



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

**Title: Re-assessment and Scope Extension Report for China Quality Mark  
Certification Group Co., Ltd, (CQM), an Accepted ExCB within the IECEx  
System, Equipment Scheme 02**

**To: Members of the IECEx Management Committee, ExMC**

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**Introduction**

This document contains the IECEx Re-Assessment Report for China Quality Mark Certification Group Co., Ltd, (CQM) an Accepted ExCB within the IECEx System, Equipment Scheme 02

During the re-assessment, the IECEx Assessment Team took the opportunity to also assess China Quality Mark Certification Group Co., Ltd, (CQM) facilities, equipment and competence to undertake certification to the Standard –

**IEC 60079-29-1 Edition 1**

Scope extension

*Explosive atmospheres - Part 29-1: Gas detectors - Performance  
requirements of detectors for flammable gases*

As per current arrangements, CQM will work with the following ExTLs -  
CHEM, CMExC, CQST, NEPSI, PCEC

Please consider the assessment report and return the completed voting form,  
(A separate Word document) to [the Secretariat](#) by

**2016 05 05**

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

*Chris Agius*

**IECEx Secretariat**

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**IECEX ASSESSMENT REPORT for China Quality  
Mark Certification Group Co., Ltd, (CQM),  
No.33 Zengguang Road, Haidian District,  
Beijing City 100048, P.R. China ExCB  
(IECEX Certification Body)**

**Type of Assessment:**

**Initial Assessment for ExCB**

**Re-Assessment of ExCB** X

**Scope Extension of ExCB** X

**1. OBJECT AND FIELD OF APPLICATION**

**1.1. Country:**

People's Republic of China

**1.2. Name of Candidate ExCB**

China Quality Mark Certification Group Co., Ltd, (CQM)

**1.3. Members of the Assessment Team**

Heinz Berger - IECEx Lead Assessor  
Gordana Ostojic (Mrs.) - IECEx Expert Assessor

*The above Team was part of an overall IECEx Assessment team comprising:*

*Heinz Berger – Team Leader  
Gordana Ostojic - Expert Assessor  
Ajay Maira – Expert Assessor  
Michel Brenon – Expert Assessor*

*This Assessment formed part of the overall assessment of all IECEx CN Bodies, including: CMExC, CQST, NEPSI, PCEC, and CHEM (Mid-term only). Results of these individual assessments are included in separate ExMC reports, as posted to the Members area of the IECEx Website.*

**1.4. Place and Date of Assessment**

CQM, No.33 Zengguang Road, Haidian District, Beijing City 100048, P.R. of China  
**June 15<sup>th</sup> & 16<sup>th</sup>, 2015**

**1.5. Assessment References**

- I. IECEx 02 IECEx Scheme rules of procedure

- II. IECEx OD 003-2 Assessment Procedures (current version)
- III. ISO/IEC 80079-34 Manufacturer Assessment (current version)
- IV. IECEx OD 009 Equipment Scheme Procedures(current version)
- V. IECEx OD 107 Checklist ISO/IEC 17065 (current version)
- VI. IECEx OD 017 Drawings and Documentation(current version)
- VII. IECEx OD 024 Witness Testing/manufacturers and users Facility
- VIII. IECEx OD 025 Guidelines Manufacturer Assessments(current version)
- IX. IECEx Document F-001 (QAR Form)
- X. ISO/IEC 17065:2012
- XI. ExCB application documents from March 9<sup>th</sup>, 2015

### 1.6. Scope of Application

Number	Title	Acceptance
60079-0 Edition Ed.3.1 Ed.4 Ed.5 Ed.6	Explosive atmospheres - Part 0: Equipment - General requirements	YES
60079-1 Edition Ed.4 Ed.5 Ed.6 Ed.7	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures 'd'	YES
60079-2 Edition Ed.4 Ed.5 Ed.6	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosures 'p'	YES
60079-5 Edition Ed.2 Ed.3 Ed 4	Explosive atmospheres - Part 5: Equipment protection by powder filling 'q'	YES
60079-6 Edition Ed.2 Ed.3 Ed 4	Explosive atmospheres - Part 6: Equipment protection by oil immersion 'o'	YES
60079-7 Edition Ed.2 Ed.3 Ed.4 Ed 5	Explosive atmospheres - Part 7: Equipment protection by increased safety 'e'	YES
60079-11 Edition	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety 'i'	YES

