

## Content

Title :	Directions Governing the Inspection of Personal Protective Equipment <b>Ch</b>
Date :	2020.09.15
Legislative :	<p>1.All 42 articles adopted and promulgated by the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs based on Jin Biao Er Zhi No. 10420004391 on 25 September, 2015, and enforced on 1 October, 2015.</p> <p>2.Articles 2, 3, 4, 19, 20, 21, 22, 23, 24, 25, 27 and 35 amended and promulgated by the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs based on Jin Biao Er Zhi No. 10620001150 on 5 April 2017.</p> <p>3.Articles 2, 3, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and 33 amended and promulgated by the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs based on Jin Biao Er Zhi No. 10720003850 on 5 September 2018.</p> <p>4.Articles 2, 3, 4, 34, 35, 37, 39 and 40 amended and promulgated by the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs based on Jin Biao Er Zhi No. 10820006940 on 20 December 2019.</p> <p>5.Articles 35 and 37 amended and promulgated by the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs based on Jin Biao Er Zhi No. 10920002330 on 7 April 2020.</p> <p>6.Articles 2, 3, 4, 34, 35, 37, 38, 39, 40, 41 and 42 amended and promulgated by the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs based on Jin Biao Er Zhi No. 10920005320 on 15 September 2020.</p>
Content :	<p><b>Chapter 1 – General Provision</b></p> <p>1. These Directions are established for carrying out inspection of personal protective equipment.</p> <p>2. Products subject to inspection Personal protective equipment imported or manufactured and sold domestically.</p> <p>(1)Protective gloves: rubber protective gloves for occupational health; plastic protective gloves for occupational health, rubber gloves for electrical insulation for electrical circuit safety ("rubber gloves for electrical insulation") and protective leather gloves for welders ("protective gloves for welders").</p> <p>(2)Safety belts: Safety belts for line-men, safety belts [fasten type] and full body harness.</p> <p>(3)Protective footwears: protective boots for occupational health, safety footwear compliant with CNS 20345 ("safety footwear") and protective footwear compliant with CNS 20346 ("protective footwear").</p> <p>(4)Protective helmets: protective helmets for drivers and passengers of motorcycle and mopeds, protective helmets for pedal cyclists, protective helmets for users of skates, skateboarders and roller skates, ("protective helmets for skating and similar activities"), industrial protective helmets, helmets for baseball activities, helmets for soft baseball and softball use, and helmets of catchers for baseball and softball activities.</p> <p>(5)Eye protectors: eye protector for welding, eye protector of ultraviolet filtering, infrared filtering, sunglare filter for industrial use, and ocular without filtering effect, filter for non-automatic dimming welding face shield ("filter"), non-automatic dimming welding face shield ("welding face shield"), eye protectors for vehicular users, and eye-protection of helmets for pedal cyclists, skates, skateboarders and roller skates, ("eye-protection of helmets for pedal cyclists and similar activities").</p> <p>3. Inspection schemes</p> <p>(1) Protective gloves:</p> <p>a. Rubber protective gloves for occupational health, rubber gloves for electrical insulation and protective gloves for welders; batch-by-batch inspection or registration of product certification (Module II and III) shall be adopted.</p>

- b. For plastic protective gloves for occupational health, declaration of conformity shall be adopted.
- (2) Safety belts: batch-by-batch inspection or registration of product certification (Module II and IV or V or VII) shall be adopted.
- (3) Protective footwears:
  - a. For protective boots for occupational health, batch-by-batch inspection or registration of product certification (Module II and III) shall be adopted.
  - b. For safety and protective footwear, type approved batch inspection or registration of product certification (Module II and III) shall be adopted.
- (4) Protective helmets: batch-by-batch inspection or registration of product certification (Module II and IV or V or VII) shall be adopted.
- (5) Eye protectors: batch-by-batch inspection or registration of product certification (Module II and IV or V or VII) shall be adopted.

