**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 China Quality Mark Certification Group Co., Ltd. (CQM) an Accepted ExCB within the IECEx 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 China Quality Mark Certification Group Co., Ltd. (CQM) an Accepted ExCB within the IECEx Equipment Scheme 02.

This report is hereby submitted for endorsement during the 2022 ExMC Meeting.

***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

IECEx assessment report form for use by IECEx assessment teams to report assessments conducted according to the relevant IECEx assessment procedures of:

Operational Document IECEx OD 003-2 for the Certified Equipment Scheme

Operational Document IECEx OD 316-\* for the Certified Service Facility Scheme

Operational Document IECEx OD 422 for the IECEx Conformity Mark Licensing Scheme

Operational Document IECEx OD 501 for the Personnel Competence Scheme

IECEx ExCB assessment report for

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

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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# Assessment information

## Type of body covered by this assessment:

|  |  |
| --- | --- |
| ExCB for IECEx Certified Equipment Scheme |  |
| ExTL for IECEx Certified Equipment Scheme |  |
| ATF for IECEx Certified Equipment Scheme |  |
| ExCB for IECEx Certified Service Facilities Scheme |  |
| ExCB for IECEx Conformity Mark Licensing System |  |
| ExCB for IECEx Certification of Personnel Competency Scheme |  |

NOTE 1 ExCB - IECEx Certification Body

NOTE 2 ExTL - IECEx Testing Laboratory

NOTE 3 ATF - Additional Testing Facility

## Type of assessment:

|  |  |
| --- | --- |
| Pre-assessment for candidate body |  |
| Initial assessment for candidate body |  |
| Surveillance |  |
| Re-assessment |  |
| Scope extension |  |

## Details of body

### Country

People’s Republic of China

### Name of body

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

### Name and title of nominated principal contact

|  |  |  |
| --- | --- | --- |
| Name | Title | E-mail address |
| Ma Zhenyu | Deputy Manager  International Cooperation Department | mzy@cqm.com.cn |

## Assessment information

### Members of the assessment team

|  |  |
| --- | --- |
| Name | Role |
| Katy A. Holdredge | IECEx Lead Assessor |

### Place(s) of assessment

|  |
| --- |
| Remote Assessment due to COVID-19 pandemic measures:  No.33 Zengguang Road, Haidian District, Beijing City 100048, P.R. of China |

### Assessment date(s)

Four hour sessions on January 20th~22nd, 27th~29th, 2021.

## Application information and background information on the assessment

The last assessment at CQM was in November 2017. This current assessment was planned in 2020 but was postponed because of the pandemic. The remote assessment was performed

## Scopes

### ExCB scope for equipment certification scheme

The scope for the ExCB is shown in Annex A.

NOTE 1 Unless otherwise indicated, earlier editions of standards (even if with a different number) are considered to be covered in the above scope for the purposes of the assessment.

### ExTL scope

The scopes for the associated ExTLs is shown in Annex A.

### ATF Scope

Not applicable.

### ExCB scope for Service Facilities Scheme

Not applicable.

## ExCB scope for Conformity Mark Licensing Scheme

Not applicable.

## ExCB scope for IECEx Personnel Competence Scheme

Not applicable.

# Common information

## Legal entity of body

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 91110108718701228R. It was first issued on September 15th, 1999 and is valid until August 24th, 2055. The requirements of the IECEx are met.

## Financial support

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

## 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.

In November 2019 CQM was accepted by the IECEE-CB scheme as the NCB in China.

## Documentation

### Quality manual

CQM has a Quality Manual (CQM/SC-2016, 05/12), which was updated on Sept. 17th, 2020.

It was found to meet the requirements of the IECEx.

### Procedures

There are 18 procedures. Procedure CQM/CX-13-2016 deals with Product Certification, including IECEx. There is no procedure that describes commenting on ExTAG DS as required by this form. This was subsequently resolved and found in accordance with the requirements of the IECEx.

### Work instructions

CQM has appropriate operational documents for certification. There are about 21 work instructions, which are related to the IECEx Scheme. P253 includes the requirements for Offsite testing and Witness testing, which are following IECEx OD 024. They are found to meet the requirements of the IECEx.

