stored electronically and are available on the Intertek Intranet.

In addition to the modification of SMS-IECEx-OP-19, a work instruction, WI-Hazloc-UK-086 *UTILIZATION OF IEC 60079-33*, was also prepared for Ex s and this was reviewed. This work instruction included the following approach regarding independent reviewers:

- The first independent verifier must be chosen from within the Intertek list of qualified IECEx reviewers.
- The second independent verifier may be chosen from Intertek list of qualified IECEx reviewers, other location or entities within Intertek or may be a third-party verifier.
- There is a preference to choosing a third independent verifier from another IECEx ExCB.

There is a form EJ-Hazloc-Global-087 – Issue Date August 12, 2020 QA RELATED ASPECTS OF IEC 60079-33 CERTIFICATION for assessment of manufacturers applying for certification to IEC 60079-33.



When initially reviewed and discussed it was found that the work instruction did not clearly indicate how IEC 60079-33 and OD 233 would be implemented. However, by the end of the online assessment process, Intertek UK had made appropriate changes to demonstrate how this would occur. The Work Instruction was then issued as an active document.

2.4.4 Records (including test records where relevant)

Records are stored in hard copy as well as in electronic format.

2.4.5 Document change control

Not relevant as this is a scope extension assessment.

2.5 Confidentiality

Not relevant as this is a scope extension assessment.

2.6 Communication with public and customers (Hard copy and Electronic)

Not relevant as this is a scope extension assessment.

2.7 Recognitions and agreements

Not relevant as this is a scope extension assessment.

2.8 Internal audit

Not relevant as this is a scope extension assessment.

2.9 Management review

Not relevant as this is a scope extension assessment.

2.10 Contracting, subcontracting and witness testing

2.10.1 Contracting

There are presently no contractors used.

2.10.2 Subcontracting

Covered by previous assessment, ExMC/1480/R. It was confirmed that there will be no subcontracting for the IEC 60079-33 Standard which is the subject of this scope extension assessment.

2.10.3 Witness testing

SMS-IECEx-OP-19 *IECEx Certified Equipment Scheme* includes reference to SMS-IECEx-OP-07a and OD 024. The SharePoint site is used to retain agreements and the IECEx Secretariat is notified of these activities approximately every six months (most recently 19 May 2020). Where subcontracting is used, the details will be included in the appropriate field of the IECEx ExTR cover page.

2.11 Training and competence.

Procedures and documentation for training and competence are available at the following address: https://sharepoint.intertek.com/ce/UKelectrical/default.aspx (Intertek Intranet)/.

The following procedures deal with training and competence:

GMS-SP-01 New Staff Training

GMS-SP-02 General Staff Training

GMS-SP-03 Managerial Staff Training

GMS-SP-04 Technical Staff Training

GMS-SP-05 Qualification of Technical Staff Competence

GMS-SP-06 Qualification of Reviewers & Mandated Reviewers



GMS-SP-07 Qualification of Certification Body Staff

GFT-SP-01A Training record

GFT-SP-05A Technical Personnel Qualification Tracking Record

Staff training needs and competencies are reviewed by the HAZLOC Technical Manager on an annual basis.

Details of staff competencies are included in the site assessment report. At the time of the online meeting these were in draft. Subsequently the revised matrix was issued.

2.12 Complaints and appeals (including appeals to IECEx)

Not relevant as this is a scope extension assessment.

2.13 Impartiality

The impartiality requirements for ISO/IEC 17065 and 17025 will be applied to ensure the independence of verifiers, as required by IEC 60079-33, is ensured.

NOTE: Include reference to methods to achieve the requirements impartiality with the requirements of ISO/IEC 17065 and ISO/IEC 17025. Also organisational arrangements (such as corporate structures) that may impact on impartiality should be reviewed.

2.14 Commenting on ExTAG Documents

Not relevant as this is a scope extension assessment.

2.15 Special facts to be noted

There are no special facts to be noted.

2.16 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 or provided separately and include:

- Details of issues raised and how these have been resolved
- Completed Technical Capability Document (TCD) for each site
- Assessor's notes

2.17 Recommendations

Based on the assessment performed on 28 and 29 July 2020 Intertek Testing & Certification Limited UK is recommended for the scope extension to IEC 60079-33 acceptance in the IECEx scheme as:

- An ExCB in the IECEx Certified Equipment Scheme
- An ExTL in the IECEx Certified Equipment Scheme

