

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

TITLE: Re-assessment Report for the continued acceptance of TÜV NORD CERT GmbH, DE, as an Accepted Ex Certification Body (ExCB) and as an Accepted Ex Test Laboratory (ExTL) within the IECEx System, Equipment Scheme 02.

Circulation to: Members of the IECEx Management Committee, ExMC

INTRODUCTION

In accordance with the 5 year re-assessment plan for the surveillance and monitoring of bodies within the IECEx System, the following document contains the IECEx Re-assessment Report for the continued acceptance of TÜV NORD CERT GmbH, DE, as an Accepted Ex Certification Body (ExCB) and as an Accepted Ex Test Laboratory (ExTL).

This report is hereby submitted for endorsement during the ExMC 2017 Meeting being held in Washington, US.

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



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 TÜV NORD CERT

INTERNATIONAL ELECTROTECHNICAL COMMISSION



CONTENTS

1	Asse	ssment	information	5
	1.1	Type o	f Body covered by this assessment:	5
	1.2	Type o	f assessment:	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	Assess	ment information	5
		1.4.1	Members of the assessment team	5
		1.4.2	Place(s) of assessment	5
		1.4.3	Assessment date(s)	
	1.5	Scopes	S	5
		1.5.1	ExCB scope for equipment certification scheme	5
		1.5.2	ExTL scope	
2	Comi	mon info	prmation	
	2.1	l egal e	entity of body	7
	2.2	•	ial support	
	2.3		/	
	2.4	•	entation	
	2.7	2.4.1	Quality manual	
		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		entiality	
	2.6		ations (Hard cover and Electronic)	
	2.7		nition and agreements	
	2.7		I audit and periodic management review	
	2.9		cting, subcontracting, use of other labs, and use of other locations	
	2.10		g and competence	
	2.10		aints and appeals (including appeals to IECEx)	
		-	I facts to be noted	
	2.12	•	Supporting documentation	
	2 1 2		mendations	
3			Ex Certified Equipment Scheme	
5			sment references	
	3.1			
	3.2		late ExCB persons interviewed	
	3.3		ated ExTL(s)ated certification functions	
	3.4			
	3.5		al marks and certificates	
	3.6		Irds accepted	
	3.7		al differences to IEC standards	
	3.8	-	sation	
		3.8.1	Names, titles, and experience of the senior executives	.13



			Name title and comparing a of the populity many second	
		3.8.2	Name, title, and experience of the quality management representative	
		3.8.3	Name and title of signatories for certification	
		3.8.4	Other employees in ExCB activity	
	3.9	Organia	zational structure	
	3.10	•	stration	
			Administrative structure	
			Indemnity insurance	
	3.11		ces	
	3.12	Commi	ttees (such as governing or advisory boards)	14
			ation operations	
		3.13.1	National approval/certification methods	14
			Certification policy	
		3.13.3	Application for certification	14
		3.13.4	Certification decision	14
		3.13.5	Suspension and cancellation of certificates	14
	3.14	Certific	ates issued	15
	3.15	Nationa	al accreditation	15
	3.16	Assess	ment of manufacturers and issue of QARs (under ATEX)	15
4	ExTL	for IEC	Ex Certified Equipment Scheme	17
	4.1	Assess	ment references	17
	4.2		ate ExTL persons interviewed	
	4.3	Associa	ated ExCB(s)	17
	4.4	Organia	sation	17
		4.4.1	Names, titles, and experience of the senior executives	17
		4.4.2	Name, title, and experience of the quality management representative	17
		4.4.3	Other employees in ExTL activity	
	4.5	Organia	zational structure	
	4.6	Resour	ces	
	4.7	Test re	ports issued	18
	4.8	Nationa	al accreditation	19
	4.9	Calibra	tion	19
	4.10	Proficie	ency TP	19
	4.11	Comme	ents (including issues found during assessment)	19
5	Anne	xes		20
Anr	nex A	Overall	Organisation Chart	21
Anr	nex B	Organis	ation Chart of ExCB and ExTL	23
Anr	nex C	Accredit	ation Certificate for Product Certification	24
Anr	nex D	Accredit	ation Certificate to ISO/IEC 17025	25