### Records (including test records where relevant)

Records management is described in procedure CQM/CX-10. All records in paper or electronic media are retained for 10 years after the certification is suspended/withdrawn. 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 contained in OD 207 Guidance on the Retention of Records

### Document change control

The Document Control Procedure CQM/CX-09 describes document change control. The last update was performed on Sept. 11th, 2020. All standards (ISO and IEC) are used in electronic media form and are subject to change control. 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.

## Confidentiality

(For staff, contractors and members of advisory bodies)

Quality Manual CQM/SC-2016, Clause 8.5 is dealing with the issue of confidentiality. Procedure for impartiality and confidentiality CQM/CX-02-2016 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.

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

CQM has a website [www.cqm.com.cn](http://www.cqm.com.cn).

## Recognitions and agreements

Agreements are in place with IECEx TLs including CHEM, CMExC, EETI, NEPSI, PCEC, CQST, CCTEG SHC SQI\_ZM, and CCCGT.

CQM is a member of IQNET dealing with management systems and recognised CCC Certification Body in China.

## Internal audit

CQM head office organizes internal audits on annual basis in accordance with Procedure CQM/CX-02-2016, revised 2020-09-10, and covers the CQM headquarters and all branches involving auditors on full time basis.

The latest internal audit was performed from July 2020. The internal audit plan, including IECEx operations, the audit records and resolution of open issues were reviewed and found to meet the requirements of the IECEx.

## Management review

Procedure CQM/CX-06-2016 also covers the management review annually. The last management review has been carried out on May 2020. It also covers IECEx operations. The minutes and a selection of supporting documentation have been reviewed and found to meet the requirements of the IECEx.

## Contracting, subcontracting and witness testing

### Contracting

Contract staff include 34 auditors and 23 engineers (reviewers). The outsourcing policy is described Procedure P231. They cover all requirements such as competences and protection techniques having the relevant training records as well. All of those comply with the requirements of the IECEx. These staff signs agreements as described in Clause 2.5.

### Subcontracting

CQM has 9 associated IECEx ExTLs including CHEM, CMExC, EETI, NEPSI, PCEC, CQST, SHC, SQI, and CCCMT. These contracts include the scope of standards and were reviewed during the assessment. These contracts all prohibit the ExTLs from subcontracting testing. All requirements of the IECEx are fulfilled.

### Off-site and Witness testing

Witness testing is covered in the procedure P253 and uses the Witness test and Offsite test procedures. This is in accordance with OD024. Evidence of a signed witness test agreement and completed audit form was reviewed. Witness and offsite testing are identified as a section in the ExTR. The requirements of the IECEx are met.

### Training and competence

Training is periodically provided to all staff to have their Expert Certificates valid. CQM/P231D6-2020 covers the issuance of Expert Certificates and monitoring is done annually. 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 2021 as well as the records from 2020 were presented during the assessment and found to meet the requirements of the IECEx.

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

## Complaints and appeals (including appeals to IECEx)

This is covered in Chapter 6 of the Quality Manual for the complaints mechanism. There is the Procedure for Dealing with Appeals and Complaints (CQM/CX-08- 2016). In addition to these Ex Electrical Product Certification Plan prescribes appeals to IECEx, which was found to meet the requirements of the IECEx.

## Impartiality

The policy on impartiality is described in the Quality manual section 1.2, CX-02-206 and is in compliance with the requirements of the IECEx. In addition, CQM’s risk identification, evaluation and control list were reviewed and considered acceptable.

## Active involvement in development of Decision Sheets

P15 procedure of the company policy on participation in IECEx ExTAG but does not currently describe the process for commenting on ExTAG DS. This was subsequently resolved and found in accordance with the requirements of the IECEx.

## Special facts to be noted

None other than those matters identified throughout this report.

## Supporting documentation

Copies of additional supporting information for this assessment have been provided to the applicant and the IECEx Secretariat. These are included in a site assessment report or provided separately and include:

* Details of issues raised and how these have been resolved;
* Checklist for ISO/IEC 17065;
* Information on competencies; and
* Information on contracting/subcontracting.

## Recommendations

Based on the assessment performed on January 20th~22nd, 27th~29th, 2021, CQM is recommended for continued acceptance in the IECEx scheme as:

* An ExCB in the IECEx Certified Equipment Scheme.

