

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

TITLE: IECEx Re-assessment and Scope Extension Report for the continued acceptance of Intertek Testing Services NA, Inc. (Plano, Texas), an Accepted Ex Test Laboratory, (ExTL).

## Circulated to: Ex Management Committee, ExMC

## INTRODUCTION

In accordance with the 5 year re-assessment plan for the surveillance and monitoring of bodies within the IECEx System, this document contains the IECEx Re-assessment report for the continued acceptance of Intertek Testing Services NA, Inc. (Plano, Texas) an Accepted Ex Testing Laboratory (ExTL) within the IECEx System, Equipment Scheme 02.

During the re-assessment the team also conducted a review and assessment of Intertek Testing Services NA, Inc. (Plano, Texas), capability to include -

ISO 80079-36

Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirement.

and

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" and liquid immersion "k.

and

IEC /TS 60079-46 Explosive atmospheres - Part 46: Equipment Assemblies, - within its scope.

This report covers both the re-assessment and the scope extension.

Please consider the assessment report and return the completed voting form, separate Word document, to the <u>Secretariat by 2018 05 25</u>

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

Chris Agius

**IECEx Secretariat** 

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# 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
- b) Operational Document IECEx OD316-5 for the Certified Service Facility Scheme
  - c) Operational Document IECEx OD422 for the IECEx Conformity Mark Licensing System

# IECEx ExTL assessment report for Intertek Testing Services NA Inc. (Plano)

INTERNATIONAL ELECTROTECHNICAL COMMISSION



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## **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

United States of America

#### 1.3.2 Name of body

Intertek Testing Services NA, Inc. (Plano, Texas)

#### 1.3.3 Name and title of nominated principal contact

Name	Title	E-mail address
Luke Ricks	Staff Engineer	Luke.Ricks@intertek.com
Paul Coghill	Quality Manager	paul.coghill@intertek.com

## 1.4 Assessment information

#### 1.4.1 Members of the assessment team

Name	Role	
Ron Webb	IECEx Lead Assessor	
Alexander Zalogin	IECEx Expert Assessor	

## 1.4.2 Place(s) of assessment

Intertek Testing Services NA, Inc.	1809 10th St. Suite 400, Plano, TX 75074 USA
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## 1.4.3 Assessment date(s)

24 to 26 July 2017

## 1.5 Application information and background information on the assessment

This assessment is for a scope extension and re-assessment of an already existing ExTL.



## 1.6 Scopes

#### 1.6.1 ExTL scope

The ExTL scope is the same as for the associated ExCB, Intertek Testing Services NA Inc., Cortland, except for IEC60079-28 where the associated ExCB is Intertek Testing and Certification Ltd, UK.

Number	Title	Comments, eg if scope change
IEC 60079-0 Edition 6.0		
IEC 60079-1 Edition 7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"	In scope
IEC 60079-2 Edition 6.0	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure «p»	In scope
IEC 60079-5 Edition 4.0	Explosive atmospheres - Part 5: Equipment protection by powder filling «q»	In scope
IEC 60079-6 Edition 4.0	Explosive atmospheres - Part 6: Equipment protection by oil immersion «o»	In scope
IEC 60079-7Explosive atmospheres - Part 7: Equipment protection by increasedEdition 5.0safety "e"		In scope
IEC 60079-11 Edition 6.0		
IEC 60079-15 Edition 4.0		
IEC 60079-18 Edition 4.0		
IEC 60079-25 Edition 2.0		
IEC 60079-26 Edition 3.0		
IEC 60079-28 Edition 2.0	eventeene vering entitled and initian	
IEC 60079-31 Edition 2.0		

The following are requested to be added to the scope of the ExTL

Number	Title
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	Explosive atmospheres - Part 46: Equipment Assemblies



Number	Title	
Edition 1.0		

## 1.6.2 ExCB scope for Service Facilities Scheme

This assessment is limited to that of an ExTL only.

## 1.6.3 ExCB scope for ExMark Scheme

This assessment is limited to that of an ExTL only.



## 2 Common information

#### 2.1 Legal entity of body

Intertek Testing Services NA, Inc. Intertek Plano laboratory is one of the laboratories under Commercial & Electrical Division of Intertek Testing Services NA, Inc.