Jim Munro
IECEx Lead Assessor

Date: 12 December 2020



3 ExCB for IECEx Certified Equipment Scheme

3.1 Assessment references

3.1.1 General references

- a) IECEx02 IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres Rules of Procedure
- a) OD003-2 Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme
- b) ISO/IEC 80079-34 Edition 2, Explosive atmospheres Part 34: Application of quality systems for equipment manufacture
- c) OD009 Issuing of CoCs, ExTRs and QARs
- d) IECEx Document OD 025 Guidelines on the Management of Assessment and Surveillance programs for the assessment of Manufacturer's Quality Systems in accordance with the IECEx Scheme
- e) OD0026 IECEx Certified Equipment Scheme Guidelines for the qualification of Lead Auditor and Auditors, in accordance with the IECEx System
- f) ISO/IEC 17065: 2012, Edition 1, General requirements for bodies operating product certification systems Conformity assessment — Requirements for bodies certifying products, processes and services
- g) IECEx Technical Capability Document (TCD)
- h) ExTAG decision sheets (DSs)

NOTE The latest editions of the above documents were applied

3.1.2 Additional references applied for this assessment

OD 233 IECEx Certified Equipment Scheme - Assessment of Ex "s" Equipment.

OD 280 Guide to Certification of Non-electrical Equipment and Protective Systems

3.2 Candidate ExCB persons interviewed

The following people were interviewed during the online assessment.

Name	Position
Wesley Van Hill	Global Technical Manager
Gareth Parker	Lab Manager (Chester)
Wendy Fischer	Lab Manager (Leatherhead)
Andy Strachan	Quality Manager
Anne Harlacher	Quality Engineer
Adrian Smart	Senior Consultant Engineer/Technical Lead

3.3 Associated ExTL(s)

The following ExTL is covered by this assessment"

Intertek Testing and Certification Ltd located in Leatherhead, Surrey, UK and in Chester, Cheshire UK.

The following are also associated ExTLs but not covered by this assessment:

Intertek India Private Ltd – New Delhi, India

Intertek Testing Services NA Ltd – Plano, TX, USA

Intertek Testing Services NA Ltd - Cortland, NY, USA

Intertek Testing Services NA Ltd – Edmonton, Canada

Intertek Italia Spa. - Udine, Italy (ATL)



3.4 Associated certification functions

Not relevant as this is a scope extension assessment.

3.5 National marks and certificates

Not relevant as this is a scope extension assessment.

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 United Kingdom 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
Andre Le Croix	CEO	None in Ex
Graham Ritchie	Executive Vice President - Europe	None in Ex
Rob Van Dorp	Chief Executive, UK & Eire	None in Ex
Henriette Bulmer	Business Line Leader – Electrical UK	None in Ex

3.8.2 Name, title and experience of the quality management representative

Name	Title	Experience
Andrew Strachan	Quality Manager	23 years
Annechiel Harlacher	Quality Engineer	3 years

3.8.3 Name and title of signatories for certification

Name	Title	Comments
Adrian Smart	Senior Consultant Engineer	Based in Leatherhead ExTL
Paul Moss	Principal Engineer	Based in Chester ExTL
Mark Newman	Senior Engineer	Based in Chester ExTL
Wesley Van Hill	Global Technical Manager	

3.8.4 Other employees in ExCB activity

Name	Title	Responsibility and Experience in Ex
Gareth Parker	Lab Manager - Chester	9 years
Wendy Fischer	Lab Manager - Leatherhead	7 years
Pierrick Balaire	Director - Electrical	None – in business development

3.9 Organizational structure

The organizational structure is shown in Annex A and Annex B.

3.10 Indemnity insurance

Not relevant as this is a scope extension assessment.



3.11 Resources

The Intertek UK ExCB has the appropriate resources of competent staff and appropriate procedures to be able to certify to IEC 60079-33.

3.12 Committees (such as governing or advisory boards)

Not relevant as this is a scope extension assessment.

3.13 Certification operations

3.13.1 National approval/certification methods

Not relevant as this is a scope extension assessment.

3.13.2 Certification policy

Not relevant as this is a scope extension assessment.

3.13.3 Application for certification

The normal application for certification is modified in the appropriate procedures and work instructions to address the different approach required for Ex s in IEC 60079-33 and OD 233.

3.13.4 Certification decision

The following procedures cover the certification decision:

GMS-OP-22 Certification Review and GMS-OP-23 Certification Granting

3.13.5 Suspension and cancellation of certificates

Not relevant as this is a scope extension assessment.

3.14 Certificates issued

The following tables shows the IECEx certificates that have been issued for the past four years. The numbers indicate active involvement in a wide range of explosion protection techniques that may be relevant for applications for IEC 60079-33.