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

Germany

1.3.2 Name of body

TÜV NORD CERT GmbH

1.3.3 Name and title of nominated principal contact

Name	Title	E-mail address
Matthias Böttcher	Certification scheme	mboettcher@tuev-nord.de
	manager	

1.4 Assessment information

1.4.1 Members of the assessment team

Name	Role (modify as necessary)
Heinz Berger	Lead Assessor
Allan Ogden	Expert Assessor

1.4.2 Place(s) of assessment

Am TÜV 1, 30519 Hannover, Germany
I Am TUV 1. 30519 Hannover. Germanv

1.4.3 Assessment date(s)

Sept. 26-28, 2016

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



	Julie 2017
Number	Title
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 60079-15 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
IEC 60079-31 Edition 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
*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 61241-4 Edition 1	Electrical apparatus for use in the presence of combustible dust - Part 4: 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/IEEE 60079-30-1	Explosive atmospheres - Part 30-1: Electrical resistance trace heating - General and testing requirements
ISO/IEC 80079-36 Edition 1	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
ISO/IEC 80079-37 Edition 1	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 ExTL scope

The ExTL scope is the same as for the ExCB.

2 Common information

2.1 Legal entity of body

TÜV NORD CERT GmbH holds a legal entity under No. HRB 9970 from the Local court of Essen. It was last modified on 21.2.2013.

The document was checked during the assessment and found to meet the requirements of the IECEx.

2.2 Financial support

Same as previous assessment, no updates. The Certification Body is part of TÜV NORD CERT. No additional companies have any kind of ownership in TÜV NORD CERT GmbH. The Certification Body gets its income from certification, testing and annual fees.

2.3 History

The history of TÜV NORD dates to 1873. TÜV's where first involved in the testing of steam boilers and mining. Later it expanded in to a number of other fields, including pressure vessels and motor vehicles. The TÜV NORD GROUP has now 9800 employees worldwide in 70 countries. Product certification covers a number of areas including material testing. TÜV NORD CERT GmbH is a merger of TÜV NORD and RW TÜV registered on first of April 2006 in the city of Essen and employs 380 employees. The present group "Explosion"

protection" has been involved in Ex-Certification since 1989, has been accepted as a notified body according to the ATEX Directive in 1996, and within the IECEx Scheme in 2001. TÜV NORD CERT GmbH is a company within Business Unit Industrial Services in TÜV NORD group. No changes since the last assessment carried out in 2011.

2.4 Documentation

2.4.1 Quality manual

The quality system of TÜV NORD CERT GmbH (TNC) is structured as following:

- Quality manual (Rev 16 dated 11.2014) with annexes, general procedures, CERT-VA/ CERT-AA/ CERT-MU
- Certification and testing
- P00 to P06 (General product- and standard related documents, Pxx-VA/AA/MU/F)
- P17 (explosive protected equipment, P17-VA/AA/MU/F)

The manual fulfils the requirement of DIN EN ISO 9001. Additional requirements from laws, Ordinances and EC Directives within the framework of the recognition procedure / accreditation procedure (such as, the ISO/IEC 17000 series) are described in the relevant documentation for the corresponding standards.

These documents were checked during the assessment and found to meet the requirements of the IECEx.

2.4.2 Procedures

Name Titel	Sprache/Language
------------	------------------



	Verfahrensanweisung Fachleitung	
<u>P 17-VA-01.docx</u>	Explosionsschutz	deutsch
	Anhang 2: Ausbildung und Berufung und	
	Aufrechterhaltung der Qualifikation von	
P17-VA-01 A2.docx	Auditoren und Sachverständigen	deutsch
	Anhang 4: Phasen und Überwachung von	
P17-VA-01 A4.docx	Zertifikaten	deutsch
	Prüfung im Labor explosionsgeschützte	
<u>P17-VA-02.doc</u>	Produkte	deutsch
	Verfahrensanweisung zur Anwendung der RL	
P17-VA-03.docx	2014/34/EU	deutsch