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

|  |
| --- |
| Katy A. Holdredge |
| IECEx Lead Assessor |

Date: 2021-06-07

# ExCB for IECEx Certified Equipment Scheme

## Assessment references

### General references

1. IECEx 02 IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres – Rules of Procedure
2. IECEx OD003-2 Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme
3. ISO/IEC 80079-34 Explosive atmospheres – Part 34: Application of quality systems for equipment manufacture
4. IECEx OD 009 Issuing of CoCs, ExTRs and QARs
5. IECEx 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
6. IECEx OD 026 IECEx Certified Equipment Scheme – Guidelines for the qualification of Lead Auditor and Auditors, in accordance with the IECEx System
7. ISO/IEC 17065 General requirements for bodies operating product certification systems Conformity assessment — Requirements for bodies certifying products, processes and services
8. IECEx OD 107 Harmonised check list for certification bodies ISO/IEC 17065
9. IECEx OD 060 IECEx Guide for Business Continuity – Management of Extraordinary Circumstances or Events Affecting IECEx Certification Schemes and Activities
10. ExTAG decision sheets (DSs)

NOTE The latest editions of the above documents were applied, unless otherwise specified

### Additional references applied for this assessment

1. IECEx OD 233 IECEx Certified Equipment Scheme - Assessment of Ex “s" Equipment
2. IECEx OD 280 Guide to Certification of Non-electrical Equipment and Protective Systems

## Candidate ExCB persons interviewed

| Name | Position |
| --- | --- |
| Liu Xianfeng | Vice- Chairman & Management representative |
| Piao Wenfeng | GM of Business Control Center |
| Yang Dong | GM of Product Certification and Inspection Business Department |
| Lu Qiao | Director  Ex Center  Product Certification and Inspection Business Department |
| Cui Wei | Manager  Quality and Scientific Research Section  Business Control Center |
| Cao Gang | Deputy Manager  Personnel Management Section  Business Control Center |
| Ma Zhenyu | Deputy Manager  International Cooperation Department |
| Liu Jia | Engineer  Ex Center  Product Certification and Inspection Business Department |
| Xu Mengjia | Engineer  Ex Center  Product Certification and Inspection Business Department |
| Wang Liran | Engineer  Ex Center  Product Certification and Inspection Business Department |
| Sun Lihong | Engineer  Ex Center  Product Certification and Inspection Business Department |
| He Han | Supervisor  Quality and Scientific Research Section  Business Control Center |
| Cheng Jia | Specialist  Personnel Management Section  Business Control Center |

## Associated ExTL(s)

* National Quality Supervision and Inspection Centre of Hoisting & Metallurgical & Explosion-Proof Electric Machine (CHEM) - PEOPLES REPUBLIC OF CHINA
* China National Quality Supervision & Test Centre for Explosion-proof / Safety Products Coal Mines (CMExC) - PEOPLES REPUBLIC OF CHINA
* Suzhou Electrical Apparatus Science Research Institute Co., Ltd. (EETI) - PEOPLES REPUBLIC OF CHINA
* National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation (NEPSI) - PEOPLES REPUBLIC OF CHINA
* Supervision & Test Center of Ex-products of China Petroleum & Chemical Industry (PCEC) - PEOPLES REPUBLIC OF CHINA
* China National Quality Supervision and Test Centre for Explosion Protected Electrical Products (CQST) - PEOPLES REPUBLIC OF CHINA
* Shanghai Meike Test Technology Co.,Ltd/Shanghai Electric Explosion Proof Test Center of Coal Industry (SHC) - PEOPLES REPUBLIC OF CHINA
* Shanghai Institute of Quality Inspection and Technical Research-China National Lighting Fitting Quality Supervision Testing Centre - PEOPLES REPUBLIC OF CHINA
* The State Work Safety Changzhou Inspection and Testing Center for Mine Communication and Monitoring Devices/Coal Industry Changzhou Quality Supervision and Inspection Center for Communication and Monitoring Products (CCCMT)

## Associated certification functions

CQM is one of the NCB for IECEE system and is authorized by Certification and Accreditation Administration of the People’s Republic of China (CNCA) as CCC CB for China Compulsory Certification.

## National marks and certificates

The approval mark is used on certified products. Certificates of compliance are issued authorizing the clients to use the applicable mark.

## Standards accepted

The scope for the ExCB is shown in Annex A.

## National differences to IEC standards

National differences to IEC standards are those for the Chinese differences listed in the latest version of the IECEx System Bulletin.