#### 2.2 Financial support

Intertek Testing Services NA, Inc. is incorporated under the laws of New York as a forprofit corporation. Intertek does not engage in the sale or promotion of any product or material. Intertek Testing Services NA, Inc. is self-funded from its operation in testing, inspection and certification.

#### 2.3 History

Intertek Testing Services N.A., Inc. is a wholly owned subsidiary of Intertek Group plc. (registered in U.K.). Intertek Group plc is a technical services company in U.K.

Electrical Products Business Line of Intertek Testing Services N.A., Inc. has a chain of testing laboratories and a Certification Body.

Additional History:

- 1972 Electrical Testing Laboratories, Inc then located in NY City, NY established its first satellite office in Atlanta, GA area for the certification of carpet products.
- 1978 Renamed to ETL Testing Laboratories. Shortly after, the Northern California office was opened in South San Francisco for the testing of electrical products and insulated glass.
- In 1988, ETL Testing Laboratories was purchased by Inchcape, plc, and became part of Inchcape Testing Services.
- In 1994, Inchcape Testing Services acquires SEMKO
- In 1996, Inchcape Testing Services is sold and the company name is changed to Intertek Testing Services NA.
- In 2002, Intertek became a publicly owned company.

The Dallas area laboratory was established as an Intertek testing laboratory in Richardson, TX in 1997 and moved to Plano TX in 2009. The laboratory includes facilities for HVAC, EMC, Gas, Hazardous Location and Product Safety testing.

#### 2.4 Documentation

## 2.4.1 Quality manual

Global Quality Policy Manual, v. 9 May 2017:

Intertek conducts its operations in accordance with the procedures contained within the Global Management System (GMS), Specific Management System (SMS), Regional Management System (RMS) and Local Management System (LMS) which are based on, and in compliance with, ISO/IEC 17065, ISO/IEC Standard 17025 and ISO/IEC Standard 17020 and meets the requirements of IECEx.

#### 2.4.2 Procedures

INTERTEK operate to global testing procedures e.g. SMS-IECEx-OP-19 IECEx Certified Equipment Scheme. These were reviewed and found to meet the requirements of IECEx.

#### 2.4.3 Work instructions

GMS-QC-16: Control of Intertek Issued Controlled Document GMS-QC-17: Control of Documents Issued by External Bodies GMS-QC-18: Controlled Document Coding Convention GMS-QC-19: Numbering of Test Reports GMS-QC-20: Numbering of Certificates GMS-QC-21: Management System Document Issuance and Change Process



GMS-QC-22: Intertek Facility, Program and Certification Body Coding

These and other work instructions were reviewed and found to meet the requirements of IECEx.

#### 2.4.4 Records (including test records where relevant)

GMS-FM-15: Control and Disposal of Records GMS-FM-16: Project File Transfer Between Offices/Sites

There is a retention period of 10 years after the certification ends but in practice all records are stored electronically indefinitely. Hard copy documents are scanned and placed into the appropriate project file and the original shredded.

#### 2.4.5 Document change control

Covered by GMS-QC-21: Management System Document Issuance and Change Process

#### 2.5 Confidentiality

(For staff, contractors and members of advisory bodies)

GMS-QC-04 Protection of Client Confidential Information and Proprietary Rights All staff now sign an electronic questionnaire on employment and this is renewed annually thereafter. This also applies to the members of the advisory bodies.

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

General communication is via<u>http://www.intertek.com</u>

## 2.7 Recognitions and agreements

No agreements in the Ex field

#### 2.8 Internal audit

GMS-QC-13: Internal Quality Auditing.

Internal auditing was carried out 13 March 2017 with minor findings. These were cleared and the preventative action subsequently completed.

## 2.9 Management review

GMS-QC-08: Management Review

This was carried out 18 October 2016. There was an Ex representative in attendance. The need for additional reviewers for IECEx was mentioned.

#### 2.10 Contracting, subcontracting and witness testing

#### 2.10.1 Contracting

The basic procedure is GMS-OP-01: Subcontracting of Testing/Evaluation.

