

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

Title: Scope Extension Assessment Report for Intertek Testing and Certification Ltd, GB, an Accepted ExCB and ExTL within the IECEx System, Equipment Scheme 02

To: Members of the IECEx Management Committee, ExMC

<u>Introduction</u>

Following an application for a scope extension from Intertek Testing and Certification Ltd, GB, a special site assessment visit was arranged and conducted for the inclusion of the following Standards within their scope -

ISO 80079-36 Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements

ISO 80079-37 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"

This report details the assessment findings of this scope extension with the IECEx Assessment Team recommending the acceptance of the above scope extension. It is now hereby submitted for voting by ExMC.

Please consider the report and return the completed voting form, separate Word document, to the Secretariat by 2016 07 19

Your speedy response to the voting process will be very much appreciated.

Chris Agias
IECEx Secretary

Address:

Level 33, Australia Square 264 George Street Sydney NSW 2000 Australia **Contact Details:**

Tel: +61 2 46 28 4690 Fax: +61 2 46 27 5285

e-mail:chris.agius@iecex.com

http://www.iecex.com



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 OD 003-2 for the Certified Equipment Scheme
- b) Operational Document IECEx OD 016 for the Certified Service Facility Scheme
- c) Operational Document IECEx OD 022 for the IECEx Conformity Mark Licensing System

IECEx	ExCB/ExTL	assessment	report for	Intertek	Testing a	and C	Certifica	tion
Ltd			-					

INTERNATIONAL ELECTROTECHNICAL COMMISSION



CONTENTS

1	Asse	ssment information	5
	1.1	Type of Body covered by this assessment: <retain appropriate="" marks=""></retain>	5
	1.2	Type of assessment: <retain appropriate="" marks=""></retain>	5
	1.3	Details of body	5
		1.3.1 Country	5
		1.3.2 Name of body	5
		1.3.3 Name and title of nominated principal contact	5
	1.4	Assessment information	5
		1.4.1 Members of the assessment team	5
		1.4.2 Place(s) of assessment	6
		1.4.3 Assessment date	6
	1.5	Scopes	6
		1.5.1 Additional Standards for ExCB scope for equipment certification scheme	6
		1.5.2 Additional Standards for ExTL scope for equipment certification scheme	6
2	Comi	mon information	7
	2.1	Legal entity of body	7
	2.2	Financial support	
	2.3	History	
	2.4	Documentation	
		2.4.1 Quality manual	7
		2.4.2 Procedures	
		2.4.3 Work instructions	
		2.4.4 Records (including test records where relevant)	
		2.4.5 Document change control	
	2.5	Confidentiality	
	2.6	Publications (Hard cover and Electronic)	
	2.7	Recognition and agreements	
	2.8	Internal audit and periodic management review	
	2.9	Contracting, subcontracting, use of other labs and use of other locations	
		No subcontracting for the standards considered	
	2.10	Training and competence	
	2.11	Complaints and appeals (including appeals to IECEx)	8
		Special facts to be noted	
		2.12.1 Supporting documentation	8
	2.13	Tests witnessed	
	2.14	Recommendations	8
3	ExCE	3 for IECEx Certified Equipment Scheme	9
	3.1	Assessment references	
	3.2	ExCB persons interviewed	
	3.3	Associated ExTL(s)	
	3.4	Associated certification functions	
	3.5	National marks and certificates	



4

ExMC/1120/DV June 2016

3.6	Standards accepted in scope extension	10
3.7	National differences to IEC standards	10
3.8	Organisation	10
	3.8.1 Names, titles and experience of the senior executives	10
	3.8.2 Name, title and experience of the quality management representative	10
	3.8.3 Name and title of signatories for certification	10
	3.8.4 Other employees in ExCB activity	10
3.9	Organizational structure	10
3.10	Administration	10
	3.10.1 Administrative structure	10
	3.10.2 Indemnity insurance	10
3.11	Resources	11
3.12	Committees (such as governing or advisory boards)	11
3.13	Certification operations	11
	3.13.1 National approval/certification methods	11
	3.13.2 Certification policy	11
	3.13.3 Application for certification	11
	3.13.4 Certification decision	11
	3.13.5 Suspension and cancellation of certificates	11
3.14	Certificates issued	11
3.15	National accreditation	11
3.16	Assessment of manufacturers and issue of QARs	12
3.17	Comments (including issues found during assessment)	12
ExTL	for IECEx Certified Equipment Scheme	13
4.1	Assessment references	13
4.2	ExTL persons interviewed	13
4.3	Associated ExCB(s)	13
4.4	Organisation	13
	4.4.1 Names, titles and experience of the senior executives	13
	4.4.2 Name, title and experience of the quality management representative	13
	4.4.3 Other employees in ExTL activity	13
4.5	Organizational structure	14
4.6	Resources	14
4.7	Test reports issued	14
4.8	National accreditation	14
4.9	Calibration	14
4.10	Comments (including issues found during assessment)	14



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	✓

This site assessment is part of the processing of a scope extension request from Intertek Testing and Certification Ltd for inclusion of the ISO 80079-36 and ISO 80079-37 non-electrical Standards which were in their final Draft form, in accordance with the decisions of the 2015 ExMC Christchurch meeting, where it was agreed that assessments of ExTLs and ExCBs could commence once the final Drafts were released.