Standard numbers	Type of protection or other identifying information	Numb	per of iss (for las	ued cert t 4 years		Total
		2017	2018	2019	2020 (to July)	
60079-0	Explosive atmospheres - Part 0: Equipment - General requirements	115	104	93	57	369
60079-1	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures 'd'	99	84	78	45	306
60079-2	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosures 'p'	34	19	23	14	90
60079-5	Explosive atmospheres - Part 5: Equipment protection by powder filling 'q'	0	0	0	0	0
60079-6	Explosive atmospheres - Part 6: Equipment protection by oil immersion 'o'	0	1	0	1	2
60079-7	Explosive atmospheres - Part 7: Equipment protection by increased safety 'e'	25	30	32	14	101
60079-11	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety 'i'	43	35	32	24	134
60079-13	Explosive atmospheres - Part 13: Equipment protection by pressurized room 'p'	1	0	0	0	1



December 202				er 2020		
Standard numbers	Type of protection or other identifying information	Number of issued certificates (for last 4 years)				Total
		2017	2018	2019	2020 (to July)	
60079-15	Explosive atmospheres - Part 15: Equipment protection by type of protection 'n'	7	12	5	5	29
60079-18	Explosive atmospheres - Part 18: Equipment protection by encapsulation "m"	2	7	5	3	17
60079-25	Explosive atmospheres - Part 25: Intrinsically safe systems	0	0	0	0	0
60079-26	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga	9	4	2	1	16
60079-27	Explosive atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO)	0	0	0	0	0
60079-28	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation	24	10	18	8	60
60079-30-1	Explosive atmospheres - Part 30-1: Electrical resistance trace heating - General and testing requirements	1	0	0	1	2
60079-31	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"	39	32	36	21	128
60079-35-1	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	0	0	0	0	0
60079-35-2	Part 35-2: Caplights for use in mines susceptible to firedamp - Performance	0	0	0	0	0
80079-36	Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements	2	6	6	1	15
80079-37	Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"	2	6	6	1	15
60079-46	Explosive atmospheres – Part 46: Equipment assemblies	0	0	1	2	3

Intertek have occasionally done projects for ATEX using the Essential Health and Safety Requirements as the basis when equipment could not comply with a harmonised standard, for example oil immersion with a higher voltage than permitted by the standard at the time. This has provided them with some practical experience with the concept of Ex s.

3.15 National accreditation

Intertek holds the following national accreditation, UKAS 17065 No. 010, Issue No. 90 (see Annex C for the accreditation information). At the time of the assessment, they were waiting on UKAS for an assessment to cover the scope extension for IEC 60079-33. They may require an Annual Surveillance.

NOTE The national accreditation is checked annually by the IECEx Secretariat.

3.16 Assessment of manufacturers and issue of QARs

QARs are performed in accordance with SMS-IECEx-OP-24.



3.17 Comments (including issues found during assessment)

Some issues, as indicated elsewhere in this report, were found and addressed during the online assessment process. At the end of that process the only outstanding issue was for relevant draft documentation to be made active in the quality system and this was subsequently done.



4 ExTL for IECEx Certified Equipment Scheme

4.1 Assessment references

4.1.1 General references

- i) IECEx02 IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres Rules of Procedure
- j) IECEx OD003-2 Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme
- k) IECEx OD009 Issuing of CoCs, ExTRs and QARs
- I) ISO/IEC 17025:2005 Edition 2, General requirements for the competence of testing and calibration laboratories
- m) IECEx Technical Capability Document (TCD)
- n) ExTAG decision sheets (DSs)
- o) OD 202 IECEx Certified Equipment Scheme IECEx Proficiency Testing Program

NOTE The latest editions of the above documents were applied.

4.1.2 Additional references applied for this assessment

OD 233 IECEx Certified Equipment Scheme - Assessment of Ex "s" Equipment.

4.2 Candidate ExTL persons interviewed

Clause 3.2 of this report shows all people interviewed during the online assessment.

4.3 Associated ExCB(s)

Intertek Testing and Certification Ltd - Leatherhead, Surrey, UK

4.4 Organisation

4.4.1 Names, titles and experience of the senior executives

See Clause 3.8.1 of this report.

4.4.2 Name, title and experience of the quality management representative

Name	Title	Experience
Andrew Strachan	Quality Manager	23 years
Annechiel Harlacher	Quality Engineer	4 years

4.4.3 Other employees in ExTL activity

Name	Title/responsibility	Experience in Ex
Wendy Fischer	Lab Manager	7 years
Adrian Smart	Senior Consultant Engineer	28 years
Vijay Varma	Senior Engineer	37 years (retired June 2020)
Lloyd Curling	Senior Engineer	15 years
Richard Antram	Engineer	10 years
Lukasz Tomczyk	Senior Engineer	13 years
George Emmanuel	Graduate Engineer	4 years
Paul Moss	Principle Engineer	20 years
Richard Smith	Principle Engineer	23 years
Mark Newman	Senior Engineer	14 years
Gareth Parker	Lab manager	9 years
Richard Tunnicliffe	Senior Engineer	12 years

4.5 Organizational structure

The organizational structure is shown in Annex A and Annex B.



