Serial No.: CCAP-GZ-5561-2019

# Implementation Rules for CCAP Mark Certification

Non-metallic materials and parts of electric power assist bicycles

CCAP 标志认证实施规则

电动自行车非金属材料及零部件

Issued on: March 15, 2019 Implemented on: March 15, 2019

China Certification Centre for Automotive Products

## Table of Contents

## 1 Application scope

This Rules applies to the CCAP mark certification of non-metallic materials and parts of electric power assist bicycles.

## 2 Certification basis and standards

GB 17761-2018, Safety technical specification for electric bicycle

GB/T 5169.11-2017, Fire hazard testing for electric and electronic products - Part 11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)

GB/T 5169.16-2017, Fire hazard testing for electric and electronic products - Part 16: Test flames - 50 W horizontal and vertical flame test methods

GB 8410-2006, Flammability of automotive interior materials

## 3 Certification mode

Type test + post-certification supervision

## 4 Classification of certification unit

In principle, the materials and parts produced by the same-producer (manufacturer) and same manufacturing enterprise (location), and having no significant difference in the following aspects could be classified as one certification unit:

1) The material and processing technology of the material;

2) The structure of non-metallic materials and parts (number of layers, number of blocks, connection methods, etc.);

3) The test temperature requirements for fire resistance of the glow wire (two types: 550 °C and 750 °C as specified in GB/T 5169.11);

4) The requirements for flame retardance (V-0, V-1 specified in GB/T 5169.11 and Chapter 3 of GB 8410-2006).

In principle, the certification client shall propose certification entrustment based on the unit classification principle. The same unit can contain multiple “models (or specifications)” of products.

For the same product that is of same manufacturer but of different manufacturing enterprises, or for the same-model product that is of different manufacturers and of the same manufacturing enterprise, it may consider to only conduct the type test on the samples of one unit. The products of other manufacturing enterprises / manufacturers shall provide documents for conformity inspection.

## 5 Certification entrusting

### 5.1 Certification process

(1) Certification entrusting, materials review and acceptance;

(2) Dividing certification product unit, formulating the certification plan;

(3) Signing the certification contract and charging;

(4) Product type test;

(5) Certification evaluation and decision;

(6) Issuing the certificate;

(7) Post-certification supervision.

### 5.2 Certification entrusting materials

See Attachment 1 *List of documents and materials to be submitted by the applicant*.

### 5.3 Certification plan and certification contract

CCAP shall review the application materials. If the application materials need to be supplemented or improved, it shall communicate with the client and require supplementing and submitting relevant materials. After the review completes, it shall issue a notice of acceptance or not-acceptance to the client.

After accepting the application, CCAP shall formulate a certification plan according to the audit result, which includes:

(1) The certification mode adopted and unit division;

(2) Type test plan (including the selection and confirmation of the designated laboratory);

(3) Estimated certification fees;

(4) Other matters and requirements that need to be explained.

CCAP shall give the above certification plan to the client. After reaching a consensus, it shall sign a formal certification contract with the client as the basis for certification implementation.

## 6 Certification implementations

### 6.1 Type test

#### 6.1.1 Type test plan

CCAP shall formulate the product inspection plan after reviewing the materials. The inspection plan includes requirements and quantity of all samples, the inspection standard, inspection items, and information of the designated labs that can be selected by the certification client.

#### 6.1.2 Sample requirements of type test

The samples for type test shall be products produced by the manufacturing enterprise entrusted with certification according to normal processing methods. The certification client shall ensure that the samples provided by it are consistent with the actual products produced, and shall not obtain samples for testing by borrowing, renting, purchasing, etc.

In principle, in the type test, the certification client shall send the samples to the designated lab for testing. When necessary, CCAP can also obtain samples for testing, by on-site sampling / sealing, in accordance with the requirements of the type test plan.

If there is only one model in one certification unit, samples of that model shall be sent for testing. If there are multiple models in one unit, CCAP can choose a representative model; a differential test shall be made for other models when necessary.