Number	Title	Acceptance
Ed.4 Ed.5 Ed.6		
60079-13 Edition Ed.1	Explosive atmospheres - Part 13: Equipment protection by pressurized room 'p'	YES
60079-15 Edition Ed.2 Ed.3 Ed.4	Explosive atmospheres - Part 15: Equipment protection by type of protection 'n'	YES
TR 60079-16 Edition Ed.1.0	Electrical apparatus for explosive gas atmospheres - Part 16: Artificial ventilation for the protection of analyser (s) houses	YES
60079-18 Edition Ed.1 Ed.2 Ed.3 Ed.4	Explosive atmospheres - Part 18: Equipment protection by encapsulation "m"	YES
60079-25 Edition Ed.1 Ed.2	Explosive atmospheres - Part 25: Intrinsically safe systems	YES
60079-26 Edition Ed.1 Ed.2 Ed 3	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga	YES
60079-27 Edition Ed.1 Ed.2	Explosive atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO)	YES
60079-28 Edition Ed.1 Ed 2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation	YES
60079-29-1 Ed. 1	Explosive atmospheres - Part 29-1: Gas detectors - Performance requirements of detectors for flammable gases	YES Scope extension
60079-30-1 Edition Ed.1	Explosive atmospheres - Part 30-1: Electrical resistance trace heating - General and testing requirements	YES
60079-31 Edition	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure	YES

Number	Title	Acceptance
Ed.1 Ed.2	"t"	
61241-0 Edition Ed.1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements	YES
61241-1 Edition Ed.1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures 'tD'	YES
61241-1-1 Edition Ed.2	Electrical apparatus for use in the presence of combustible dust - Part 1: Electrical apparatus protected by enclosures and surface temperature limitation - Specification for apparatus	YES
61241-4 Edition Ed.1	Electrical apparatus for use in the presence of combustible dust - Part 4: Type of protection 'pD'	YES
61241-11 Edition Ed.1	Electrical apparatus for use in the presence of combustible dust - Part 11: Protection by intrinsic safety 'iD'	YES
61241-18 Edition Ed 1	Electrical apparatus for use in the presence of combustible dust - Part 18: Protection by encapsulation 'mD'	YES
62086-1 Edition Ed.1	Electrical apparatus for explosive gas atmospheres – Electrical resistance trace heating – Part 1: General and testing requirements	YES

#### 1.7. Candidate ExCB Persons Interviewed

Name	Position
Song Yuewei	Deputy General Manager/ Quality Manager
Wang Tianyi	General Manager Assistant, Director of Product Certification Division
Liu Xianfeng	Director of Quality Management Department
Mr. Cao Gang	Director of Approval Department
Mr. Li Hede	Technical Expert
Ms. Zhu Yu	Personnel Management Department
Ms. Liu Jia	Business Department

#### 1.8. Legal Entity of the Candidate ExCB

CQM is an independent legal entity registered in China and provides certification service approved by Certification and Accreditation Administration of the People's Republic of China (CNCA). The legal entity document was presented during the assessment. The number is 110000000880372. It was first issued on September 15<sup>th</sup>, 1999 and is valid until August 24<sup>th</sup>, 2055. The requirements of the IECEx are met.

### 1.9. Associated Testing Laboratories

CQM has 5 contracted Testing Laboratories for explosion-proof electrical apparatus:

<b>Names of Laboratories</b>	<b>Address</b>
Testing Laboratory for Explosion protected Electrical Products of Nanyang Explosion Protected Electrical Research Institute / China National Quality Supervision and Test Center for Explosion Protected Electrical Products <b>(CQST)</b>	No.20 North Zhongjing Road, Nanyang, Henan, P. R. China, Postcode: 473008
Shanghai Inspection and Testing Institute of Instrumentation and Automation Systems (SITIIAS) / National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation <b>(NEPSI)</b>	No.103, Cao Bao Road, Shanghai, P. R. of China, Postcode:200233
Testing Laboratory of Explosion-proof Electrical Products of Tianjin Research Institute of Chemical Industry .China's / China Supervision and Test Center of Explosion –proof Quality for Petroleum and Chemical Industry Electrical Products <b>(PCEC)</b>	No. 85 Road 3, Dingzigu Hongqiao District, Tianjin, China, Postcode:300131
Testing Laboratory for Explosion-proof and Safety Products of Fushun Branch of China Coal Research Institute / China National Quality Supervision & Test Center for Explosion-proof and Safety Products for Coal Mine's <b>(CMExC)</b>	No.11 Binhe Road, Fushun Economic Development Zone, Liaoning Province, P.R.China ,Postcode: 113122
Testing Laboratory of Jiamusi Explosion-Proof Electrical Machine Research Institute <b>(CHEM)</b>	No.3, Anqing Street, Jiamusi, Heilongjiang, China, Postcode: 154005

