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Implementation Detailed-Rules for China Compulsory Certification – Electric Welding Machine

强制性产品认证实施细则

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0. Introduction

Implementation Detailed-Rules for China Compulsory Certification - Electric welding machine (hereafter referred to as Detailed-Rules) is formulated according to the provisions of *Implementation Rules for China Compulsory Certification - Electric welding machine* (CNCA-C04-01:2014) (hereafter referred to as Implementation Rules). Detailed-Rules is used together with Implementation Rules as a supportive document.

The product scope, certification basis and all other contents of this Detailed-Rules shall comply with relevant provisions of Implementation Rules. It shall also be adjusted according to the Notices such as defined directory and directory adjustment that are issued by Certification and Accreditation Administration of China (hereafter referred to as CNCA).

In accordance with the provisions of Implementation Rules, following the principles of maintaining the effectiveness of product certification, improving quality of product, serving certification companies, and controlling risk of certification, CQC formulates and issues this Detailed-Rules. Through establishing the classification management requirements of manufacturing enterprises, and combining the classification of manufacturing enterprises, this Detailed-Rules determines the implementation requirements for China Compulsory Certification of electric welding machine.

0.1 Terms and definitions

0.1.1 Testing at Manufacturer's Premises (abbreviated as TMP mode)

It means that the engineers of designated laboratory use the testing equipment in the factory laboratory to conduct testing. The factory shall dispatch test personnel to provide assistance. The designated laboratory will examine, approve and issue the test report.

0.1.2 Witnessed Manufacturer's Testing (abbreviated as WMT mode)

It means that the engineer of designated laboratory witnesses the factory laboratory's test conditions and all tests completed by using the laboratory's equipment or according to the test plan submitted; or witnesses part of the test conditions and the test items. Test personnel of the factory laboratory shall provide the original records and draft up the test report together with the engineer of designated laboratory according to relevant provisions. The designated laboratory shall audit, approve and issue the test report.

0.1.3 ODM (Original Design Manufacturer) manufacturing enterprise

The factory that utilizes the same-quality assurance capability requirements, same-product design, same-production process control, and same inspection requirements etc., to design, process, manufacture the same-product for a

manufacturer or multiple manufacturers.

0.1.4 Holder of ODM initial certificate

The organization that holds the initial product certificate of ODM product.

0.1.5 OEM (Original Equipment Manufacturer) manufacturing enterprise

The manufacturing factory that manufactures the certification product in accordance with the entrusting party's design, process control and inspection requirements. The entrusting party can be the certification entrusting client [Note by Translator (not part of this document): "Certification entrusting client" refers to the applicant who applies the production certification to CQC. "Certification entrusting client" may be the Manufacturer or its proxy (Power of Attorney) such as local representative, importer, distributor etc. Hereafter it is abbreviated as CLIENT] or the manufacturer. OEM manufacturing enterprise manufactures the certification product with its own equipment in accordance the entrusting party's design, process control and inspection requirements.

0.2 Classification management requirements of manufacturing enterprise

CQC collects and sorts-out all the information related to certification products and quality related to manufacturing enterprises; and uses dynamic classification management for manufacturing enterprises. CLIENT, manufacturer and manufacturing enterprise shall make cooperation with it.

Manufacturing enterprises are divided into 4 categories, expressed by A, B, C, D respectively. CQC shall classify the manufacturing enterprises according to the following basic principles, and regularly or irregularly reclassify the manufacturing enterprises in accordance with all information to achieve dynamic management. If there is any change, the documents published by CQC shall prevail. In principle, the classification result of manufacturing enterprises shall be step-by-step upgraded in the sequence of D-C-B-A; and step-by-step downgraded in the sequence of A-B-C-D; or be directly adjusted to corresponding category after risk assessment.