2.4.3 Work instructions

Name	Titel	Sprache/Language
	Bedienungsanleitung für den Prüfstand	
<u>P17-AA-01.doc</u>	Druckfeste Kapselung "d"	deutsch
	Bedienungs- und Prüfanweisung für Prüfstand	
P17-AA-02.doc	optische Zündquellen "op"	deutsch
	Prüfungen gemäß den Regeln des IECEx-	
	Schemas, die außerhalb des IECExTL	
P17-AA-03.doc	durchgeführt werden	deutsch
	Erstellung von Dokumentvorlagen und deren	
	Verwendung im Prüflabor	
<u>P17-AA-04.docx</u>	Explosionsgeschützte Geräte	deutsch
P17-F-1100.docx	Formblatt Flexibilisierung	deutsch
	Hinweise zur Anerkennung von	
	Prüfergebnissen, die nicht im Prüflabor der	
P17-MU-001.docx	TÜV NORD CERT GmbH ermittelt wurden	deutsch
<u>P17-MU-</u>	Advice on approving test results which were	
<u>001e.docx</u>	not determined in the Testing	english
	Entgeltordnung Explosionsschutz ab	
P17-MU-010.doc	01.01.2013	deutsch

2.4.4 Records (including test records where relevant)

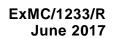
Advice is given in P17-VA-01 and used formats are stored in folder P17.

2.4.5 Document change control

QM-Manual 400, 401, 402

Document change control is described in the TÜV NORD CERT QM manual clause 3.2.5 and procedure CERT-401-VA-007 (Control of documents and data).

Documents are controlled by the Quality representative and authorized by the relevant person depending on the nature of documents. Documents are read only available to the staff by intranet through the Share Point Portal Server; only the members of QM department have full access. Updates are forwarded via "Workflow" to the Quality representative, authorized and put into intranet accordingly. The Share Point Portal Server provides an email notification service for updated documents.





2.5 Confidentiality

Every employee is required to sign an employment contract that includes a provision to ensure confidentiality of company and customer information with the potential penalty of immediate dismissal and possible criminal action.

All members of advisory Body have signed a confidentiality agreement. Confidentiality and impartiality agreements from all employees active in IECEx were reviewed and found to meet the requirements of the IECEx.

In case of subcontractors only IECEx accepted testing laboratories are involved (PTB and VTT).

Confidentiality declarations were checked during the assessment and found to meet the requirements of the IECEx.

2.6 Publications (Hard cover and Electronic)

Information about TÜV NORD CERT procedures are given on the TÜV NORD website www.tuev-nord.de

Employees are encouraged to publish information about their work in technical journals.

2.7 Recognition and agreements

There are agreements on mutual acceptance of reports with Nanio CCVE in Russia, NEPSI in China and KOSHA in Korea, all members in the IECEx System. Furthermore TÜV NORD CERT is recognised by the US Coast Guard.

2.8 Internal audit and periodic management review

Internal Audits: QM-Manual 140, 141

Internal audits are described in TNC Quality Manual section 3.1.8 and CERT-140-VA-008 (Internal audits). Internal audits are scheduled yearly by an audit plan and performed. If the audit includes non-conformities, corrective actions are implemented using the software tool "EPCAT". The Quality representative provides reports to the management that includes the results of the audits.

The Internal audit for the ExTL was conducted on 2016-08-12 (ref IA-FL-2016-54) by Dr. Weber, the internal audit for the specialist management has been carried out on 2016-08-25 (ref. IA-FL 2016-016) by Dr. Deter.

The internal audit plans for the ExCB and the ExTL were reviewed as well as the whole process in resolving open issues.

Management Review: QM-Manual 212

Management reviews are described in TÜV NORD Quality Manual section 3.1.9 and CERT-212-VA-022 (Management review). The management review is performed yearly. The result of the management review is kept in quality records on the Intranet.

A specific Management Review related to 2015 has been conducted on 10.2.2016. The next is planned for 16.2.2017. The minutes of the management review concerning 2015 was reviewed and issues concerning Ex activities were seen. All of the actions were reviewed by the assessment team and found to comply with IECEx requirements.



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

Procedure for suppliers like subcontractors, service provider and suppliers of material is described in CERT-320-VA-004 (Order related purchasing / Subcontractors). Subcontractors are evaluated and registered in a list of subcontractors. Subcontractors are

Subcontractors are evaluated and registered in a list of subcontractors. Subcontractors are mentioned in the test report.