CCAP and/or the lab shall review the authenticity of the samples provided by the certification client. Where the laboratory has doubts about the authenticity of the sample, it shall explain the situation to CCAP and handle it accordingly.

In principle, it shall be ensured that samples are sent to the laboratory for type test within 10 days. If samples are not sent within the specified time due to special circumstances, sufficient reasons for delaying sample delivery shall be provided to CCAP.

##### 6.1.2.1 Quantity of type test samples

The quantity of samples to be sent shall comply with the provisions in Table 1 of this Rules.

The number of test samples that need to be supplemented shall be subject to the test plan finally confirmed by CCAP.

The certification client shall ensure that the submitted samples are completely consistent with the actual products produced, including materials, structures, parameters, etc.

information. After the certification completes, CCAP shall send the type test report, together with the certificate (or certification decision), to the certification client. The certification client shall ensure to provide the complete and effective type test report to CCAP and law-enforcement agencies during post-certification supervision.

### 6.2 Certification evaluation and decision

CCAP conducts comprehensive assessment of the type test result and relevant materials/information. If the evaluation is PASS, the certificate shall be granted according to certification unit. If not, the certification is terminated.

**Note:** For the situation where the type test is not carried out according to the certification process, the certification client shall submit a type test report within one year issued by the testing agency contracted by CCAP, and the test results of all test items shall comply with the relevant standards. CCAP can decide whether to recognize the type test report provided by the enterprise based on risks, and can also conduct a type test again through sampling.

### 6.3 Time-limit of certification

Time-limit of certification refers to the period FROM the date when certification-body accepts the entrusting TO the date when the certificate is issued.

Usually, FROM the date when CCAP accepts the entrusting TO the date when the certificate is issued (or certification decision is made), the time is not more than 90 days. In which, it includes the time for review of certification entrustment application materials, type test implementation and review time, evaluation and approval time of the certification result, and certificate-making time, but it excludes the time required for the preparation work of the certification client, such as the time needed by the client for preparing materials and test samples, rectification of non-conformity items, and re-test time.

Other certification procedure time-limit shall follow relevant provisions of CCAP. Each department of CCAP shall control the certification time-limit according to the requirements of relevant documents. The certification client and the manufacturing enterprise shall actively cooperate in order to complete all the activities within the time-limit required by CCAP.

If the certification activities are not completed within the specified time-limit due to reasons of the client and the manufacturing enterprise, it shall not be counted in the certification time-limit.

## 7 Post-certification supervision

### 7.1 Post-certification follow-up inspection

#### 7.1.1 Post-certification follow-up inspection type, frequency and inspection time

Post-certification supervision of non-metallic materials and parts of electric power assist bicycles is divided into two types: first supervision and daily supervision.

The first supervision refers to the first post-certification supervision carried out by CCAP on the certified enterprise 0 ~ 6 months after the issuance of the first certificate.

The daily supervision refers to the post-certification supervision that CCAP implements according to the post-certification supervision plan after the first supervision of certified enterprises. In principle, daily supervision shall be carried out at least once a year.

The time for post-certification follow-up inspection is determined according to the number of categories of certified products, with due consideration to the production scale of the factory. Generally, the first supervision and inspection time for the same manufacturing enterprise (location) is 2 ~ 4 man-days, and the daily supervision is 1 ~ 2 man-days. When conducting on-site inspections of ODM producers (manufacturers), the number of man-days for each ODM inspection shall not exceed 0.5 man-days. For supervision, depending on the number of product models involved in the expansion/change, on-site verification man-days may be appropriately increased.

If one of the following situations occurs, the frequency of supervision may be increased:

1) Serious quality problems occur in certified products or serious complaints are made by users and are found to be the responsibility of the certificate holder;

2) The certification body has sufficient reasons to question the conformity of the certified product with health and safety standards;

3) There is sufficient information to show that the manufacturer and manufacturing plant may affect product compliance or consistency due to changes in organizational structure, production conditions, quality management systems, etc.