Basic principles for classification are as follows:

① Category A:

In principle, enterprises of Category B [Translator Note: It should be "Category A" here] shall provide conformity documents to CQC. CQC shall conduct comprehensive risk assessment on collected quality information and materials provided by enterprises, then determine the classification result. The content of assessment shall at least include:

a) Factory inspection

There is no nonconformity in factory inspections in the last 2 years

reasons;

d) There are significant quality problems and the enterprise is responsible for it, involving certificate suspension and certificate withdrawal;

e) The results of national, provincial and CCC special tests are unqualified and there are safety performance problems.

f) The manufacturing enterprises that are deemed to be adjusted to be Category D by CQC, according to the comprehensive assessment of quality information concerning manufacturing enterprises and certification product.

1. Application Scope

Same as Clause 1 of Implementation Rules.

2. Standards for certification

Same as Clause 2 of Implementation Rules.

3. Certification mode

3.1 Basic mode

The basic mode of China Compulsory Certification for electric welding machine is:

Type test + After-certification supervision

3.2 Details of certification mode

According to basic mode, combining with manufacturing enterprises classification management principle, and relative certification elements with regard to different enterprises, the details are as follows:

Mode 1: Type test + After-certification supervision

Mode 2: Type test + Enterprise quality assurance capacity and product conformity inspection (initial factory inspection) + After-certification supervision

After-certification supervision refers to 1 or combination of 3 methods – after-certification inspection, manufacturing enterprise sampling inspection, or/and market sampling inspection.

3.3 Applicability of certification mode

Category A: It may adopt Mode 1.

manufacturing enterprise (such as ODM Agreement, OEM Agreement, certificate of authorization, etc.);

(5) Product description information (including: main technical parameters, structure, specification, critical components and/or materials list, explanation of differences of different specification products within the same certification-unit, etc.);

(6) Factory inspection survey form;

(7) Self-assessment report of factory's quality assurance capacity (if applicable);

(8) For "change application", the documents of relative changed items;

(9) Other required documents.

5.3 Implementation arrangement

CQC shall formulate the certification plan after acceptance, and issue the notice to CLIENT. In general, certification plan includes the following:

(1) Adopted certification mode and certification-unit division;

(2) List of application documents to be submitted;

(3) Sample-submitting requirements of type test;

(4) Information about designated laboratory;

(5) Required certification process and time limit;

(6) Estimated certification costs;

(7) Contact information of relevant CQC staffs;

(8) Other necessary issues.

6. Certification implementation

6.1 Type test

6.1.1 Type test plan

Type test plan includes: sample requirements, quantity, test items, and implementation of type test, etc. See 6.1.2, 6.1.3, 6.1.4 for details.

6.1.2 Sample requirements for type test

6.1.2.1 Generally, CLIENT selects and sends the representative samples to be tested in accordance with CQC's provisions.

time limit is deemed as termination of certification.

6.1.5 Type test report

Same as Clause 6.1.5 of Implementation Rules.

6.2 Initial factory inspection

Initial inspection shall cover the application/certification products and their processing locations. “Cover the application/certification products” refers to covering the product conformity inspection. Product conformity inspection shall be carried out on the products of defined code of each category factory (see Table 6-1). “Processing location” refers to all the departments, places, staffs and activities that relate to the product certification quality.

If CQC is not able to complete the on-site factory inspection required in Attachment 2, it may extend the inspection to locations such as at CLIENT, manufacturing enterprise.

results (type test report, change approval data, product description, etc.) approved by certification.

6.2.3.3 Critical components and materials

Critical components and materials used in certification product shall meet the following requirements:

(a) Meet the requirements of relevant standards;

(b) Be conformity with the result approved by CQC or that approved by the technical responsible person in manufacturing enterprise.

6.2.3.4 Witness test items shall be at least the routine inspection items (see Attachment 3).

6.2.4 Inspection time

Generally, initial factory inspection is carried out after passing type test. Under exceptional circumstances, type test and factory inspection can be carried out at the same time. After completing type test, in principle, factory inspection shall be accomplished within 1 year; otherwise, the type test shall be carried out again.

During factory inspection, the product within the scope of certification shall be in production in this factory. Determine the factory inspection time according to quantity of certification-unit products and enterprise scale. Normally, for each processing location, it shall be 1 ~ 4 man-day.