Service provider e. g. calibrations services ordered by accredited calibration centres. The maintenance and the calibration system are managed by the test equipment office.

TUV Nord Cert utilise oD 024 for the pur[poses of testing at other locations.

- At present, TÜV NORD CERT has agreements according to OD24 with eleven companies.
- The contract format is P17-F.30.1, advice for manufacturers in P17-MU-001
- For witness testing (only) according to 6.3.5 of OD024 Registration of the manufacturer or user test facility has been made with the IECEx Secretariat and updating of the current information in the Register using form P17-F-33.
- That ExTRs reviewed clearly indicated when there has been witness testing done.

2.10 Training and competence

QM-Manual 510, 511

Training of employees is described in CERT-510-AA-013 and Annexes. There is at least one annual Exchange of Experience (CERT-510-AA-017e). In 2016, the EoE was conducted on 25-02-2016 and there is planned another EoE on 29-11-2016.

Individual Training is defined in annual meetings with personnel and according to new requirements given by the IECEx System. For Ex new comer's special trainings are performed.

The training plan and its performance were checked during the assessment and found to meet the requirements of the IECEx.

2.11 Complaints and appeals (including appeals to IECEx)

QM-Manual 120

The complaint procedure is described in the TÜV NORD CERT Quality manual section 3.3.8 and CERT-120-VA-012 (Management of Complaints and Objections). Complaints are collected, evaluated and corrective actions taken accordingly using the "TÜV NORD CERT Complaints and Appeals Management Homepage".

Information about the possibility for complains is given on the TÜV NORD CERT website.

The procedures, minutes and confidentiality declarations were reviewed and found to meet the requirements of the IECEx.

2.12 Special facts to be noted

None

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 17065
- Checklist for ISO/IEC 17025
- Completed Technical Capability Document (TCD) for the accepted scope



- Photos of the facilities/tests witnessed
- Assessors' notes
- Documents reviewed

2.13 Recommendations

Based on the assessment performed on September 26-28, 2016, TÜV NORD CERT GmbH 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

This is according to the scope of the standards listed in this document.

Heinz Berger	Allan Ogden	
Lead Assessor	Expert Assessor	

Date: 2016-09-28



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) ISO/IEC 80079-34 Edition 1, Explosive atmospheres Part 34: Application of quality systems for equipment manufacture
- d) OD009 Issuing of CoCs, ExTRs and QARs
- e) 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
- f) OD0026 IECEx Certified Equipment Scheme Guidelines for the qualification of Lead Auditor and Auditors, in accordance with the IECEx System
- g) ISO/IEC 17065:2012, Edition 1, General requirements for bodies operating product certification systems
- h) IECEx Document OD17 Drawing and documentation guidance
- i) IECEx Technical Capability Document (TCD)
- j) ExTAG decision sheets (DSs)

NOTE The latest editions of the above documents were applied

3.2 Candidate ExCB persons interviewed

Name	Position
Matthias Böttcher	Certification Scheme Manager Products
Andreas Meyer	Specialist Manager Explosion Protection, Head of Ex Certification Body (starting October 1 st , 2016)
Christian Roder	Deputy Specialist Manager Explosion Protection, Deputy Head of Ex Certification Body (starting October 1 st , 2016)
Dr. Martin Deter	Quality Manager
Anke Drews	Ex QAR/QAN Auditor

3.3 Associated ExTL(s)

TÜV NORD CERT IECEX TL

3.4 Associated certification functions

None

3.5 National marks and certificates

TÜV NORD CERT is a notified body according to European ATEX Directive 2014/34/EU. The notified Body No. is 0044. TÜV NORD ATEX certificates are accepted by the European commission and by European state regulators.