**Note:** The contracts between CQM and the ExTLs were reviewed and found to meet the requirements of the IECEx.

### 1.10. Associated Certification Functions

CQM operates the Chinese Ex Certification Scheme. This system is highly harmonized with IECEx procedures, where several IECEx documents (e.g. OD 005 (manufacturer assessment) and OD009 (rules of operation) were taken over for the national system.

### 1.11. National Marks and Certificates

CQM is issuing Ex certificates bearing the CQM Ex Mark.

**1.12. Financial Support**

CQM gets its income from certification and training and is therefore financially independent.

**1.13. History**

China Quality Mark Certification Group Co., Ltd. (CQM) is established as a legal entity registered in China and approved by Certification and Accreditation Administration of the People's Republic of China (CNCA).

CQM conducts compulsory product certification, product conformity and safety certification, QMS certification, ESM certification, OHSMS certification, HACCP certification and other conformity assessment activities in the field of industry, agriculture, traffic, transportation, commerce, service, IT, etc.

CQM grew out of the China Certification Committee for Quality Mark Certification Center approved by the former China State Bureau of Technical Supervision (CSBTS) in Sept.1991. The secretariat of CQM is affiliated to China Standardization Association (CAS). CQM established working stations in China and conducted the voluntary product certification and the QMS certification.

Since its being accredited in Sept.1995, CQM has been setting up affiliated centres to conduct the quality management system certification. In Sept.1999, CQM was registered in Beijing Business Administrative Bureau, and began to conduct the product certification, management system certification, certification training, and other conformity assessment activities as well.

In Sept.2001, CQM joined IQNet that was made up of over thirty well-known certification bodies from different countries. The organizations certified by CQM can get the qualification to apply for getting the certificates issued by other IQNet members without repeated audits, which brings convenience for the certified organizations to promote their international trade.

In July 2002, CQM was approved by CNCA and re-registered at first in accordance with newly issued Regulations of People's Republic of China on Certification and Administration.

In 2002, CQM was approved by CNCA and then assessed by CNAT to get qualification to train the national registered auditor and internal auditor of QMS, EMS and OHSMS.

On August 25, 2005, China Certification Center for Quality Mark was reformed and the name was changed to "China Quality Mark Certification Group Co., Ltd".

In October 2005 CQM was accepted by the IECEx System as an IECEx Certification Body.

**1.14. Standards Accepted**

See clause 1.6 of this report.

**1.15. National Differences to IEC Standards**

Chinese National Differences to IEC standards listed in Section 1.6 of this report are available in the current edition of the IECEx Bulletin.

## 2. ORGANISATION

**2.1. Names, Titles and Experience of the Senior Executives**

Name	Title	Experience
Gao Jianzhong	Chairman of the Board	1 years
Ji Xiaodong	General Manager	2 years
Song Yuewei	Deputy General Manager/ Quality Manager	20 years
Wang Tianyi	General Manager Assistant, Director of Product Certification Division	16 years

**2.2. Name, Title and Experience of the Quality Management Representative**

Name	Title	Experience
Song Yuewei	Quality Manager	20 years
Liu Xianfeng	Director of Quality Management Department	13 years

**2.3. Name and Title of Nominated Principal Contact**

Name	Title	Comments
Song Yuewei	Deputy General manager	
Wang Tianyi	General Manager Assistant, Director of Product Certification Division	

**2.4. Name and Title of Signatories for Certification**

Name	Title	Comments
Ji Xiaodong	General Manager	
Song Yuewei	Deputy General Manager	

**2.5. Other Employees in ExCB activity**

Name	Title	Responsibility and Experience in Ex
Mr. Xing Xuemin	Director of Personnel Management Department	---
Ms. Liu Xianfeng	Director of Quality Department	8



Name	Title	Responsibility and Experience in Ex
Mr. Cao Gang	Director of Approval Department	6
Mr. Li Hede	Technical Expert	42
Ms. Zhu Yu	Personnel Management Department	5
Ms. Liu Jia	Business Department	11
Ms. Ren Xiaoxia	Approval Department	5

Several CV's were reviewed during the assessment with main focus on education, confidentiality agreements and training records. They were found to meet the requirements of the IECEx System.