6.2.5 Inspection conclusion

Inspection team submits the inspection conclusion to CQC. If inspection conclusion is unqualified, inspection team shall submit this conclusion to CQC directly; if there is unqualified item in factory inspection, factory shall complete the rectification within prescribed time limit, and inspection team shall verify the rectification result with appropriate method. If factory fails to accomplish the rectification on time, the conclusion of factory inspection is unqualified.

6.3 Certification evaluation and approval

Same as Clause 6.2 of Implementation Rules.

6.4 Certification time limit

Same as Clause 6.3 of Implementation Rules.

7. After-certification supervision

On the basis of manufacturing enterprise classification management and actual

qualified. In principle, it shall TAKE the representative-specification samples of the initial type test AS the basis of change evaluation. Implementation of change is only allowed after change is approved by CQC.

8.2.3 Records of change

Same as Clause 8.2.3 of Implementation Rules.

Requirements to certification technical responsible person shall be based on "*General Requirements for Certification Technical Responsible Person*" issued by CQC.

8.3 Expansion of covered products

Same as Clause 8.3 of Implementation Rules.

8.4 Cancellation, suspension and withdrawal of certificate

Same as Clause 8.4 of Implementation Rules.

8.5 Use of certificate

Same as Clause 8.5 of Implementation Rules.

9. Certification marks

Same as Clause 9 of Implementation Rules.

10. Charge

Same as Clause 10 of Implementation Rules.

11. Certification responsibilities

Same as Clause 11 of Implementation Rules.

12. Process and time-limit requirements related to technical disputes, complaints and appeal

They shall be in accordance with the provisions of CQC "*Handling Procedures for Appeal, Complaint and Dispute*".

No.	Product name	Division principle of certification-unit	Certification standards	Sample quantity
5	Welding cable coupling device	1. The same function; 2. Consistent structure (installation structure of the main component of product and etc.); 3. Consistent material-texture of key material.	GB 15579.12	3 pairs for each specification.
6	Resistance welding machine	1. The same function; 2. The same operating principle (main loop and control mode); 3. Consistent structure (supply voltage, cooling mode, installation structure of the main component of product and etc.); 4. Consistent material-texture of main transformer winding.	GB 15578	1 set for each specification.
7	Welding torch (gun)	1. The same function; 2. Consistent structure (cooling mode, installation structure of the main component of product and etc.); 3. Consistent material-texture of key material.	GB 15579.7	2 for each specification.
8	Wire feeder	1. The same function; 2. The same operating principle (main loop and control mode); 3. Consistent structure (supply voltage, cooling mode, installation structure of the main component of product and etc.).	GB 15579.5	1 set for each specification.

Attachment 2 Requirements for factory's quality assurance capacity

1. Application scope

The requirements for factory's quality assurance capacity is one of the assessment items for certification body to carry out factory inspection.

2. Terms and definitions

2.1 Certification technical responsible person

Certification technical responsible person is one of the internal staffs in manufacturer and/or manufacturing enterprise who masters the requirements for certification basis, approves the change of certified products, and takes corresponding responsibilities in accordance with the scope of duty prescribed in Implementation Rules / Detailed-Rules.

2.2 Conformity of certification products (product conformity)

The certification products shall be in conformity with the samples in type test. Specific requirements for product conformity is prescribed in Implementation Rules / Detailed-Rules.

2.3 Routine inspection

in order to eliminate the unaccepted product caused by contingency factors, it generally carries out 100% inspection on products in final phase of production. After verification, equivalent and fast-method is allowed for routine inspection.

Note: For special products, according to certification requirements of Implementation Rules / Detailed-Rues, sampling inspection may be adopted for routine inspection.

2.4 Verification test

Verification test is the sampling inspection with the purpose of verifying if certification products consistently meet the requirements of certification basis standards.

2.5 Regular verification test for critical components

Regular verification test is the regular sampling inspection with the purpose of verifying if the quality characteristics of critical components consistently meet the requirements of certification basis standards and/or technical requirements.