## Organisation

See Annex A for the organization chart.

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Ji Xiaodong | Chairman & CEO, | 20 |
| Wang Xichun | Vice- Chairman | 19 |
| Liu Xianfeng | Vice- Chairman & Management representative | 17 |
| Wang Hui | CFO | 19 |

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Liu Xianfeng | Vice- Chairman & Management representative | 17 |

### Name and title of signatories for certification

|  |  |  |
| --- | --- | --- |
| Name | Title | Comments |
| Yang Dong | GM | - |
| Lu Qiao | Director | - |
| Liu Jia | Engineer | - |
| Xu Mengjia | Engineer | - |
| Liu Bing | Engineer | - |

### Other employees in ExCB activity

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience in Ex (years) |
| Wang Liran | Engineer | 10 |
| Sun Lihong | Engineer | 15 |

## Organizational structure

See Annex A for the organization chart.

## Indemnity insurance

CQM holds indemnity insurance from the People Insurance Company of China Limited with validity to Oct. 16th, 2021. The number is PZBH202044030000000021. It can be renewed every year.

## Resources

CQM has adequate resources, including staff, quality management documentation and associated ExTLs, to support their scope as an IECEx ExCB.

## Committees (such as governing or advisory boards)

The Governing Body is mentioned in Annex 1 (list of all members) of the Quality Manual. It consists of 9 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 2020. The next meeting will take place in Q2 of 2021. The minutes of the last meeting were reviewed and found to be accurate and actions well controlled. The requirements of the IECEx are fulfilled.

## Certification operations

### National approval/certification methods

CQM maintains national certification methods according to Chinese regulation covering all the types of protection for Ex electrical equipment or non-electrical equipment. All national Ex activities are covered by CNAS accreditation.

### 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.

### 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 P33. The procedure was checked and found to meet the requirements of the IECEx.

### Certification decision

The Ex product certification procedure (CQM13-3800-01-2015) includes for Approval, Maintenance, Updating, Extension, Reducing, Suspension, Resumption, Cancellation and Withdrawal Certification. It was checked and found to meet the requirements of the IECEx.

### Suspension and cancellation of certificates

The Ex product certification procedure (CQM13-3800-01-2020) includes for Approval, Maintenance, Updating, Extension, Reducing, Suspension, Resumption, Cancellation and Withdrawal Certification, P815. It was checked and found to meet the requirements of the IECEx.