4.6 Resources

Intertek UK have the appropriate resources of competent staff, appropriate procedures and the necessary test equipment to be able to carry out the ExTL activities necessary to support certification to IEC 60079-33.

4.7 Test reports issued

Intertek issues a comparable number of test reports to the certificates shown in 3.14.

4.8 National accreditation

Intertek holds the following national accreditation for ISO/IEC 17025: UKAS No. 0029 Issued 30 June 2020 (see Annex D for the accreditation information). At the time of the assessment, they were waiting on UKAS for an assessment to cover the scope extension for IEC 60079-33. They may require an Annual Surveillance.

NOTE The national accreditation is checked annually by the IECEx Secretariat.

4.9 Calibration

There are no tests specified by IEC 60079-33 and so it was not necessary to look at calibration which was covered in re-assessment report ExMC/1480/DV.

4.10 Tests witnessed during the assessment visit

No tests were witnessed during the assessment visit because there are no additional tests specified in IEC 60079-33.

4.11 Participation in IECEx Proficiency Testing Programs

Year(s) of participation	IECEx Proficiency Testing program	General information about results
2011-2012	Program 1 "Explosion pressure"	Did not participate
2011-2012	Program 2 "Spark Ignition"	Did not participate
2013-2014	Program 3 "Flame Transmission	Leatherhead only
2013-2014	Program 4 "Temperature Classification"	Leatherhead only
2015-2016	Program 5 "Electrostatic Charge"	Did not participate
2015-2016	Program 6 "Intrinsic Safety"	Did not participate
2017-2018	Program 7 "Explosion Pressure"	Chester only. Leatherhead did not submit results due to health and safety reasons. Testing currently being performed in Chester location
2017-2018	Program 8 "Pressurized Enclosure"	Both locations participated
2019-2020	Program 9 "Battery Testing"	Both locations participated - In process
2019-2020	Program 10 "Tests of Enclosures"	Both locations participated – In process

Program: PTB Ex PT Scheme

4.12 Comments (including issues found during assessment)

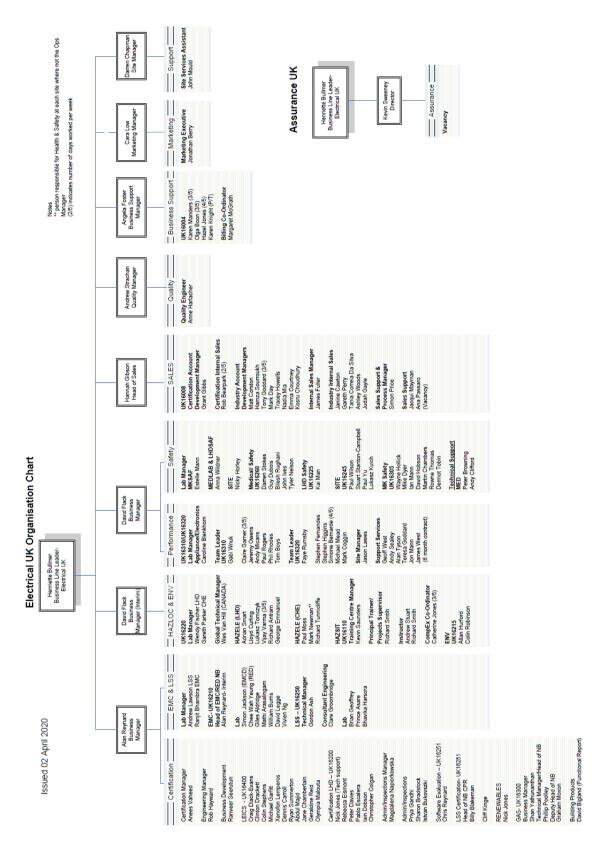
There were no issues raised for the ExTL.

5 Annexes

See Contents.