For the IECEx Scheme the applicable procedure is SMS-IECEx-OP-19 IECEx Certified Equipment Scheme

#### 2.10.2 Subcontracting

GMS-OP-01: Subcontracting of Testing/Evaluation

SMS-IECEx-OP-19 IECEx Certified Equipment Scheme

The following tests are, or may be, subcontracted by the body:



Standard	Clause	Test
60079-0: 2011	26.10	Resistance to Light
60079-0: 2011	26.5.3	Small component ignition test

#### 2.10.3 Witness testing

SMS-IECEx-OP-19 IECEx Certified Equipment Scheme.

OD 024 is referenced.

Several jobs had been carried out using OD 024 and these were correctly identified and recorded.

#### 2.11 Training and competence

GMS-SP-05 Qualification of Technical Staff Competence

GMS-SP-06 Qualification of Reviewers and Mandated Reviewers

Details of staff competencies are included in the site assessment report.

The relevant staff were interviewed and found to meet the competence necessary to undertake the tests within their scope.

#### 2.12 Complaints and appeals (including appeals to IECEx)

SMS-IECEx-OP-19 IECEx Certified Equipment Scheme

GMS-QC-03 Appeals & Disputes Handling

The 'complaints' are logged from customer surveys which are sent at various times during the job progress. For the Hazloc section there has not been any adverse feedback for 2017 so far.

#### 2.13 Commenting on ExTAG Documents

SMS-IECEx-OP-19 IECEx Certified Equipment Scheme, INTERTEK Plano participates in the ExTAG consultation process for preparation and maintenance of ExTAG Decision Sheets through its corporate and global entity

#### 2.14 Special facts to be noted

None

#### 2.15 Supporting documentation

Copies of additional supporting information for this assessment have been provided to INTERTEK Plano 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 (See also 4.12)
- Checklist for ISO/IEC 17025
- Completed Technical Capability Document (TCD)
- Photos of the facilities/tests witnessed are included in the above TCD
- Assessors' notes

#### 2.16 Recommendations

Based on the assessment performed on 24-26 July 2017, Intertek Testing Services NA Inc. (Plano) is recommended for continued acceptance in the IECEx scheme as:



## • An ExTL in the IECEx Certified Equipment Scheme

This is according to the scope of the standards listed in this document including the extension of scope. All issues found during the assessment have been satisfactorily been cleared.

Pending updating of the ISO/IEC 17025 accreditation to cover all the standards, annual surveillance may be necessary. Noting that the secretariat monitors the status of National Accreditation.

Ron Webb	Alexander Zalogin	
IECEx Lead Assessor	IECEx Expert Assessor	

Date: 22 March 2018



## 3 ExCB for IECEx Certified Equipment Scheme

Not relevant for ExTL only

## 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) OD 280 IECEx Certified Equipment Scheme Guide to Certification of Non-electrical Equipment and Protective Systems
- NOTE The latest editions of the above documents were applied.

#### 4.2 Candidate ExTL persons interviewed

Name	Position	
Paul Coghill	Quality Manager	
Luke Ricks	Staff Engineer	
Heetesh Bhakta	Engineering Team Lead	
Thu Phan Senior Project engineer		
Additional staff interviewed are identified in the TCD		

## 4.3 Associated ExCB(s)

Intertek Testing Services NA, Inc - 3933 US Route 11 South Cortland, NY 13045, USA

Intertek Testing Services Ltd., Cleeve Road, Leatherhead, KT22 7SB, UK for IEC60079-28 where the associated ExCB is Intertek Testing and Certification Ltd, UK.

## 4.4 Organisation

#### 4.4.1 Names, titles and experience of the senior executives

Name	Title	Experience
Ramzi Amawi	Director of Operations	15 years (1 year Ex)
Heetesh Bhakta	Team Leader	6 years (6 years Ex)

#### 4.4.2 Name, title and experience of the quality management representative

Name	Title	Experience
Paul Coghill	Regional Quality Manager	17 years (5 years Ex)
Charles Parker	Local Quality Manager	6 years (1 year Ex)



## 4.4.3 Other employees in ExTL activity

Name	Title/responsibility	Experience in Ex	
Other ExTL staff are identified in the TCD			

In addition, reviewers from Intertek Testing Services NA Inc. Cortland and Intertek Testing and Certification Ltd, UK can be used.