## 2.6. Organizational Structure

See attached organization charts in **ANNEX 1**

## 2.7. Administration (including Indemnity Insurance)

See **ANNEX 1** for the administration of CQM.

CQM holds an insurance contract for product certification with PICC Property and Casual Company Limited, located in Beijing. The contract number is 44031400013656. It was last confirmed on October 16<sup>th</sup>, 2014, is valid until October 16<sup>th</sup>, 2015 and can be renewed every year. The contract was reviewed during the assessment and found to meet the requirements of the IECEx.

# 3. RESOURCES

There are 673 full time staff, 123 of them in the headquarters of CQM in Beijing and 629 full time auditors, 2081 part time auditors and experts more than 130 contracted laboratories accredited by CNAS.

Personnel active in Ex Certification:

Final Reviewer: 9 (3 in CQM Headquarter)  
QAR reviewer: 7 (2 in CQM HQ)  
ExTR reviewer: 11 (2 in CQM HQ)  
Auditors: 30 (7 in CQM HQ)  
Experts: 3 (1 in CQM HQ)

CQM is located in 33 Zengguang Road, Haidian District, Beijing 100048, P.R. China, fully owned by CQM. The total office area is 2600m<sup>2</sup>.

# 4. COMMITTEES / Governing Board / Appeals / Advisory Board

The Governing Body is mentioned in Annex 1 (list of all members) of the Quality Manual.

It consists of 7 members showing a wide range of experience in the industrial and consumer field and other fields relevant to the wide range of certification activities in CQM. All signed a confidentiality agreement. They were checked during the assessment and found to meet the requirements of the IECEx. The governing board usually meets once a year. The last meeting was held on August 13th, 2014. The next meeting will take place in August 2015. The minutes of the last meeting were reviewed with the help of an interpreter and found to be accurate and actions well controlled. The requirements of the IECEx are fulfilled.

## 5. CERTIFICATION OPERATIONS

### 5.1. *National Approval/Certification Methods*

CQM maintains national certification methods which cover a very large number of technical and nontechnical fields for the whole country. See clause 3 for the number of employees. All national Ex activities are covered by CNAS accreditation.

### 5.2. *Certification Policy*

For CQM as a certification body the quality policy and certification policy are the same and is:

Impartial performance, Objective evaluation, Scientific Management, Normative Service.

This is described in the Quality Manual. It was checked and found to meet the requirements of the IECEx.

### 5.3. *Application for Certification*

CQM has a standard application form for all applications with provision to nominate what certification is sought. There is comprehensive information for those seeking to make application on the [CQM website](#) and they may also seek information from the ExTLs. All applications come through the CQM Central Office in Beijing. Application for certification is described in procedure CQM/CX-35. The procedure was checked and found to meet the requirements of the IECEx.

### 5.4. *Certification Decision*

CQM has The Procedure for Approval, Maintenance, Updating, Extension, Reducing, Suspension, Resumption, Cancellation and Withdrawal Certification (CQM/CX-39). In addition to this CQM had developed Ex Electrical Product Certification Rule (CQM13-3800-01) and Guide for Ex Electrical Product Certification (CQM/ZY-SH-01-18) to guide certification decision for Ex product certification. The procedures were checked and found to meet the requirements of the IECEx.

## 6. STATISTICS

### 6.1. *Certificates Issued*

Number of **certificates** issued under IECEx in the preceding four years for each type of protection:

Standards	Title	Number of issued certificates				Total
		2012	2013	2014	2015	
60079-0	Explosive atmospheres - Part 0: Equipment - General requirements					<b>Part 0 included in numbers below</b>
60079-1	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures 'd'	44	40	77	14	
60079-2	Explosive atmospheres - Part 2: Equipment protection by pressurized enclosures 'p'	0	2	2	0	4
60079-5	Explosive atmospheres - Part 5: Equipment protection by powder filling 'q'	5	4	8	2	19
60079-6	Explosive atmospheres - Part 6: Equipment protection by oil immersion 'o'	0	0	0	0	0
60079-7	Explosive atmospheres - Part 7: Equipment protection by increased safety 'e'	18	35	41	11	105
60079-11	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety 'i'	4	10	25	5	44
60079-13	Explosive atmospheres - Part 13: Equipment protection by pressurized room 'p'	0	0	1	0	1
60079-15	Explosive atmospheres - Part 15: Equipment protection by type of protection 'n'	11	9	6	1	27
TR 60079-16	Electrical apparatus for explosive gas atmospheres - Part 16: Artificial ventilation for the protection of analyser (s) houses	0	0	0	0	0
60079-18	Explosive atmospheres - Part 18: Equipment protection by encapsulation "m"	2	2	4	1	9
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	3	2	4		9
60079-27	Explosive atmospheres - Part 27: Fieldbus intrinsically safe concept (FISCO)	0	0	0	0	0

Standards	Title	Number of issued certificates				Total
		2012	2013	2014	2015	
60079-28	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation	0	1	0	0	1
60079-29-1	Explosive atmospheres - Part 29-1: Gas detectors - Performance requirements of detectors for flammable gases	0	0	0	0	0
60079-30-1	Explosive atmospheres - Part 30-1: Electrical resistance trace heating - General and testing requirements	0	0	0	0	0
60079-31	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"	32	33	28	10	103
61241-0	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements					<b>Part 0 included in numbers below</b>
61241-1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures 'tD'	7	8	1	0	16
61241-1-1	Electrical apparatus for use in the presence of combustible dust - Part 1: Electrical apparatus protected by enclosures and surface temperature limitation - Specification for apparatus	0	0	0	0	0
61241-4	Electrical apparatus for use in the presence of combustible dust - Part 4: Type of protection 'pD'	0	0	0	0	0
61241-11	Electrical apparatus for use in the presence of combustible dust - Part 11: Protection by intrinsic safety 'iD'	0	0	1	0	1
61241-18	Electrical apparatus for use in the presence of combustible dust - Part 18: Protection by encapsulation 'mD'	0	0	0	0	0
62086-1	Electrical apparatus for explosive gas atmospheres – Electrical resistance trace heating – Part 1: General and testing requirements	0	0	0	0	0

**Note:** Numbers in the table show the IECEx Certificates only.

## **7. DOCUMENTATION**

### **7.1. Quality Manual**

The quality management system of CQM consists of four levels:

- Level 1: Quality manual (CQM/SC documents)
- Level 2: Procedures (CQM/CX documents)
- Level 3: Working instructions (CQM/ZY documents)
- Level 4: Records/Forms (CQM/JL documents)

The Quality Manual (QM) (CQM/SC-00-2014, Ed 04/02) was issued on July 1st, 2014 and updated on April 1st, 2015. The list of procedures is amended to the Quality Manual as Annex 4. It was found to meet the requirements of the IECEx.

### **7.2. Procedures**

There are 33 (including reserved numbers) procedures. Procedures CQM/CX-31 to CQM/CX-42 deal with IECEx. CQM has developed a guidance document for IECEx product certification in accordance to IECEx OD 009 under the number CQM/ZY-SH-01-18. The procedure, based on OD 009 was reviewed with the help of an interpreter and found to meet the requirements of the IECEx.

### **7.3. Work Instructions**

CQM has appropriate operational documents for certification. There are about 100 work instructions, eight of them related to the IECEx Scheme. Several work instructions were reviewed with the help of an interpreter and found to meet the requirements of the IECEx.

### **7.4. Records**

Records management is described in procedure CQM/CX-10. There are about 200 forms. 20 forms are related to IECEx. Several record forms were reviewed with the help of an interpreter and found to meet the requirements of the IECEx.

All records are retained in a paper file. The paper record is retained for 2 certification period (6 years). In addition to paper records, all records are retained via electronic media. The electronic media records are retained for 4 certification periods (12 Years).

There is an appropriate system to ensure electronic records are not lost. There is a dedicated storage area for the storage of records. The procedure and several forms related to IECEx were reviewed and found to meet the requirements of the IECEx.

### **7.5. Document Change Control**

The Quality Manual and procedure CQM/CX-09 describes document change control. The last update was performed on April 1<sup>st</sup>, 2015. All standards (ISO and IEC) are used in electronic media form and are subject to change control.

All quality documents are on the intranet and there is one paper copy only of each document which are controlled. For IECEx documents only those on the IECEx website are regarded as controlled. All current documents are on the intranet of CQM. Staff will be notified on all changes. CQM/CX-09 was checked during the assessment and found to meet the requirements of IECEx.