**7.1.2 Content of post-certification follow-up inspection**

(1) Product consistency inspection (including consistency of structure and parameters, model specifications and key components/materials), factory quality assurance ability inspection (see Attachment 3) and on-site designated testing (selected from routine inspections and confirmation inspections);

(2) Use situation of the certification mark and the certificate;

(3) Other CCAP's requirements on factory on-site inspection.

Among them, product consistency inspection and on-site designated testing means that the inspection team randomly selects certified products from the products that have passed the inspection at the end of the production line or in the warehouse to conduct inspections including but not limited to the following:

may cause quality and safety accidents; unlawful and illegal use of marks or certificates; serious dishonest behavior in the factory; or during the suspension of the certification certificate, if the factory does not take corrective measures or fails to pass the corrective action, the inspection result is unqualified and the inspection shall be terminated.

#### 7.1.4 Notification of the post-certification follow-up inspection conclusion

After the factory inspection finishes, the inspection team shall inform the enterprise of the inspection result. If there are non-conformity items founded, it shall give the verification mode (such as paper verification or on-site verification) and clear requirements of rectification time-limit. And also inform the manufacturing enterprise of the verification result in time.

When the conclusion of on-site inspection result of the inspection team is changed after it is assessed by certification body, then the certification body shall in time notify the manufacturing enterprise of the conclusion.

### 7.2 Production on-site sampling test or inspection

#### 7.2.1 Principles of production on-site sampling test or inspection

If production on-site sampling inspection or test method is adopted for post-certification supervision, then the certification client, manufacturer and manufacturing enterprise shall cooperate.

#### 7.2.2 Content of production on-site sampling test or inspection

CCAP formulate the sampling inspection plan during each inspection. For the inspection items, all or several of the type test inspection items shall be inspected. In principle, different units/models of products shall be drawn as samples for each time of supervision.

The personnel appointed by CCAP shall draw samples from qualified products produced by the enterprise (including the production lines, warehouses) according to the sampling inspection plan. After sampling, CCAP shall seal up the samples. The enterprise shall send the samples to the designated test lab within 10 working days. The enterprise shall also fill out the sample description form when sending the samples and truthfully describe critical components and materials (including the suppliers) used in the samples. CCAP and/or the lab shall inspect the conformity of the samples. If they find that the samples are inconsistent with the certification-products, in principle, test shall not be continued. The inspection conclusion shall be that: the samples are not consistent with the certification-products; the test is stopped.

**Note:** The warehouse sampling base shall be no less than 10 times the quantity of testing samples, but there is no base limit when randomly sampling on the production line.

### 7.3 Record of post-certification supervision

CCAP shall make appropriate record of the whole process of post-certification supervision and archive it on file in order to ensure the traceability of the certification process and the result.

### 7.4 Assessment of post-certification supervision result

CCAP shall conduct a comprehensive assessment to the follow-up inspection result, the sampling inspection result and relevant materials. If it passes the assessment, the certificate can be kept and the certification mark can be continuously used; if it fails in the assessment, CCAP shall handle with suspension or withdrawal of the certificate according the corresponding situation; and an announcement shall be issued.

## 8 Certificate

### 8.1 Maintenance of certificate

This Rules covers the 5-year valid period of product certificate. Within the valid period, the validity of the certificate is maintained by depending on the “post-certification supervision” of CCAP.

Before the certification is expired, if it needs to continue to use, entrusting client shall put forward the certification entrusting within 90 days before the expiry date. If the newest post-certification supervision, within the certificate validity, is PASS, then the certificate shall be directly renewed.

### 8.2 Content of certificate

If the certified product and selling package are printed with the content contained in the certificate, it shall be consistent with the content in the certificate. Changes to the certificate shall indicate the change information to clearly show the number of changes to the product.