#### 4. General regulations of inspection schemes

##### (1) Batch-by-batch inspection:

- a. Before a product is imported or manufactured and sold domestically, the obligatory inspection applicant must apply for inspection by submitting an application form to The Ministry of Economic Affairs, Bureau of Standards, Metrology and Inspection ("BSMI") or its Branch ("Inspection Authority"). Those who apply for the inspection of eye protector for welding, eye protector of ultraviolet filtering, infrared filtering, sunglare filter for industrial use, and ocular without filtering effect, filter, welding face shield should indicate the date of manufacture on the application form. If an optional requirement is claimed when applying for the inspection of products mentioned above, the testing report from the third-party laboratory stating that the product conforms to the optional requirement shall be submitted. The Inspection Authority will not accept any application if the obligatory inspection applicant fail to fill the application form.
- b. Application for protective helmets for drivers and passengers of motorcycles and mopeds and eye protectors for vehicular users may be combined in one application. If the application is combined, protective helmets for drivers and passengers of motorcycle and mopeds (including eye protectors for vehicle users) or protective helmets for drivers and passengers of motorcycle and mopeds (including eye protectors) must appear as the name of the commodity applying for inspection. A commodity inspection mark will be attached to the protective helmet itself once it is been approved.
- c. Application for welding face shield and filter may be combined in a single application. If the application is combined, welding face shield (with filter) must appear as name of the commodity applying for inspection. A commodity inspection mark will be attached to the welding face shield itself once it is been approved.
- d. "Protective helmets for pedal cyclists", "protective helmets for users of skating and similar activities", and "eye-protection of helmets for pedal cyclists and similar activities" may be combined in a single application. If the application is combined, "protective helmets for pedal cyclists" (eye-protection of helmets for pedal cyclists) and "protective helmets for users of skating and similar activities" (eye-protection of helmets for users of skating and similar activities), or "protective helmets for pedal cyclists" (with eye protectors) and "protective helmets for users of skating and similar activities" (with eye protectors) must appear as name of the commodity applying for inspection. A commodity inspection mark will be attached to the eye protector for welding itself once it is been approved.
- e. Aside from the above three Items, the same type mentioned in the above Clause is the type recognition principle for the registration of product certification for commodities of the same category. the same batch of commodity submitted for application should have the same obligatory inspection applicant, the commodities of the same category, same type, or the same specifications.
- f. The same type mentioned in the above Items is the type recognition principle for the registration of product certification for commodities of the same category.

##### (2) Registration of product certification:

- a. The applicant shall submit the type classification table, product structure pictures, product-component cross reference tables, color photographs(3"x5" or larger) of finished products and components, a sample of the Chinese label, relevant technical documents and sample to the Inspection Authority or designated testing laboratories recognized by the BSMI for a type-test application.
- b. In principle, one type of commodity from the main type and series type will be subject to the aforementioned types of testing.
- c. After receipt of the type-test report, the applicant must attach any other conformity assessment and submit it to the Inspection Authority in accordance with the process of registration of product certification.
- d. After receipt of the Registration Certificate, the obligatory inspection applicant must print the commodity inspection mark, the Roman letter 'R' followed by a designated code. A designated code

is the number on the product registration certificate.

e. Where any changes or modifications were made to the scope as listed in the Registration Certificate, the obligatory inspection applicant shall apply for a renewed Registration Certificate with the inspection agencies that issued the original type test reports.

(3) Declaration of Conformity:

a. The obligatory inspection applicant should prepare the following technical documents when signing the Declaration of Conformity:

(a) Technical descriptions of the commodity concerned, including its structure, material, purpose, product catalogue, color photographs (3"x5" or larger) of the product and a comprehensive list of specifications.

(b) One original type test report, which is valid for a year before the signing of the Declaration of Conformity.

(c) Summary of how the product is manufactured.

(d) Management and supervision measures in place during the manufacturing process.

b. An applicant should submit the type catalogue and sample to the Inspection Authority or to the designated testing laboratories recognized by the BSMI for the application of the aforementioned type-test report.

c. The obligatory inspection applicant must keep the Declaration of Conformity and relevant technical documents until the manufacturer ceases production of the product for five years or after the importer ceases to import the products for five years.

d. The Declaration of Conformity should be kept with the obligatory inspection application for check. Upon market surveillance by the Inspection Authority, the obligatory inspection applicant must provide the Declaration of Conformity within twenty-four hours and the relevant technical documents should be delivered to the Inspection Authority within ten working days.

(4) Type Approved Batch Inspection (TABI):

a. The obligatory inspection applicant shall apply for a type-test in accordance with the first and second Items of the Clause 2, and after obtaining the type-test report, submit the application form, type-test report and the relevant technical documents to the inspection authority for type-approval, in order to receive the type approval certificate.

b. Before a product is imported or manufactured and sold domestically, the obligatory inspection applicant must apply for inspection by submitting the copy of the type approval certificate. The Inspection Authority will not accept any application if the obligatory inspection applicant fails to fill the application form or did not submit the copy of the type approval certificate.

c. The same batch of commodity submitted for application should have the same obligatory inspection applicant, and the same type.

d. Where any changes or modifications were made to the scope as listed in the type approval certificate, the obligatory inspection applicant must apply for Type Inspection Report change to the Inspection Authority that issued the original Type Inspection Report, and apply for certificate renewal to the Inspection Authority.

## Chapter 2 – Inspection Regulations for Protective Gloves

### 5. Inspection standards and items

(1) Rubber protective gloves for occupational health and plastic protective gloves for occupational health: test appearance, tensile load, pinhole, impermeability (test for product), symbols and dimensions in accordance with CNS 8068.