## 8. CONFIDENTIALITY

Quality Manual number CQM/SC-00, Clause 6.5 is dealing with the issue of confidentiality. Form Procedure for impartiality and confidentiality CQM/CX-02-2014 will be used. A confidentiality agreement is signed by every employee as part of the employment documentation. The confidentiality/impartiality agreements were reviewed during the assessment and found to meet the requirements of the IECEx.

## 9. PUBLICATIONS

CQM maintains a homepage in the English language. The website is [CQM](#). Printed documentation is available as well.

## 10. NATIONAL ACCREDITATION

CQM holds accreditation by the China National Certification Accreditation Service Association (CNAS) for ISO/IEC 17065:2012. The certificate was issued on February 26th, 2015 under number CNAS 002-P and is valid until January 3th, 2016. The last surveillance visit was performed from Sept 9 -12th, 2014. The certificate was presented during the assessment. All the standards applied for in Clause 1.6 of this report are listed in the scope of standards belonging to the certificate. See **ANNEX 2**.

CQM also holds accreditation by China National Certification Accreditation Service Association (CNAS) for ISO/IEC 17021:2011. The certificate was issued on February 26th, 2015 under number CNAS 002-Q and is valid until January 3rd, 2016. The last surveillance visit was performed from Sept 9 -12th, 2014. The certificate was presented during the assessment. See **ANNEX 3**.

The IECEx requirements are met.

The next CNAS surveillance visit will be performed from July 6th - 10th, 2015.

## 11. RECOGNITION AND AGREEMENTS

CQM is a member of IQNET dealing with management systems.

## 12. INTERNAL AUDIT AND PERIODIC MANAGEMENT REVIEW

The Quality Manual, Clause 7.3 deals with internal audits and management review. CQM head office organizes internal audits and management review on annual basis and covers the CQM headquarter and all branches involving auditors on full time basis.

Procedure CQM/CX-06-2014 covers the Procedure for internal audit. The latest

internal audit was performed from May 5 – 7, 2015. The internal audit plan (2015 to 2018, including IECEx operation), the audit records and resolution of open issues were reviewed and found to meet the requirements of the IECEx.

Procedure CQM/CX-06-2014 covers the management review. The last management review has been carried out on March 19-20, 2015. It also covers IECEx operation. The minutes have been reviewed with an interpreter and found to meet the requirements of the IECEx. The next management review will be held in March 2016.

### **13. SUBCONTRACTING, USE OF OTHER LABS AND USE OF OTHER LOCATIONS**

CQM has presently five ExTLs under subcontract (NEPSI, CQST, PCEC, CMExC and CHEM). They are listed in clause 1.9 of this report. These contracts include the scope of standards and were reviewed during the assessment.

CQM furthermore has 30 assessors and reviewers under contract. All the contracts were reviewed during the assessment as well the confidentiality/impartiality agreements. They cover all requirements such as competences in QMS and protection techniques having the relevant training records as well.

Subcontracting is well organized in CQM. The annexes in the on-site assessment report "List of subcontractors" and "List of contractors" show all necessary details. All requirements of the IECEx are fulfilled.

### **14. TRAINING**

Training is covered in section 3.1.4 of the Quality Manual. Training is periodically provided to all assessment staff to have their Expert Certificates valid. CQM has appropriate training plan yearly and implements it according to requirements and demands.

Training records are retained for all members of staff. There is a competency matrix that lists the employees and their competency. This is based on a competence examination in written form.

The training plan for 2015 as well as the records from 2014 were presented during the assessment and found to meet the requirements of the IECEx.

### **15. ASSESSMENT OF MANUFACTURERS AND ISSUE OF QAR'S**

There is The Procedure for Management of Certification and Audit (CQM/CX-19-2014) and The Procedure for factory inspection implementation of product certification (CQM/CX37-2015). In addition to this procedure, CQM had developed Ex Electrical Product Certification Plan (CQM13-3800-01-2015) in accordance with IECEx 02 and Guide for Ex Electrical Product Certification (CQM/ZY-SH-01-18) in accordance with IECEx OD 009 to guide assessment of manufacturers and issue of QARs.