### 8.3 Change of certificate

#### 8.3.1 Change of certification requirements (including standard change-version)

When the certification requirements are changed, CCAP shall issue the above-mentioned certification requirements on the public website. At the same time, CCAP shall notify the certification enterprises by fax, email or other methods.

After the certification enterprises receive the notice, they shall submit the certification change application and the required materials to CCAP within the stipulated time-limit. CCAP shall draw up a plan on whether it needs to arrange a product supplementary inspection and/or factory inspection according to the result of the material review, and conduct assessment on the result. If, within the stipulated period of the change plan, the

key parts list, process documents, work instructions and other design documents. Ensure continuous validity of documents.

**2.2** The factory shall ensure the adequacy and suitability of the documents and use valid versions of the documents.

**2.3** The factory shall ensure that the records are clear, complete and traceable, as evidence that the product meets the specified requirements. The retention period of quality-related records shall meet the requirements of laws and regulations. Ensure that the records after the previous inspection can be obtained in this inspection, and at least not less than 24 months.

**2.4** The factory shall identify and save important documents and quality information related to product certification, such as type test reports, factory inspection results, certification status information (validity, suspension, withdrawal, cancellation and so on), certification change approval information, supervision and sampling test reports, product quality complaints and handling results.

**3 Purchasing and receiving inspection**

**3.1** Supplier control

The factory shall develop procedures for the selection, evaluation and daily management of suppliers of key parts and materials, to ensure that suppliers have the ability to produce key parts and materials that meet requirements.

The factory shall keep records of supplier selection, evaluation and daily management.

**3.2** Inspection/verification of key parts and materials

The factory shall establish and maintain procedures for inspection or verification of key parts and materials provided by suppliers and procedures for periodic confirmation inspections. The procedure can be a control plan, inspection specifications or other similar documents, which shall at least include inspection items, methods, frequency and judgment criteria, to ensure that key parts and materials meet the requirements stipulated in the certification.

Inspection of key parts and materials can be done by the factory or by the supplier. When inspected by the supplier, the factory shall put forward clear inspection requirements to the supplier.

Factories shall keep key part inspection or verification records, confirmation inspection records, certificates of conformity and relevant inspection data provided by suppliers, etc.

**4 Production process control and process inspection**

**4.1** Process preparation

The factory shall identify key production procedures. Key procedure operators shall have the corresponding ability. If the quality of the product cannot be guaranteed without documentary regulations in this process, a corresponding process operation instruction shall be formulated to control the production process.

**4.2** If the product production process requires environmental conditions, the factory shall ensure that the working environment meets the specified requirements.

**4.3** When feasible, the factory shall monitor appropriate process parameters and product characteristics.

**4.4** The factory shall inspect products at appropriate stages of production to ensure that products and parts are consistent with certification samples.

**5 Ex-factory inspection and confirmation inspection**

The factory shall establish and maintain documented regulations for product ex-factory inspection and confirmation inspection to verify that the product meets the specified requirements. The document shall at least include inspection items, content, methods, frequency, judgment and response plan, etc., and inspection records shall be kept.

Product ex-factory inspection is a 100% inspection (routine inspection) or product sampling inspection of products on the production line at the final stage of production. Usually, after inspection, there is no further processing except for packaging and labeling. Routine inspection items shall at least include appearance.

Confirmation inspection is a sampling inspection conducted to verify that the product continues to meet standard requirements. The confirmation inspection items shall at least include fire performance inspection and/or flame retardant performance inspection, no less than once per unit per year.

**6 Inspection and testing equipment**

Equipment used for inspection and testing shall meet the inspection and testing capabilities.

Inspection personnel shall use instruments and equipment accurately.

The inspection and testing equipment used to determine that the products produced meet the specified requirements shall be calibrated or verified according to the specified period. Calibration or verification shall be traceable to national or international standards. For self-calibration, the calibration method, acceptance criteria, calibration cycle, etc. shall be specified. The calibration status of the equipment shall be easily identifiable by users and managers.

**This is an excerpt of the PDF (Some pages are marked off intentionally)**



**------ The End ------**