Note: The standards were published at the end of February 2016

It should also be known that the Lead Assessor, Mr Ron Webb has been intimately involved in the preparation of the new non electrical standards as well as a member of ExMC WG15 (non-electrical expert Working Group).

It should be noted that Andrew Austin is also a member of ExMC WG15 (non-electrical expert Working Group)

1.3 Details of body

1.3.1 Country

UK

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
Andrew Austin	Technical Manager	Andy.austin@intertek.com

1.4 Assessment information

1.4.1 Members of the assessment team

Name	Role (modify as necessary)
Ron Webb	Lead Assessor



1.4.2 Place(s) of assessment

Intertek House, Cleeve Road, Leatherhead, Surrey KT22 7SB

1.4.3 Assessment date

26 April 2016

1.5 Scopes

1.5.1 Additional Standards for ExCB scope for equipment certification scheme

Number	Title
ISO 80079-36 Edition 1 (2016)	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
ISO 80079-37 Edition 1 (2016)	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"

1.5.2 Additional Standards for ExTL scope for equipment certification scheme

Number	Title
ISO 80079-36 Edition 1 (2016)	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
ISO 80079-37 Edition 1 (2016)	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"



2 Common information

2.1 Legal entity of body

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

2.2 Financial support

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

2.3 History

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

2.4 Documentation

2.4.1 Quality manual

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

2.4.2 Procedures

While covered in the assessment reported in ExMC/846/DV, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

2.4.3 Work instructions

See 2.4.2.

2.4.4 Records (including test records where relevant)

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

2.4.5 Document change control

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

2.5 Confidentiality

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

2.6 Publications (Hard cover and Electronic)

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.



2.7 Recognition and agreements

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

2.8 Internal audit and periodic management review

While covered in the assessment reported in ExMC/846/DV, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

2.9 Contracting, subcontracting, use of other labs and use of other locations

No subcontracting for the standards considered

2.10 Training and competence

There is a competency matrix for the IECEx Scheme. Interviews were undertaken with staff to ensure that they had the required level of understanding. These are included in a TCD document which is held by the Secretariat. Training records for each staff member are held on an Intranet system.

2.11 Complaints and appeals (including appeals to IECEx)

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

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:

Completed technical capability document (TCD)

2.13 Recommendations

Based on the assessment performed on 26 April 2016 Intertek Testing and Certification Ltd is recommended for scope extension to include the Standards listed in 1.5 in the IECEx scheme as:

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

Ron Webb

Lead Assessor

Date: 26 April 2016



3 ExCB for IECEx Certified Equipment Scheme

3.1 Assessment references

- a) IECEx02 IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres Rules of Procedure
- b) OD003-2 Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme
- c) OD005-1 IECEx Quality System Requirements for Manufacturers Part 1: Guidance on the establishment and maintenance of a quality system
- d) OD005-2 IECEx Quality System Requirements for Manufacturers Part 2: Audit Checklist. (This is available in a Word format for use by ExCBs)
- e) ISO/IEC 80079-34 Edition 1, Explosive atmospheres Part 34: Application of quality systems for equipment manufacture
- f) OD009 Issuing of CoCs, ExTRs and QARs
- g) 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
- h) OD0026 IECEx Certified Equipment Scheme Guidelines for the qualification of Lead Auditor and Auditors, in accordance with the IECEx System
- i) ISO/IEC 17065, General requirements for bodies operating product certification systems
- j) IECEx Document OD17 Drawing and documentation guidance
- k) IECEx Technical Capability Document (TCD)
- ExTAG decision sheets (DSs)
- m) ExMC/1031/CD

NOTE The latest editions of the above documents were applied

3.2 ExCB persons interviewed

Name	Position	
Andrew Austin	Technical Manager	
Adrian Smart	Senior Consultant Engineer	
Lloyd Curling	Engineer	
Richard Tunnicliffe	Senior Engineer	

3.3 Associated ExTL(s)

The ExCB is integral with the ExTL

3.4 Associated certification functions

While covered in the assessment reported in ExMC/846/DV, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

3.5 National marks and certificates

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.