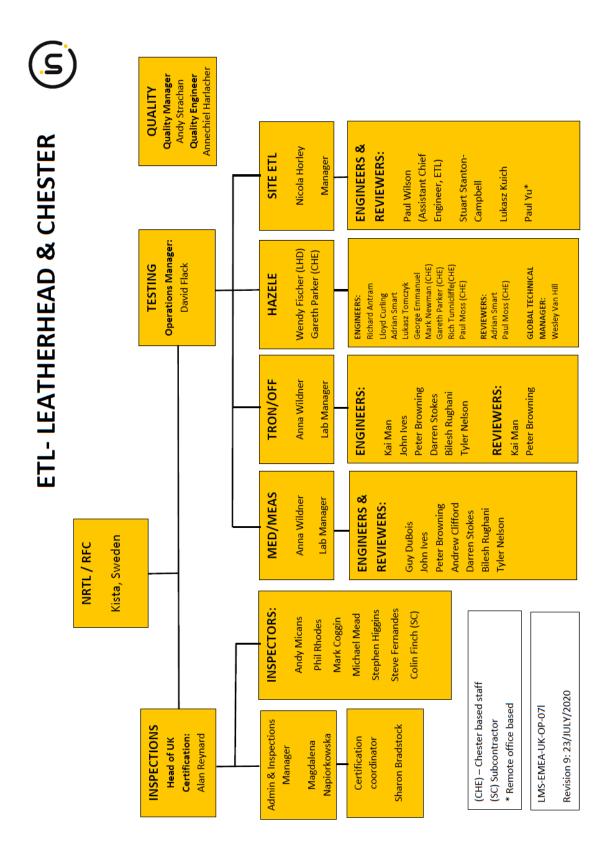


Annex A Overall Organisation Chart





Annex B Organisation Chart of ExCB and ExTL





Annex C Accreditation Certificate for ISO/IEC 17065

Schedule of Accreditation

United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

Intert	ek Testing & Certification Ltd		
Issue No: 090 Issue date: 20 July 2020			
Academy Place 1-9 Brook Street Brentwood	Contact: Mr Andrew Strachan Tel: +44 (0)1372 370900 Fax: +44 (0)1372 370999 E-Mail: mailing.uk@intertek.com		
ESSEX CM14 5NQ	E-Mail: mailing.uk@intertek.com Website: www.intertek.com		
	Academy Place 1-9 Brook Street Brentwood Essex		

Intertek Testing & Certification Ltd Intertek House Cleeve Road Leatherhead Surrey KT22 7SA United Kingdom	Intertek Testing & Certification Ltd Centre Court Meridian Business Park Leicester LE19 1WD United Kingdom
Intertek Testing & Certification Ltd Deeside Lane Chester CH1 6DD United Kingdom	Intertek Testing & Certification Ltd Davy Avenue Knowhill Milton Keynes Bucks MK5 BNL United Kingdon

Assessment Manager: JJ

Page 1 of 39



Annex D **Accreditation Certificate for ISO/IEC 17025**

Schedule of Accreditation United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

ಯಾ	Intertek Testing & Certification Ltd			
	Issue No: 110 Issue date: 30 June 2020			
	Academy Place	Contact: Mr Andrew Strachan		
	1-9 Brook Street	Tel: +44 (0)1372 370900		
0029	Brentwood	E-Mail: mailing.uk@intertek.com		
	Essex	Website: www.intertek.com		
Accredited to	CM14 5NQ			
ISO/IEC 17025:2017				
Testing performed by the Organisation at the locations specified below				

Locations covered by the organisation and their relevant activities

Laboratory locations:

Location details		Activity	Location code
Primary Contact Address Intertek House Cleeve Road	Local contact Mr D Flack	Schedule Sections: 1, 2, 3, 7, 9, 11,13, 17, 18	CR
Leatherhead Surrey KT22 7SA	Tel: +44 (0)1372 370900 Fax: +44 (0)1372 370999 Email: david.flack@intertek.com		
Address Unit D Imperial Park	Local contact Mr A Reynard	EMC, Fire Detection & Fire Alarm Systems	IP
Randalls Way Leatherhead Surrey KT22 7TS	Tel: +44 (0)1372 370900 Fax: +44 (0)1372 370999 Email: alan.reynard@intertek.com	Schedule Sections 4,12, 19	
Address Research & Performance Testing Centre	Local contact Mr D Flack	Schedule Sections: 5, 7, 8, 10, 13, 14, 15, 18	МК
Davy Ävenue Knowhill Milton Keynes MK5 8NL	Tel: +44 (0)1908 857777 Fax: +44 (0)1908 857830 Email: david.flack@intertek.com		
Address Deeside Lane Chester	Local contact Mrs P Chadwick	Schedule Sections: 2 and 18	сн
CH1 6DD	Tel: +44 (0)1244 882590 Fax: +44 (0)1244 882599 Email: pamela.chadwick@intertek.com		

Assessment Manager: JJ

Page 1 of 68