Note: Critical components is a general term of components, parts and original materials that play a critical role in products meeting the requirements of certification basis standards.

and proper usage of external resources and keep the records about external resources, such as contract agreement, usage records, etc.

3.2 Documents and records

3.2.1 Factory shall create and maintain the documented procedure and take control of the files required by this document, necessary external documents and records effectively. The product design standards and specifications shall not be lower than the requirements of certification basis standards. For the main contents that may have influences on product conformity, factory shall have the necessary drawings, samples, list of critical components, process document, operation instructions and other design documents to ensure the continuous validity of these documents.

3.2.2 Factory shall ensure the document's sufficiency and suitability; and use the valid version.

3.2.3 Factory shall ensure the clearness, integrity and traceability of records; and consider them as evidences for meeting the provisions. The records retention period related to quality shall in accordance with the provisions of laws and regulations. Make sure that previous inspection record is accessible for this-time inspection. Retention period is at least 24 months.

3.2.4 Factory shall identify and preserve the important documents and quality information concerning product certification, such as type test report, result of factory inspection, status information of CCC certificate (validity, suspension, cancellation, withdrawal, etc.), change approval information, sampling inspection report, product quality compliance and results, etc.

3.3 Control of purchase and critical components

3.3.1 Purchase control

For purchased critical components, factory shall identify the technical requirements and indicate them in procurement documents. The technical requirements shall ensure that the final products meet the provisions of certification.

Factory shall establish and maintain the list of qualified critical components' manufacturers/manufacturing enterprises; and purchase critical components from them. Factory shall also maintain the records of purchase and usage of critical components, such as purchase lists, input-output notes, accounts, etc.

3.3.2 Quality control of critical components

3.3.2.1 Factory shall establish and maintain the documented procedure, verify and/or inspect the critical components in accordance with purchasing technical requirements during stocking (inbound) and keep the related records.

the production requirements.

3.4.5 If necessary, factory shall check, monitor and measure the products and its characteristics at proper production stages in accordance with the provisions, so as to ensure the conformity between products and standards, and production conformity.

3.5 Routine inspection and/or verification inspection

Factory shall establish and maintain the documented procedure; and take control of routine inspection and/or verification inspection for final products. Inspection procedure shall meet the prescribed requirements. The content of procedure includes inspection frequency, items, content, methods, judgement, etc. Factory shall record relevant inspections and preserve these records.

For the inspections entrusted by external agency, factory shall ensure that the capacity of external agency meets the inspection requirements and preserve the evaluation results of relevant abilities, such as the recognition of laboratory, etc.

3.6 Inspection instruments and equipment

3.6.1 Basic requirements

Factory shall be equipped with sufficient inspection instruments and equipment, so as to ensure that the capacities of instruments and equipment used in purchase, production and final inspection are in compliance with the test requirements of mass-production.

Inspectors shall use the instruments and equipment correctly; and master and implement the inspection requirements effectively.

3.6.2 Calibration and verification

The inspection instruments and equipment that are used for ensuring the certification products to meet the prescribed provisions shall be calibrated and verified periodically based on provisions. Calibration and verification period can be set according to use frequency, previous calibration, etc. For internal calibration, factory shall stipulate calibration method, acceptance criteria and calibration period, etc. Calibration and verification shall be traced to national or international references. The calibration or verification status of instruments and equipment shall be easy to identify by user or manager. Factory shall maintain the calibration and verification records.

For the calibration and verification entrusted by external agency, factory shall ensure that the capacity of external agency meets the calibration or verification requirements and preserve the evaluation results of relevant abilities.

Note: For the critical monitoring and measuring devices used in process control, factory shall

changes), process and resource, purchase, production, inspection, product preservation and delivery, and other suitable quality links, in order to ensure ongoing conformance to requirements of certification basis standards.

3.10 Product preservation and delivery

In purchase, production and inspection links, the product preservations such as identification, carrying, package, storage and protection shall meet prescribed requirements. If necessary, factory shall take control of the delivery process in accordance with prescribed provisions.