## Certificates issued

Number of certificates issued under for the preceding two 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 2 years) | | Total |
| --- | --- | --- | --- | --- |
| 2019 | 2020 |
| 60079-0 | Explosive atmospheres -  Part 0: Equipment - General requirements | 38 | 25 | 63 |
| 60079-1 | Explosive atmospheres -  Part 1: Equipment protection by flameproof enclosures 'd' | 30 | 22 | 52 |
| 60079-2 | Explosive atmospheres -  Part 2: Equipment protection by pressurized enclosures 'p' | 1 | 0 | 1 |
| 60079-5 | Explosive atmospheres -  Part 5: Equipment protection by powder filling 'q' | 3 | 1 | 4 |
| 60079-6 | Explosive atmospheres -  Part 6: Equipment protection by oil immersion 'o' | 0 | 0 | 0 |
| 60079-7 | Explosive atmospheres -  Part 7: Equipment protection by increased safety 'e' | 17 | 3 | 20 |
| 60079-11 | Explosive atmospheres -  Part 11: Equipment protection by intrinsic safety 'i' | 7 | 3 | 10 |
| 60079-13 | Construction and use of rooms or buildings protected by pressurization  Part 13 | 0 | 0 | 0 |
| 60079-15 | Explosive atmospheres -  Part 15: Equipment protection by type of protection 'n' | 3 | 0 | 3 |
| TR 60079-16 | Artificial ventilation for the protection of analyser(s) houses  Part 16 | 0 | 0 | 0 |
| 60079-18 | Electrical apparatus for explosive gas atmospheres -  Part 18: Construction, test and marking of type of protection encapsulation 'm' electrical apparatus | 2 | 0 | 2 |
| 60079-25 | Explosive atmospheres -  Part 25: Intrinsically safe systems | 0 | 0 | 0 |
| 60079-26 | Explosive atmospheres -  Part 26: Equipment with equipment protection level (EPL) Ga | 1 | 1 | 2 |
| 60079-27 | Explosive atmospheres -  Part 27: Fieldbus intrinsically safe concept (FISCO) | 0 | 0 | 0 |
| 60079-28 | Explosive atmospheres -  Part 28: Protection of equipment and transmission systems using optical radiation | 2 | 2 | 4 |
| 60079-29-1 | Explosive atmospheres - Part 29-1: Gas detectors - Performance requirements of detectors for flammable gases | 0 | 0 | 0 |
| 60079-30-1 | Explosive atmosphere -  Part 30-1: Electrical resistance trace heating - General and testing requirements | 0 | 0 | 0 |
| 60079-31 | Explosive atmosphere -  Part 31: Equipment dust ignition protection by enclosure "t" | 14 | 8 | 22 |
| 61241-0 | Electrical apparatus for use in the presence of combustible dust -  Part 0: General requirements | 1 | 0 | 1 |
| 61241-1 | Electrical apparatus for use in the presence of combustible dust -  Part 1: Protection by enclosures 'tD' | 1 | 0 | 1 |
| 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 |
| 61241-4 | Electrical apparatus for use in the presence of combustible dust -  Part 4: Type of protection 'pD' | 0 | 0 | 0 |
| 61241-11 | Electrical apparatus for use in the presence of combustible dust -  Part 11: Protection by intrinsic safety 'iD' | 0 | 0 | 0 |
| 61241-18 | Electrical apparatus for use in the presence of combustible dust -  Part 18: Protection by encapsulation 'mD' | 0 | 0 | 0 |
| 62086-1 | Electrical apparatus for explosive gas atmospheres –  Electrical resistance trace heating – Part 1: General and testing requirements | 0 | 0 | 0 |
| IEC 60079-33  Edition 1.0 | Explosive atmospheres – Part 33: Equipment protection by special protection “s” | 0 | 0 | 0 |
| IS0 80079-36  Edition 1.0 | Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements | 0 | 0 | 0 |
| ISO 80079-37  Edition 1.0 | Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres – Nonelectrical type of protection constructional safety ”c” control of ignition source ”b”, liquid immersion ”k” | 0 | 0 | 0 |

NOTE Above include certificates to IEC 60079-0 unless otherwise shown

## National accreditation

CQM is authorized by Certification and Accreditation Administration of the People’s Republic of China (CNCA) as Certification Body. The national accreditation certification for ISO/IEC 17065 is shown in ‎Annex C. CNAS did an audit of surveillance related to their voluntary CQMEx mark at a manufacturer of non-Ex control panel and junction box in 2019. No surveillance of a manufacturer was performed in 2020 due to the pandemic.

## Assessment of manufacturers and issue of QARs

The Ex product certification procedure (CQM13-3800-01-2015) and Working instruction for factory auditing (P663Ex) provides guidance for manufacturer’s assessment and issuing of QAR. The implementation rule for product certification during pandemic dated April 2020 includes the requirements of OD060. The procedure was reviewed and found to meet the requirements of the IECEx.

## Comments (including issues found during assessment)

CQM has the necessary staff, competency and resources for their scope. There were some issues related to the following topics:

* Evidence of principal information on manufacturer’s drawings and documentation not provided in English as required by IECEx OD 017, Drawing and documentation Guidance for IEC Ex Certification – for use by Manufacturers and ExTLs;
* Missing implementation of ExTAG DS 2014/001; and
* Inconsistency between certification and manufacturer’s documentation for a specific condition.

In addition, there were insufficient manuals/policies/procedures/work instructions for

* IECEx OD 250, Guidance on the Management of IECEx Quality Assessment Reports and insufficient action for CoCs on list having invalid QARs;
* IECEx OD 060, IECEx Guide for Business Continuity – Management of Extraordinary Circumstances or Events Affecting IECEx Certification Schemes and Activities and insufficient action in updating the IECEx website;
* IECEx OD 209, Requirements and Guidelines for the Suspension, Cancellation and Reinstatement of Certificates of Conformity and
* Commenting on ExTAG Decision Sheets.

All issues were revised to the satisfaction of the audit team and now meet the requirements of the IECEx.