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
Mr. Andreas Meyer	Head of the IECEx CB	27 years
Mr. Christian Roder	Deputy Head of IECEx CB	8 years

3.8.2 Name, title, and experience of the quality management representative

Name	Title	Experience
Dr. Martin Deter	Quality management representative	16 years
Mrs. Angelika Ull	Deputy Quality management representative	8 years
Mr. Hakan Sen	Deputy Quality management representative, Deputy Head of Certification Body	11 years

3.8.3 Name and title of signatories for certification

Name	Title	Comments
Mr. Andreas Meyer	Head of the IECEx CB, QAR	ameyer@tuev-nord.de
Mr. Christian Roder	Deputy Head of IECEx CB, QAR	croder@tuev-nord.de

3.8.4 Other employees in ExCB activity

Name	Title	Responsibility and Experience in Ex
Mr. Hoferichter, Klaus	Reviewer	26 years
Ms. Drews, Anke	Reviewer, QAR	17 years
Mr. Müller, Björn C.	Reviewer	5 years
Mr. Gaur, Mahesch	QAR	7 years
Mr. Ghisu, Marco	QAR	3 years
Mr. Heinen, Thomas	QAR	16 years
Mr. Ripplinger, Michael	QAR	7 years
Mr. Werner, Andreas	QAR	5 years

3.9 Organizational structure

See Annexes A and B of this report.

3.10 Administration

3.10.1 Administrative structure

TÜV NORD CERT has two supporting departments. Order Service and Certification Service. For these two activities about 50 people are involved.



3.10.2 Indemnity insurance

TÜV NORD CERT GmbH hold an insurance from HDI Gerling. The Policy No. 39-130133-01020. The present certificate is valid until 1.1.2018.

3.11 Resources

Eleven people including administration are working for the ExCB.

3.12 Committees (such as governing or advisory boards)

QM-Manual 211

Standing Orders for the Advisory Board (CERT-211-VA-013-A1e) and additional Annexes are part of the QM Manual. The advisory Board conduct an annual meeting, mostly in February (22/23-02-2016). There is a Share Point Portal Server for information during the period (like new fields of operation or complaints/appeals).

The procedure, the confidentiality declarations and the latest minutes of the board meeting were reviewed during the assessment and found to meet the requirements of the IECEx.

3.13 Certification operations

3.13.1 National approval/certification methods

NB 0044	ATEX Notified Body

TÜV NORD CERT is a notified body also according to European ATEX Directive. The Ex Certification Body is accredited acc. ISO 17065 and the Test Laboratory according to ISO 17025 by German accreditation body DAkkS.

3.13.2 Certification policy

See QM Manual 1.7 Quality and Environment Policy (Company Policy).

The document was reviewed during the assessment and found to meet the requirements of the IECEx.

3.13.3 Application for certification

P17-VA-01: Verfahrensanweisung Fachleitung Explosionsschutz. The application form TÜV NORD CERT for Ex projects can be found on the homepage.

3.13.4 Certification decision

P17-VA-01: Verfahrensanweisung Fachleitung Explosionsschutz. The procedure was reviewed and found to meet the requirements of the IECEx.

3.13.5 Suspension and cancellation of certificates

P17-VA-01: Verfahrensanweisung Fachleitung Explosionsschutz P17-VA-01 A4 Phasen und Überwachung von Zertifikaten Testing and Certification Regulations (Products) The procedures were reviewed and found to meet the requirements of the IECEx.



3.14 Certificates issued

Number of certificates issued under 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):

Standard numbers	Type of protection or other identifying information	Number of issued certificates (for last 4 years)				
		2012	2013	2014	2015	Total
IEC 60079-0						
IEC 60079-1		46	51	47	38	182
IEC 60079-2		7			1	8
IEC 60079-5						-
IEC 60079-6						-
IEC 60079-7		31	24	39	12	106
IEC 60079-11		48	35	50	52	185
IEC 60079-15		7	5	5	5	22
IEC 60079-18					1	1
IEC 60079-25						-
IEC 60079-26		10	15	10	10	45
*IEC 60079-27		4				4
IEC 60079-28			1			1
IEC/IEEE 60079-30-1	Issued under EN 60079-30-1					5
IEC 60079-31		7	4		1	12
*IEC 61241-0						
*IEC 61241-1						
IEC 61241-4						
*IEC 61241-11						
*IEC 61241-18						
ISO/IEC 80079-36						67 ATEX
ISO/IEC 80079-37						See above