3.6 Standards accepted in scope extension

See clause 1.5 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
Campbell Robertson	Operations Director	6 months Intertek
Alan Raynard	Certification Manager	6 months Intertek, 17 years SGS in a similar position and quality manager

3.8.2 Name, title and experience of the quality management representative

Name	Title	Experience
Chris Downes	Quality Manager	7 months Intertek, 6.5 years in a similar position
		years in a similar position in a 17025 Lab

3.8.3 Name and title of signatories for certification

Name	Title	
Andrew Austin	Technical Manager	
Adrian Smart	Senior Consultant Engineer	
Vijay Varma	Senior Engineer	
Paul Moss	Principal Compliance Engineer	

3.8.4 Other employees in ExCB activity

Name
There are a number of Hazloc engineers in the Leatherhead and Chester offices with
considerable experience in Ex. These are employed in both an ExCB and ExTL capacity

3.9 Organizational structure

Included in the Site Assessment Report

3.10 Administration

3.10.1 Administrative structure

Included in the Site Assessment Report

3.10.2 Indemnity insurance

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.



3.11 Resources

Adequate staffing resources were available

3.12 Committees (such as governing or advisory boards)

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

3.13 Certification operations

3.13.1 National approval/certification methods

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

3.13.2 Certification policy

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

3.13.3 Application for certification

While covered in the assessment reported in ExMC/846/DV, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

3.13.4 Certification decision

While covered in the assessment reported in ExMC/846/DV, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

3.13.5 Suspension and cancellation of certificates

Not relevant as this is a scope extension assessment. This was covered in the reassessment ExMC/846/DV.

3.14 Certificates issued

Number of certificates issued for the preceding four years for each type of protection. For new applications these should be for national or regional schemes and for currently accepted bodies IECEx certificates should be shown (certificates for other schemes may also be shown):

Intertek Testing and Certification Ltd are able to demonstrate experience with non-electrical standards, noting the number of certificates and reports issued under the ATEX Directive:

Standard numbers	Type of protection or other identifying information	
		Total
EN 13463-xx	Non-electrical equipment	80
	(ATEX Certificates)	

3.15 National accreditation

National accreditation for the standards involved in this scope extension will be made. Pending this assessment, until then, annual surveillance may be required



3.16 Assessment of manufacturers and issue of QARs

Intertek Testing and Certification Ltd already carry out QAN assessments to ATEX for non-electrical equipment. This will extend to cover QARs under the IECEx Scheme.

3.17 Comments (including issues found during assessment)

The staff interviewed had a good understanding of the non-electrical standards in the EN13463-xx series. These were used as a basis for development of ISO 80079-36 and ISO 80079-37.

A review of previous files relating to the EN 13463 series revealed that Intertek Testing and Certification Ltd staff are well versed and have a full understanding of the assessment approaches for non-electrical equipment for Ignition Hazard Assessments.



4 ExTL for IECEx Certified Equipment Scheme

4.1 Assessment references

- a) IECEx02 IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres Rules of Procedure
- b) IECEx OD003-2 Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme
- c) IECEx OD009 Issuing of CoCs, ExTRs and QARs
- d) ISO/IEC 17025:2005 Edition 2, General requirements for the competence of testing and calibration laboratories
- e) IECEx Document OD17 Drawing and documentation guidance
- f) IECEx Technical Capability Document (TCD)
- g) ExTAG decision sheets (DSs)
- h) ExMC/1031/CD

NOTE The latest editions of the above documents were applied.

4.2 ExTL persons interviewed

Name	Position
Andrew Austin	Technical Manager
Adrian Smart	Senior Consultant Engineer
Lloyd Curling	Engineer
Richard Tunnicliffe	Senior 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
Campbell Robertson	Operations Director	6 months Intertek
Alan Raynard	Certification Manager	6 months Intertek, 17 years SGS in a similar position and quality manager

4.4.2 Name, title and experience of the quality management representative

Name	Title	Experience
Chris Downes	Quality Manager	7 months Intertek, 6.5 years in a similar position in a 17025 Lab

4.4.3 Other employees in ExTL activity

Name





There are a number of Hazloc engineers in the Leatherhead and Chester offices with considerable experience in Ex. These are employed in both an ExCB and ExTL capacity

4.5 Organizational structure

Included in the Site Assessment Report

4.6 Resources

Adequate staff resources are available, both technical and administrative.

4.7 Test reports issued

Number of test reports (ExTRs) issued under for the preceding four years for each type of protection.

Intertek Testing and Certification Ltd are able to demonstrate experience with non-electrical standards, noting the number of certificates and reports issued under the ATEX Directive:

Standard numbers	Type of protection or other identifying information	
		Total
EN 13463-xx	Non-electrical equipment	80
	(ATEX)	

4.8 National accreditation

National accreditation for the standards involved in this scope extension will be made. Pending this assessment, until achieved annual surveillance may be required.

4.9 Calibration

While covered in the assessment reported in ExMC/846/DV, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

4.10 Comments (including issues found during assessment)

The staff interviewed had a good understanding of the non-electrical standards in the EN13463-xx series. These were used as a basis for development of ISO 80079-36 and ISO 80079-37.

It is further acknowledged that Intertek Testing and Certification Ltd are an active ExTL with an extensive scope of acceptance, refer to IECEx OD 001, therefore are in possession of the necessary test equipment and resources to undertake tests according to ISO 80079-36 and 80079-37.