# Annexes

1. Scope for IECEx Certified Equipment Scheme
   1. Current standards

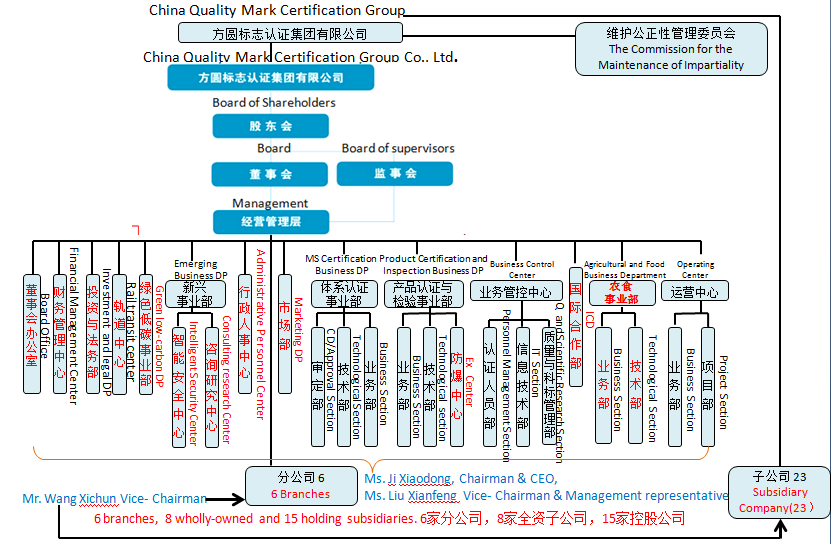
| Number | Title | CQM | CHEM | CMExC | EETI | NEPSI | PCEC | CQST | CCTEG SHC | SQI\_ZM |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IEC 60079-0  Edition 7.0 | Explosive atmospheres - Part 0: Equipment - General requirements | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| IEC 60079-1  Edition 7.0 | Explosive atmospheres - Part 1: Equipment protection by flameproof  enclosures “d” | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| IEC 60079-2  Edition 6.0 | Explosive atmospheres - Part 2: Equipment protection by pressurized  enclosure “p’ | √ | √ | √ | √ | √ | √ | √ | √ |  |
| IEC 60079-5  Edition 4.0 | Explosive atmospheres - Part 5: Equipment protection by powder filling “q” | √ |  | √ | √ | √ | √ | √ | √ |  |
| IEC 60079-6  Edition 4.1 | Explosive atmospheres - Part 6: Equipment protection by oil immersion “o” | √ |  | √ | √ | √ | √ | √ | √ |  |
| IEC 60079-7  Edition 5.1 | Explosive atmospheres - Part 7: Equipment protection by increased  safety "e" | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| IEC 60079-11  Edition 6.0 | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i” | √ | √ | √ | √ | √ | √ | √ | √ |  |
| IEC 60079-13  Edition 2.0 | Explosive atmospheres -  Part 13: Equipment protection by pressurized room "p" and artificially ventilated room "v" | √ |  | √ | √ | √ | √ | √ | √ |  |
| IEC 60079-15  Edition 5.0 | Explosive atmospheres – Part 15: Equipment protection by type of protection "n" | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| IEC 60079-18  Edition 4.1 | Explosive atmospheres – Part 18: Equipment protection by encapsulation “m” | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| IEC 60079-25  Edition 3.0 | Explosive atmospheres – Part 25: Intrinsically safe electrical systems | √ |  | √ | √ | √ | √ | √ | √ |  |
| IEC 60079-26  Edition 3.0 | Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga | √ |  | √ | √ | √ | √ | √ | √ |  |
| IEC 60079-28  Edition 2.0 | Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation | √ |  | √ | √ | √ | √ | √ | √ | √ |
| IEC 60079-29-1  Edition 2.1 | Explosive atmospheres - Part 29-1: Gas detectors – Performance requirements of detectors for flammable gases | √ |  |  |  | √ |  |  |  |  |
| IEC 60079-29-4  Edition 1.0 | Explosive Atmospheres – Part 29-4: Gas detectors - Performance requirements of open path detectors for flammable gases |  |  |  |  |  |  |  |  |  |
| IEC/IEEE 60079-30-1  Edition 1.0 | Explosive atmospheres – Part 30-1: Electrical resistance trace heating – General and testing requirements | √ |  | √ | √ | √ | √ | √ | √ |  |
| IEC 60079-31  Edition 2.0 | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t" | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| IEC TS 60079-32-1  Edition 1.1 | Explosive atmospheres - Part 32-1: Electrostatic hazards, guidance  (may be used for testing purposes but not for issuing an IECEx Certificate of Conformity) |  |  |  |  |  |  |  |  |  |
| IEC 60079-32-2  Edition 1.0 | Explosive atmospheres - Part 32-2: Electrostatics hazards - Tests  (may be used for testing purposes but not for issuing an IECEx Certificate of Conformity) |  |  |  |  |  |  |  |  |  |
| IEC 60079-33  Edition 1.0 | Explosive atmospheres – Part 33: Equipment protection by special protection “s” | √ |  |  |  | √ | √ | √ | √ |  |
| IEC 60079-35-1  Edition 1.0 | Explosive atmospheres – Part 35-1: Caplights for use in mines susceptible to firedamp – General requirements – Construction and testing in relation to the risk of explosion |  |  |  |  |  |  |  |  |  |
| IEC 60079-35-2  Edition 1.0 | Explosive atmospheres – Part 35-2: Caplights for use in mines susceptible to firedamp – Performance and other safety-related matters |  |  |  |  |  |  |  |  |  |
| 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 – Nonelectrical type of protection constructional safety ”c” control of ignition source ”b”, liquid immersion ”k” | √ |  | √ | √ | √ | √ | √ | √ |  |
| IEC TS 60079-39  Edition 1.0 | Explosive atmospheres - Part 39: Intrinsically safe systems with electronically controlled spark duration limitation |  |  |  |  |  |  |  |  |  |
| IEC TS 60079-40  Edition 1.0 | Explosive atmospheres - Part 40: Requirements for process sealing between flammable process fluids and electrical systems |  |  |  |  |  |  |  |  |  |
| IEC TS 60079-42  Edition 1.0 | Explosive atmospheres - Part 42: Electrical safety devices for the control of potential ignition sources from Ex-Equipment  (may be used for testing purposes but not for issuing an IECEx Certificate of Conformity) |  |  |  |  |  |  |  |  |  |
| IEC TS 60079-46  Edition 1.0 | Explosive atmospheres – Part 46 - Equipment assemblies | √ |  |  |  | √ |  | √ | √ |  |
| IEC 62784  Edition 1.1 | Vacuum cleaners and dust extractors providing equipment protection level Dc for the collection of combustible dusts - Particular requirements | √ |  |  |  | √ |  |  |  |  |
| ISO 16852  Edition 2 | Flame arrestors - Performance requirements., test methods and limits for use |  |  |  |  |  |  |  |  |  |