NOTE Above include certificates to IEC 60079-0

3.15 National accreditation

TÜV NORD CERT holds an accreditation according to ISO/IEC 17065:2012. The number is D-ZE-12007-01-04. It is valid until 5.5.2019. It can be seen on the DakkS Homepage under http://www.dakks.de/as/ast/d/D-ZE-12007-01-04.pdf

3.16 Assessment of manufacturers and issue of QARs (under ATEX)

TÜV NORD CERT has procedures to address assessments of manufacturers. The report format includes the all requirements from the IECEx Scheme

Procedures in P17-VA-01 Forms and templates on P17

The list of QARs issued by TÜV NORD CERT is available on the IECEx Homepage under TUN. Several QARs were reviewed during the assessment and found to meet the requirements of the IECEx



3.17 Comments (including issues found during assessment)

In the ExCB area 3 NCRs were found. It concerns the requirements given in OD 025 and OD 011-2. They all were resolved to the satisfaction of the assessors.



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)

NOTE The latest editions of the above documents were applied.

4.2 Candidate ExTL persons interviewed

Name	Position
Przemyslaw Glowacki Explosion Protection Deputy of Head of	
	Laboratory (during assessment)
	Now Head of ExTL
Björn Müller	Testing Expert (during assessment)
	Now Deputy Head of ExTL
Jan Ewald	Testing Expert
Klaus Hoferichter	Testing Expert
Thomas Heinen	Testing Expert
Thomas Hübner	Testing Expert
Miss Anke Drews	Testing Expert
Christian Roder	Testing Expert

4.3 Associated ExCB(s)

TÜV NORD CERT IECEX CB

4.4 Organisation

Please see annex B

4.4.1 Names, titles, and experience of the senior executives

Name	Title	Experience
Mr. Przemyslaw Head of laboratory 6		6
Glowacki		
Mr. Björn Müller	Deputy Head of laboratory	5

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

Name	Title	Experience
Dr. Martin Deter	Quality management	16 years
	representative	



			-
Mrs. Angelika Ull	Manager Accreditation	8 years	

4.4.3 Other employees in ExTL activity

Name	Title/responsibility	Experience in Ex (years)				
Boukthir Rafik	Testing Expert	5				
Drews Anke	Testing Expert	17				
Ewald Jan	Testing Expert	5				
Gäbelein Gerald	Testing Expert	22				
Ghisu Marco	Testing Expert	3				
Göppert Boris	Testing Expert	24				
Heinen Thomas	Testing Expert	16				
Hoferichter Klaus	Testing Expert	26				
Hübner Thomas	Testing Expert	11				
Lampe Daniel	Testing Expert	7				
Meyer Andreas	Testing Expert	27				
Roder Christian	Testing Expert	8				
Sittko Martin	Testing Expert	7				
Willemeit Mark	Testing Expert	10				

4.5 Organizational structure

Please see annexes A & B

4.6 Resources

TÜV NORD CERT has 16 persons employed for the Ex certification and administration.

4.7 Test reports issued

Number of test reports (ExTRs) issued under 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 ExTRs should be shown (test reports for other schemes may also be shown)

Standard numbers	Type of protection or other identifying information	report	Number of issued reports (ExTRs) (for last 4 years)			
		2012	2013	2014	2015	Total
IEC 60079-0						
IEC 60079-1		46	51	47	38	182
IEC 60079-2		7			1	8
IEC 60079-5						-
IEC 60079-6						-
IEC 60079-7		31	24	39	12	106
IEC 60079-11		48	35	50	52	185
IEC 60079-15		7	5	5	5	22
IEC 60079-18					1	1
IEC 60079-25						-
IEC 60079-26		10	15	10	10	45



Standard numbers	Type of protection or other identifying information	repor	Number of issued reports (ExTRs) (for last 4 years)				
		2012	2013	2014	2015	Total	
*IEC 60079-27		4				4	
IEC 60079-28			1			1	
IEC/IEEE						5	
60079-30-1							
IEC 60079-31		7	4		1	12	
*IEC 61241-0							
*IEC 61241-1							
IEC 61241-4							
*IEC 61241-11							
*IEC 61241-18							
ISO/IEC						67	
80079-36						ATEX	
ISO/IEC 80079-37						See above	

NOTE Above include reports to IEC 60079-0

4.8 National accreditation

TÜV NORD CERT holds an accreditation according to ISO/IEC 17025. The number is PL-12007-02-01. It is valid until 16.3.2022. It can be seen on the DakkS Homepage under http://www.dakks.de/as/ast/d/D-PL-12007-02-01.pdf

4.9 Calibration

The calibration system in TÜV Nord is used to monitor the status of over 6000 instruments. This also includes equipment which is used for indication and is not calibrated. All instruments which are used for measurement has an indication of the calibration status.