## 4.5 Organizational structure

The laboratory in Plano is split into five operational groups of Conformity Assessment, Performance, Gas Appliances, HazLoc and HVAC, all of which report to the Director of Operations, Mr. Ramzi Amawi.

Mr. Amawi reports to Mr. Tim Corcoran, who is responsible for the Plano operation as well as other regional operations.

The Quality Manager Mr. Paul Coghill is responsible for the quality system development and implementation.

The Conformity Assessment, Performance, Gas Appliances, HazLoc and HVAC Departments are accredited by A2LA.

The laboratory also operates as a IECEE CB-Scheme CBTL for the CONT, EMC, MEAS, MED, HOUS and LITE product categories under the Intertek NCBs in USA and Sweden

Intertek North America laboratories use the same quality system for laboratory operations

#### 4.6 Resources

The laboratory has adequate staffing, equipment to carry out the tests required.

## 4.7 Test reports issued

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

Standard numbers	Type of protection or other identifying information		nber of i TRs) (fo			Total
		2014	2015	2016	2017	
60079-0	General requirements	26	26	36	25	113
60079-1	Equipment protection by flameproof enclosures "d"	10	13	18	10	51
60079-2	Equipment protection by pressurized enclosure "p	4	5	7	2	18
60079-5	Equipment protection by powder filling "q"					0
60079-6	Equipment protection by liquid immersion "o"	1				1
60079-7	Equipment protection by increased safety "e"	1	3	4	3	11
60079-11	Equipment protection by intrinsic safety "i"	6	11	19	15	51
60079-15	Equipment protection by type of protection "n"	11	4	13	7	35
60079-18	Equipment protection by encapsulation "m"		3	6	2	11
60079-25	Intrinsically safe electrical systems IEC 60079-25:2010			9	3	12



						April Zu
Standard numbers	Type of protection or other identifying information			ssued re r last 4 y		Total
		2014	2015	2016	2017	
60079-26	Equipment with Equipment Protection Level (EPL) Ga	4	3	3	1	11
60079-28	Protection of equipment and transmission systems using optical radiation	1	1		5	7
60079-31	Equipment dust ignition protection by enclosure "t"				1	1
80079-36	Non-electrical equipment for explosive atmospheres - Basic method and requirements	2	3	5	1	11
80079-37	Non-electrical equipment for explosive atmospheres - Non-electrical type of protection constructional safety "c", control of ignition sources "b", liquid immersion "k"	2	3	5	1	11

NOTE 1 Above include reports to IEC 60079-0 unless otherwise shown

#### 4.8 National accreditation

OSHA Nationally Recognized Testing Laboratory (NRTL)

A2LA ISO/IEC 17025 Accreditation (certificate 2310.01)

## 4.9 Calibration

All equipment is calibrated externally using national accredited test laboratories.

Sample equipment certificates were reviewed and verified against specific instrument/equipment and found to be satisfactory.

#### 4.10 Tests witnessed during the assessment visit

The following tests were witnessed during the assessment visit:

Standard	Clause number	Test	Comments
IEC 60079-0	26.4.5	Dust test IP6X	Good
IEC 60079-0	26.13	Surface resistance	Good
IEC 60079-1	15.2.2	Reference pressure	Good
IEC 60079-11	10.1	Spark Test Apparatus	Good
IEC 60079-11	10.5	Temperature rise on batteries	Good
IEC 60079-18	8.1.2	Dielectric strength test	Good
IEC 60079-28	5.2.2.3	Irradiance	Good
IEC 60079-31	6.1.1.3	Pressure test	Good
ISO 80079-36	Annex D	Transferred charge	Equipment not available at the time of the visit but subsequently obtained. Discussions with staff and review of the procedure were both seen to be acceptable to allow scope extension.