3.11 CCC certificate and CCC-mark

The management and usage of CCC certificate and CCC-mark shall comply with *"China Compulsory Certification Management Method"*, "*China Compulsory Certification Mark Management Method"* and other regulations. For uniformly printed standard-specification CCC-mark or the CCC-mark applied through printing and molding, factory shall maintain the usage record. Applying or release of CCC-mark is not permitted for the following products:

(a) The uncertified product that is within the catalogue of China Compulsory Certification;

(b) After certification, the change of product needs to be approved by certification body, yet it is unapproved.

(c) The product of which the certification validity is expired;

(d) Products of which the certificate has been cancelled, suspended, or withdrawn;

(e) Unqualified products.

that the product continuously complies with the requirements of relevant standards, which shall be carried out in accordance with the requirements of standard; if the factory is not provided with testing conditions, qualified laboratory may be entrusted for the inspection.

Product name	Critical components and materials	Control parameter	Certification condition
	Permeability magnetic material for main loop (silicon steel sheet, ferrite, etc.)	Model, magnetic permeability, loss and manufacturer	/
	Insulating materials for main loop (insulating paint, insulating sleeve, insulating framework, etc.)	Model, thermal class and manufacturer	/
Resistance welding machine	Circuit breaker*	Model, rated current, voltage and manufacturer	Based on national China Compulsory Certification requirements 1)
	Contactor*	Model, rated current, voltage and manufacturer	Based on national China Compulsory Certification requirements 1)
	Circuit breaker*	Model, rated current, voltage and manufacturer	Based on national China Compulsory Certification requirements 1)
	Fuse*	Model, rated current, voltage and manufacturer	Based on national China Compulsory Certification requirements 1)
	Electric wire and cable*	Model, sectional area and manufacturer	Based on national China Compulsory Certification requirements 1)
	Thermal protector*	Model, temperature, rated current, voltage and manufacturer	Certificate or testing report 1)
	Cooling fan	Model, rotational speed, power, diameter, rated voltage and manufacturer	
	Main loop switch	Model, rated current, voltage, switch pole number and manufacturer	
	Conducting material for main loop	Model, sectional geometric dimension, texture, thermal class and manufacturer	
	Permeability magnetic material for main loop (silicon steel sheet, ferrite, etc.)	Model, magnetic permeability, loss and manufacturer	
	Insulating materials for main loop (insulating paint, insulating sleeve, insulating framework, etc.)	Model, thermal class and manufacturer	

Appendix 5 Change Requirements of Critical Components and Materials of Electric Welding Machine Product Compulsory Certification

1. The changes of critical components and materials are classified into Class A and Class B; the principles are as follows:

1.1 Class A changes shall be approved by CQC. In case of any change, whether the complete machine meets the safety requirements must be confirmed by the laboratory according to relevant requirements of complete machine and component standards; and the changes must be approved upon passing CQC assessment.

1.2 Class B changes may not necessarily be approved by CQC. In case of any change, whether the complete machine meets the safety requirements may be judged by the certification technical responsible person of the manufacturing enterprise who conducts the confirmation / technical judgment to the materials. When the change is judged as meeting the conditions and requirements of Class B change, it may be reported to CQC directly without the approval of CQC.

2. Conditions for Class B changes

2.1 There is such technical responsible person of certification manufacturing enterprise who is nominated/authorized by the manufacturer (if produced by ODM, it is nominated/authorized by manufacturing enterprise), and assessed and identified by CQC;

2.2 The manufactures and manufacturing enterprise have good reputation.

3. Requirements for Class B changes

3.1 When Class B changes are applicable, it shall be approved by the technical responsible person of the certification manufacturing enterprise; the change record shall be preserved and reported to CQC for filing.

3.2 When Class B changes are applicable, false-report or fail-to-report is deemed as change-invalid; and it is deemed as changing components and materials without permission. Once the CQC finds any violated change, it shall execute according to "China Compulsory Certification Management Method", " Compulsory product certificate cancellation, suspension and withdrawal implementation rules", and the relevant regulations of CQC.

3.3 Providing false change information is deemed as changing components and materials without permission; and the CQC shall revoke its certificate.

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