The list of equipment concerning the calibration of equipment used for testing in IECEx was reviewed concerning proper (measurement uncertainty information) and valid calibration as well as calibration sequence. Several original certificates were checked and found to meet the requirements of the IECEx.

4.10 Proficiency TP

During the re-assessment the assessment team confirmed the active participation of TUV Nord in the IECEx Proficiency Testing Programme. The results of their participation are held by the PTP provider and the IECEx Secretariat. The results have been reviewed and found not to present any areas of concern.

4.11 Comments (including issues found during assessment)

In the ExTL area 4 NCRs were found. It concerns the quality of test procedures, declaration of competence and the handling of test record sheets. They all were resolved to the satisfaction of the assessors.



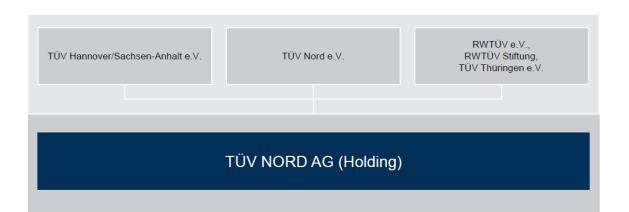
5 Annexes

- Annex A Overall Organisation Chart
- Annex B Organisation Chart of ExCB and ExTL
- Annex C Accreditation Certificate for Product Certification
- Annex D Accreditation Certificate to ISO/IEC 17025