## 4.11 Participation in IECEx Proficiency Testing Program

Program: PTB Ex PT Scheme and A2LA. Intertek participates in the IECEx Proficiency testing program, noting the following results

Year(s) of participation	IECEx Proficiency Testing program	General information about results
2013	PTB - Flame Transmission	Acceptable
2013	PTB - Temperature Classification	Acceptable
2015	A2LA - Creepage and Clearance	Pass – Good to excellent
2015	PTB - Electrostatic Charge	Acceptable
2015	PTB - Assessment of a safety barrier [Ex ia Ga] IIC	Acceptable
2017	PTB - Explosion Pressure	ТВD
2017	PTB - Pressurized Enclosure	TBD

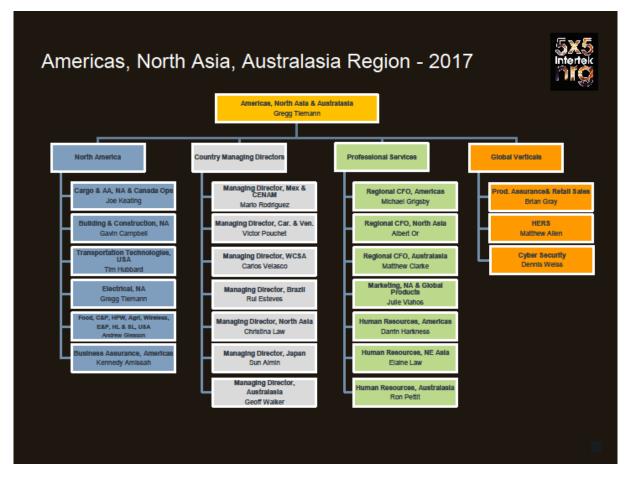
## 4.12 Comments (including issues found during assessment)

- Need to revalidate and formally issue test procedures
- Provide an Uncertainty Budget for the O2 measurement
- Ensure Temp/Humidity is maintained during electrostatic testing
- Include ExTAG Decisions in work instructions

These were all cleared subsequently to the satisfaction of the assessment team.

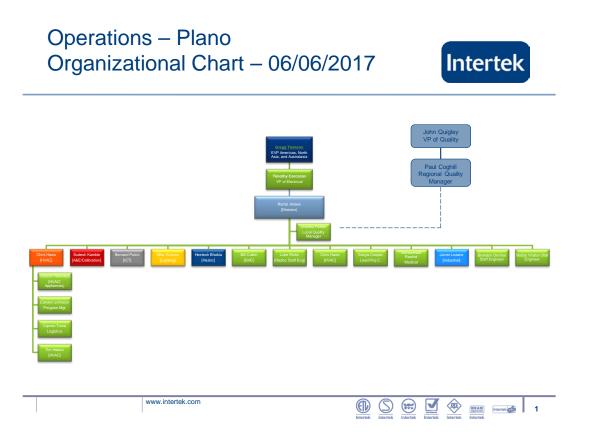


Annex A Overall Organisation Chart





Annex B Organisation Chart of ExCB and ExTL





## Annex C Accreditation Certificate for ISO/IEC 17025







#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

#### INTERTEK TESTING SERVICES NA, INC.1 1809 10th Street, Suite 400 Plano, TX 75074 Paul D. Coghill Phone: 330 405 3552

#### ELECTRICAL

Valid to: September 30, 2017

Certificate Number: 2310.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following energy efficiency, product safety, electromagnetic compatibility and telecommunications testing:

#### Test Technology:

Test Method(s)2,3:

Emissions	
Radiated and Conducted	CFR 47 FCC, Part 15B (using ANSI C63.4:2003 and 2009) and
	Part 18 (using MP-5); IEC/CISPR 11: EN 55011: KN 11: AS/NZS CISPR 11:
	CNS 13803:
	IEC/CISPR 14-1; EN 55014-1; KN 14-1; AS/NZS CISPR 14-1;
	CNS 13783-1;
	IEC/CISPR 22; EN 55022; AS/NZS CISPR 22; KN 22; SI 061 Part 6 1; CNS 12428 (14) to 6 CH2); ICES 002;
	SI 961 Part 6.1; CNS 13438 (Up to 6 GHz); ICES-003; CISPR 15; EN 55015; AS/NZS CISPR 15;
	CNS 13439;
	CISPR 32 (excluding equipment within the scope of CISPR 13)
Electromagnetic Fields of	IEC 62233
Household Appliances and	110 02255
Similar Apparatus with Regard	
to Human Exposure	
Current Harmonics	EN/IEC 61000-3-2; KN 61000-3-2;
	EN/IEC 61000-3-12; KN 61000-3-12
Flicker and Fluctuations	EN/IEC 61000-3-3; KN 61000-3-3; EN/IEC 61000-3-11: KN 61000-3-11
	EN/IEC 01000-5-11; KIN 01000-5-11
Immunity	
Electrostatic Discharge	EN/IEC 61000-4-2; KN 61000-4-2
Radiated Immunity	EN/IEC 61000-4-3; KN 61000-4-3
readiated minidity	
	the part