The following QARs were reviewed during the assessment:

CN/CQM/QAR 13.0002/01, protection type "d"; manufacturer in the P.R. of China



CN/CQM/QAR 14.0005/00, protection type “d”, manufacturer in the P.R. of China  
CN/CQM/QAR 14.0006/00, protection type “d”, manufacturer in the P.R. of China  
CN/CQM/QAR 10.0002/05, protection type “n” and “tD”, manufacturer in Brazil,  
production location in the P.R. of China  
CN/CQM/QAR 15.0002/00, protection type “n”, manufacturer in USA, production  
location in the P.R. of China

All QARs reviewed are in good order. The requirements of the IECEx are met.

## **16. COMPLAINTS AND APPEALS (Including appeals to IECEx)**

This is covered in Chapter 5.8 of the Quality Manual for the complaints mechanism. There is The Procedure for Dealing with Appeals and Complaints (CQM/CX-09-2014). In addition to these Ex Electrical Product Certification Plan prescribes appeals to IECEx. Complaints received concerning IECEx were resolved.

## **17. SPECIAL FACTS TO BE NOTED**

### **17.1. Supporting Documentation**

Copies of additional supporting information for this assessment have been provided to the applicant and the IECEx Secretariat. These include:

- Details of issues raised and how these have been resolved
- Competence Matrix
- List of Contractors
- Checklist for ISO/IEC 17065

## **18. COMMENTS (Including issues found during assessment)**

During the assessment issues were found by reviewing ExTRs (e.g. issue date, marking of mechanical properties, ambient temperature, flame path dimensions, certificate number on type plate, drawings without issue date, the use of “X” marking and declaration of threaded joints.

All issues were resolved to the satisfaction of the assessment team.

## **19. RECOMMENDATION**

Based on the re-assessment and scope extension performed on June 15<sup>th</sup> & 16<sup>th</sup>, 2015, the ExCB of CQM, Beijing, China, is recommended for continued acceptance in the IECEx System (IECEx 02) as an IECEx Certification Body (ExCB) according to the scope of standards listed in this document including the extension of scope.

Lead Assessor  
Heinz Berger

Expert Assessor Gordana  
Ostojic (Mrs.)

Date: June 16th, 2015





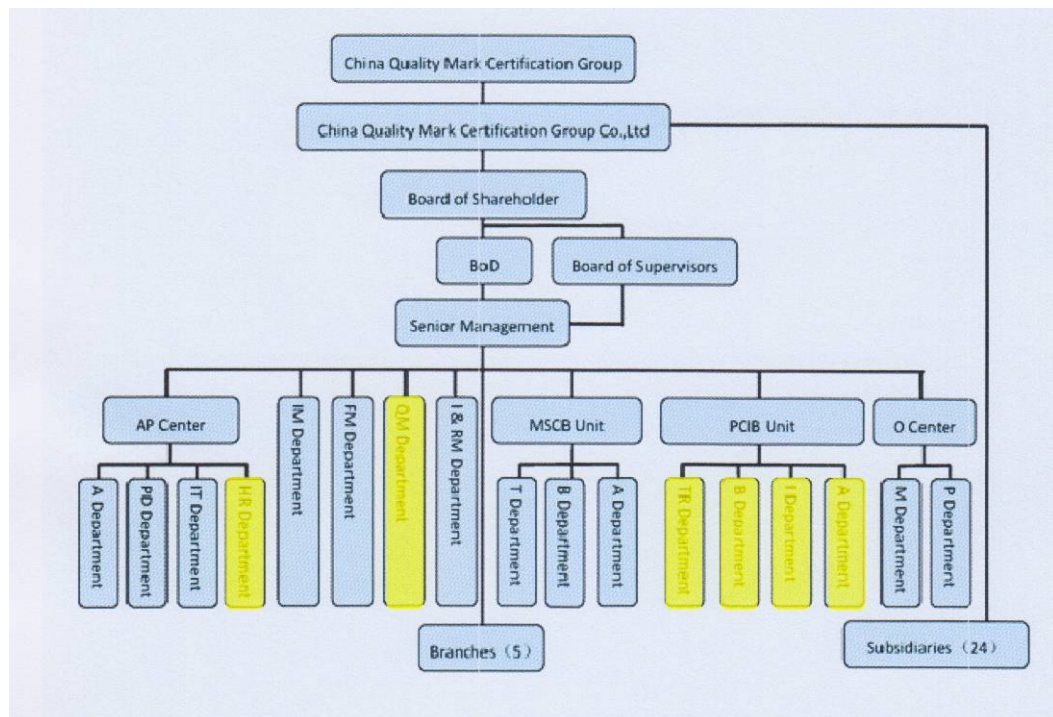
## **List of Annexes:**

**Annex 1:** Organization Chart of CQM

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**Annex 3:** CNAS Accreditation Certificate for ISO/IEC 17021 and 17021-3

## Annex 1: Organization Chart of CQM



Note: the following departments which in yellow are related to IECEX.