Annex A Overall Organisation Chart

SHAREHOLDER OF TÜV NORD AG

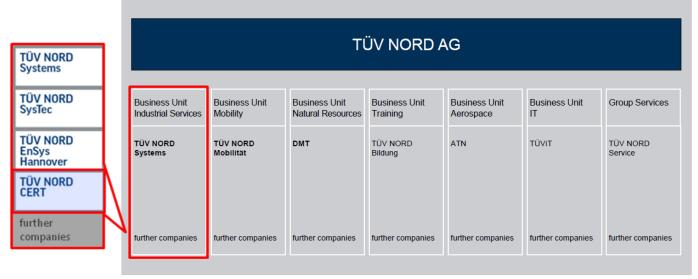


1 V-QM Organigramm Gesellschafter TN AG_e 04/2014

TÜV NORD GROUP



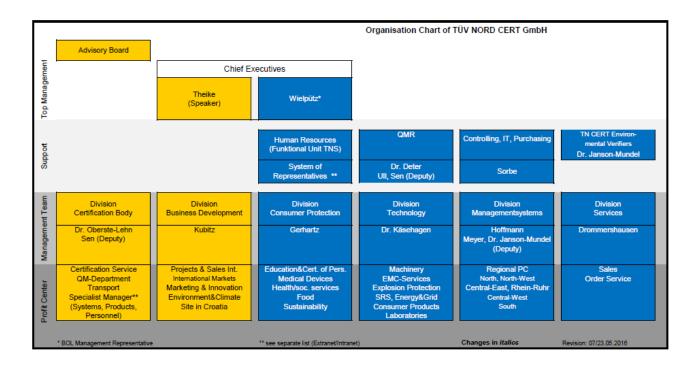
TÜV NORD GROUP



Bold type: Lead Company of the Business Unit

1 V-QM Organigramm TNG_e 04/2014

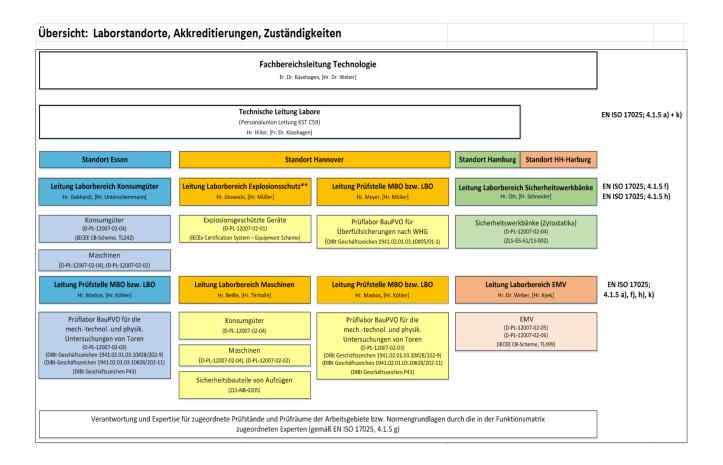
TÜV NORD GROUP





Annex B Organisation Chart of ExCB and ExTL

								Rev. 50/04.17	
Zertifizierungsstellenleiter Head of Certification Bo	dy	Dr. Oberste-Lehn, Klaus 1); Stellv./Deputy: Dr. Janson-Mundel, Ortrun							
ZS-Gremium / CB Advisory Board (gebildet aus jeweils 3 Personen:	Dr. Oberste-Lehn, Klaus / Dr. Janson-Mundel, Ortrun + Doukkali, Khalid / Eck, Michael / Sen, Hakan / Roßberg, Steffen								
ZSL + 2 Stellvertreter) / consisting of 3 persons; (ZSL + 2 Deputies)									
Administration Administration-		Drommershausen, Dirk							
Zertifizierungsservice certification service / Auftragsservice order ser	vi ce -	Sen, Hakan							
Zertifizierung von Managementsystemen, Personal	, Produkten, Pro	ozessen, Dienstleistungen und Anerk	ennung von QS/QM						
Certification of Management Systems, Persons, Pro	ducts, Processe	s, Services and assessment of QA/QI	Λ						
Fachbereich	Fachliche Verantwortung				Akkreditierungsgrundlage				
Specialist Field	Ordner Folder	Specialist Technical Responsibility				Basis of Accreditation Notified Body			
		Fachleitung Specialist Manager	Stellvertretung Deputy	CSM	ISO 17021	ISO 17065	Sonstige Other		
	7		•			-			
Explosionsgeschützte Geräte Explosion-proof Equipment**	P17	Meyer, Andreas	Roder, Christian	Böttcher,		х		NB 0044,	
(2014/34/EC) (IECEx Scheme)				Matthias				IECEx CB	
Prüflabore / Test Centers 10)									
Prüflabore / Test Centers ₁₀)		Technische Leitung Labore	Stellvertretung	CSM:					
Prüflabore / Test Centers ₁₀)		Technische Leitung Labore technical Head of laboratory	Stellvertretung Deputy:	CSM: Böttcher,					
Prüflabore / Test Centers ₁₀)			-						





Annex C Accreditation Certificate for Product Certification



Deutsche Akkreditierungsstelle GmbH

Anlage zur Akkreditierungsurkunde D-ZE-12007-01-04 nach DIN EN ISO/IEC 17065:2013

Gültigkeitsdauer: 10.09.2015 bis 05.05.2019

Ausstellungsdatum: 10.09.2015

Urkundeninhaber:

TÜV NORD CERT GmbH Langemarckstraße 20, 45141 Essen

für ihren Standort:

Am TÜV 1, 30519 Hannover

Zertifizierungen von Produkten, Prozessen und Dienstleistungen in den Bereichen:

Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen

I Richtlinie 94/9/EG bis 19.04.2016

Konformitätsbewertung nach

Anhang III, EG-Baumusterprüfung Anhang V, Prüfung der Produkte Anhang VI, Konformität mit der Bauart Anhang IX, Einzelprüfung

II Richtlinie 2014/34/EU ab 20.04.2016

Konformitätsbewertung nach

Anhang III, EU-Baumusterprüfung Anhang V, Konformität mit dem Baumuster (durch Produktprüfung) Anhang VI, Konformität mit dem Baumuster (i.F. mit überwachter Produktprüfung) Anhang IX, Einzelprüfung



Annex D Accreditation Certificate to ISO/IEC 17025