Test Technology:	Test Method(s) <sup>2,3</sup> :
Immunity (Cont'd) Electrical Fast Transient / Burst	EN/IEC 61000-4-4; KN 61000-4-4
Surge Immunity	EN/IEC 61000-4-5; KN 61000-4-5
Conducted Immunity	EN/IEC 61000-4-6; KN 61000-4-6
Voltage Dips, Short Interruptions, and Line Voltage Variations	EN/IEC 61000-4-11; KN 61000-4-11
Power Frequency Magnetic Field	EN/IEC 61000-4-8; KN 61000-4-8
General Lighting	EN/IEC 61547
Generic and Product Specific EMC Standards	
Laboratory	EN/IEC 61326-1; EN/IEC 61326-2-6; EN/IEC 61326-3-1; EN/IEC 61326-3-2
Medical	EN/IEC 60601-1-2
ITE/Telecom	IEC/CISPR 24; EN 55024; KN 24; EN 300 386; SI 961 Part 6.2
Household	IEC/CISPR 14-2; EN 55014-2; KN 14-2
Residential, Commercial, and Light Industrial (Generic)	EN/IEC 61000-6-1; KN 61000-6-1; EN/IEC 61000-6-3; KN 61000-6-3; CISPR 61000-6-3
Industrial (Generic)	EN/IEC 61000-6-2; KN 61000-6-2; EN/IEC 61000-6-4; KN 61000-6-4
Product Safety	
ITE	EN/IEC 60950; EN/IEC 60950-1; IEC 62368-1; UL 1950; UL 60950; UL 60950-1; SI 60950 Part 1; CSA C22.2 No. 60950; CSA C22.2 No. 60950-1; AS/NZS 60950; AS/NZS 60950.1; IEC 60950-21; IEC 60950-22; IEC 62040-1-1
Laboratory	EN/IEC 61010-1; UL 61010-1; CSA C22.2 No. 61010-1; AS/NZS 61010-1; IEC 61010-2-010; IEC 61010-020; IEC 61010-2-030; IEC 61010-2-032; IEC 61010-2-040; IEC 61010-2-051; IEC 61010-2-081; IEC 61010-2-101