* 1. Superseded standards

The following superseded standards may form part of a body’s scope, generally for historical reasons.

| Number | Title | CQM | CHEM | CMExC | EETI | NEPSI | PCEC | CQST | CCTEG SHC | SQI\_ZM |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| IEC 60079-27  Edition 2.0 | Explosive atmospheres – Part 27: Fieldbus intrinsically safe concept (FISCO) | √ |  |  |  | √ | √ | √ | √ |  |
| IEC 61241-0  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements | √ | √ | √ | √ | √ |  | √ | √ |  |
| IEC 61241-1  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosure “tD” | √ | √ | √ |  | √ | √ | √ | √ |  |
| IEC 61241-4  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 4: Protection by pressurization "pD" | √ |  | √ | √ | √ | √ | √ | √ |  |
| IEC 61241-11  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust – Part 11: Protection by intrinsic safety 'iD' | √ |  | √ | √ | √ | √ | √ | √ |  |
| IEC 61241-18  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 18: Protection by encapsulation "mD" | √ |  | √ | √ | √ |  | √ | √ |  |
| IEC 62013-1  Edition 2.0 | Caplights for use in mines susceptible to firedamp - Part 1: General requirements - Construction and testing in relation to the risk of explosion |  |  |  |  |  |  |  |  |  |
| IEC 62013-2  Edition 2.0 | Caplights for use in mines susceptible to firedamp - Part 2: Performance and other safety-related matters |  |  |  |  |  |  |  |  |  |
| IECEx DS2015/001A  2015 10 09 | Equipment assemblies | √ |  |  |  |  |  |  |  |  |

1. Overall Organisation Chart



1. Accreditation Certificate for ISO/IEC 17065