AP Center: Administrative and Personnel Center

A Department: Administrative Department

PD Department: Planning and Development Department

IT Department: IT Department

**HR Department: Human Resource Department (IECEX)**

IM Department: Investment Management Department

FM Department: Financial Management Department

**QM Department: Quality Management Department (IECEX)**

I & RM Department: International & Research Management Department

MSCB Unit: Management System Certification Business Unit

T Department: Technology Department

B Department: Business Department

A Department: Approval Department

**PCIB Unit: Product Certification & Inspection Business Department**

**TR Department: Technology Research Department (IECEX)**

**B Department: Business Department (IECEX)**

**I Department: Inspection Department (IECEX)**

**A Department: Approval Department (IECEX)**

O Center: Operation Center

M Department: Marketing Department

P Department: Project Department

PC Dept: Product Certification Department

QM Dept: Quality Management Department

ANNEX 2: CNAS Accreditation Certificate for ISO/IEC 17065





**China National Accreditation Service for Conformity Assessment**  
**PRODUCT CERTIFICATION BODY ACCREDITATION CERTIFICATE**  
**( No. CNAS C002-P)**

*China National Accreditation Service for Conformity Assessment has accredited*  
**CHINA QUALITY MARK CERTIFICATION GROUP CO.,LTD**  
No.33, Zengguang Road, Haidian District, Beijing, 100048 ,P.R. China

*to ISO/IEC 17065:2012 Conformity Assessment - Requirements for Bodies Certifying Products, Processes and Services (CNAS-CC02 Requirements for Bodies Certifying Products, Processes and Services) for the competence to undertake the product certification service as described in the schedule attached to this certificate.*

*The scope of accreditation is detailed in the attached schedule bearing the same accreditation number as above. The schedule forms an integral part of this certificate.*

**Date of Issue: 2015-02-26**  
**Date of Expiry: 2016-01-03**  
**Date of Initial Accreditation: 2004-03-09**





**Signed on behalf of China National Accreditation Service  
for Conformity Assessment**

China National Accreditation Service for Conformity Assessment (CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation systems for conformity assessment. CNAS is the signatory to International Accreditation Forum Multilateral Recognition Arrangement (IAF MLA), and the signatory to Pacific Accreditation Cooperation Multilateral Recognition Arrangement (PAC MLA).



**ANNEX 3: CNAS Accreditation Certificate for ISO/IEC 17021 and 17021-3**





**China National Accreditation Service for Conformity Assessment**  
**QUALITY MANAGEMENT SYSTEM CERTIFICATION BODY**  
**ACCREDITATION CERTIFICATE**  
**( No. CNAS C002-Q)**

*China National Accreditation Service for Conformity Assessment has accredited*  
**CHINA QUALITY MARK CERTIFICATION GROUP CO.,LTD**  
No.33, Zengguang Road, Haidian District, Beijing, 100048 ,P.R. China

*to ISO/IEC 17021:2011 Requirements for Bodies providing audit and Certification of management Systems (CNAS-CC01 ) and ISO/IEC TS 17021-3: 2013 Accreditation Service— Requirements for Bodies providing audit and certification Part 3: Competence Requirements for Auditing and Certification of Quality Management Systems (CNAS-CC131 ) for the competence to undertake the quality management system certification service as described in the schedule attached to this certificate.*

*The scope of accreditation is detailed in the attached schedule bearing the same accreditation number as above. The schedule forms an integral part of this certificate.*

**Date of Issue: 2015-02-26**  
**Date of Expiry: 2016-01-03**  
**Date of Initial Accreditation: 1996-01-05**



**Signed on behalf of China National Accreditation Service  
for Conformity Assessment**

China National Accreditation Service for Conformity Assessment (CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation systems for conformity assessment. CNAS is the signatory to International Accreditation Forum Multilateral Recognition Arrangement (IAF MLA), and the signatory to Pacific Accreditation Cooperation Multilateral Recognition Arrangement (PAC MLA).