Inter



Test Technology:	Test Method(s) <sup>2.3</sup> :
Product Safety (Cont'd) Medical	EN/IEC 60601-1; UL 60601-1; CSA C22.2 No. 60601-1; AAMI ES60601-1; AS/NZS 3200.1.0; IEC 60601-1-1; IEC 60601-1-3; IEC 60601-1-4; IEC 60601-1-6; IEC 60601-2-2; IEC 60601-2-7; IEC 60601-2-10; IEC 60601-2-18; IEC 60601-2-7; IEC 60601-2-25; IEC 60601-2-26; IEC 60601-2-24; IEC 60601-2-25; IEC 60601-2-34; IEC 60601-2-28; IEC 60601-2-32; IEC 60601-2-34; IEC 60601-2-35; IEC 60601-2-37; IEC 60601-2-38; IEC 60601-2-40; IEC 60601-2-41; IEC 60601-2-38; IEC 60601-2-40; IEC 60601-2-50; IEC 60601-2-52; IEC 60601-2-54; IEC 60601-2-50; IEC 60601-2-52; IEC 60601-2-54; IEC 60601-2-57; IEC 62304; IEC 62366; IEC 80601-2-30; IEC 80601-2-35; IEC 80601-2-60
Hazardous Locations	IEC/EN/CSA/ISA 60079-0; IEC/CSA 60079-1; IEC/EN/CSA/ 60079-2; IEC/UL/CSA/ISA 60079-5; IEC/UL/CSA/ISA 60079-6; IEC/UL/CSA/ISA 60079-7; IEC/UL/CSA/ISA 60079-11; IEC/UL/CSA/ISA 60079-15; IEC/UL/CSA/ISA 60079-25; IEC/UL/CSA/ISA 60079-26; IEC/UL/CSA/ISA 60079-28; IEC/UL/CSA/ISA 60079-31; NFPA 496
Appliances	EN/IEC 60335-1; EN/IEC 60335-2-2; EN/IEC 60335-2-7; EN/IEC 60335-2-8; EN/IEC 60335-2-9; EN/IEC 60335-2-10; EN/IEC 60335-2-11; EN/IEC 60335-2-14; EN/IEC 60335-2-15; EN/IEC 60335-2-21; EN/IEC 60335-2-23; EN/IEC 60335-2-24; EN/IEC 60335-2-25; EN/IEC 60335-2-32; EN/IEC 60335-2-34; EN/IEC 60335-2-30; EN/IEC 60335-2-32; EN/IEC 60335-2-34; EN/IEC 60335-2-35; EN/IEC 60335-2-36; EN/IEC 60335-2-37; EN/IEC 60335-2-38; EN/IEC 60335-2-40; EN/IEC 60335-2-41; EN/IEC 60335-2-42; EN/IEC 60335-2-40; EN/IEC 60335-2-49; EN/IEC 60335-2-42; EN/IEC 60335-2-48; EN/IEC 60335-2-49; EN/IEC 60335-2-50; EN/IEC 60035-2-51; EN/IEC 60335-2-65; EN/IEC 60335-2-60; EN/IEC 60035-2-78; EN/IEC 60335-2-65; EN/IEC 60335-2-80; EN/IEC 60335-2-78; EN/IEC 60335-2-79; EN/IEC 60335-2-80; EN/IEC 60335-2-97; EN/IEC 60335-2-89; EN/IEC 60335-2-90; EN/IEC 60335-2-97; EN/IEC 60335-2-98; EN/IEC 60335-2-101; EN/IEC 60335-2-102; ANSI Z21.47-2012; CSA 2.3-2012; ANSI Z83.8-2009; CSA 2.6-2009)
Lighting	EN/IEC 60598-1; EN/IEC 60598-2-1; EN 60598-2-2; EN/IEC 60598-2-3; EN/IEC 60598-2-4; EN/IEC 60598-2-5; EN/IEC 60598-2-7; EN/IEC 60598-2-8; EN/IEC 60598-2-9; EN/IEC 60598-2-10; EN/IEC 60598-2-12; EN/IEC 60598-2-13; EN/IEC 60598-2-17; EN/IEC 60598-2-18; EN/IEC 60598-2-19; EN/IEC 60590-2-22; EN/IEC 60598-2-23; EN/IEC 60598-2-25; EN/IEC 62471; EN/IEC 62471-2



Test Technology:	Test Method(s) <sup>2,3</sup> :
Product Safety (Cont'd) Appliances (Gas)	ANSI Z21.47-2012; CSA 2.3-2012; ANSI Z83.8-2009; CSA 2.6-2009
Controls	IEC 60730-1; IEC 60730-2-9
Solar Collectors	ASHRAE 93-2010; ISO 9806-1 (1994); ISO 9806-2 (1995); ISO 9806-3 (1995); CAN/CSA F378-87 (r1998); SRCC Standard 100; SRCC OG-300

<sup>1</sup> Intertek Testing Services NA, Inc. was previously accredited by A2LA at 420 N. Dorothy Dr., Richardson, TX 75081 from March 17, 2005 until March 3, 2009.

<sup>2</sup> When the date, revision or edition of a test method standard is not identified on the scope of accreditation, the laboratory is required to be using the current version within one year of the date of publication, per part C., Section 1 of the R101 - General Requirements - Accreditation of ISO-IEC 17025 Laboratories.

<sup>3</sup> The laboratory is only accredited for testing activities outlined within the test methods listed above. Reference to any other activity within these standards, such as risk management or risk assessment, does not fall within the laboratory's accredited capabilities.