(2) Rubber gloves for electrical insulation: test all items in accordance with CNS 12546.

(3) Protective gloves for welders: test all items in accordance with CNS 7178.

(4) If the dimensions of the commodities mentioned in the above three Clauses were manufactured according to parties' agreement and not according to the inspection standards, the obligatory inspection applicant should submit the sales information (such as a sales agreement and purchase order) to the Inspection Authority when applying for a test. It is not necessary for the obligatory inspection applicant to obtain the BSMI's prior approval before applying for a test.

### 6. Principle of sampling for batch-by-batch inspection

(1) Rubber protective gloves for occupational health: divided into different categories (natural rubber or synthetic rubber) and reagent classification, 3 samples for each category, but for any gloves supposedly suitable for three reagents classification or more, an additional sample is required for every additional reagent classification.

(2) Rubber gloves for electrical insulation: 2 samples for each category with a different purpose (voltage resistance).

(3) Protective gloves for welders: 2 samples for each category with a different purpose (fusing or gas welding).

(4)The Inspection Authority may seal the number of samples set out in terms of the above three Clauses, deliver it to the obligatory inspection applicant for safe-keeping for re-inspection in future.

7. Processing time of batch-by-batch inspection: 7 working days after sampling.

8 .Same type, main type and series type mentioned in the test reports are defined as follows:

(1)Rubber protective gloves for occupational health and plastic protective gloves for occupational health:

a. Same type: same category (natural or synthetic rubber).

b. Main type: of the same type, select any one reagent classification as the main type.

c. Series type: of the same type, other reagent classification expect for the main type shall be a different series type.

(2)Rubber gloves for electrical insulation:

a. Same type: all protective gloves for electric insulation submitted by the obligatory inspection applicant.

b. Main type: select any one category under the same type (voltage resistance) as the main type.

c. Series type: of the same type, other categories (voltage resistant) except for the main type shall be a different series type.

(3)Protective gloves for welders

a. Same type: all protective gloves for welders submitted by the obligatory inspection applicant.

b. Main type: select any one category under the same type (fusing or gas welding) as the main type.

c. Series type: of the same type, other categories (fusing or gas welding) except for the main type shall be a different series type.

9. Relevant technical documents must also be submitted with the application for the registration of product certification:

(1)Test reports for the glove material.

(2)Descriptions for quality assurance system.

10. Items to be tested for the type test:

(1)Rubber protective gloves for occupational health and plastic protective gloves for occupational health:

a. Main type: same as Clause 1 of Article 5.

b. Series type (key items): tensile load, pinhole and impermeability (test for product).

(2)Protective gloves for electric insulation:

a. Main type: same as Clause 2 of Article 5.

b. Series type: same as Clause 2 of Article 5.

(3)Protective gloves for welders:

a. Main type: same as Clause 3 of Article 5.

b. Series type: same as Clause 3 of Article 5.

11. Inspection Agency

(1)Rubber Protective gloves for occupational health, plastic protective gloves for occupational health and protective gloves for electric insulation: Tainan Branch of the BSMI.

(2)Protective gloves for welders: the 6th Division of the BSMI.

### Chapter 3: Inspection Regulations for Safety Belts

12. Inspection standards and items

(1)Safety belts for line-men: test all items in accordance with CNS 7543.

(2)Safety belts (fasten type): test all items in accordance with CNS 6701.

(3)Full body harness: category, label and suspension rope related auxiliaries are tested in accordance with CNS 6701. The rest are subject to full testing in accordance with CNS 14253.

13. Principle of sampling for batch-by-batch inspection

(1) Safety belts for line-men:

a. First category (U-suspension type): 2 samples.

b. Second category (U and straight suspension type): 3 samples.

c. Third category (U and straight suspension type [with auxiliary hook]): 3 samples.

(2)Safety belts (fasten type): the product falls into one of four categories according to its structure, 2 samples for each category:

a. 1A: With auxiliary belt, hook [belt ring] at the front end of the rope.

b. 1B: With auxiliary belt, rope clip at the front end of the rope.

- c. 2A: Without auxiliary belt, hook [belt ring] at the front end of the rope.
- d. 2B: Without auxiliary belt, rope clip at the front end of the rope.
- (3) Full body harness: 2 samples for each design.
- (4) The Inspection Authority may seal the number of samples set out terms of the above three Clauses, deliver it to the obligatory inspection applicant for safe-keeping for re-inspection in future.

14. Processing time of batch-by-batch inspection: 7 working days after the sampling.

15. Same type, main type and series type mentioned in the test reports are defined as follows:

- (1) Same type: same safety belts and rope.
- (2) Main type: of the same type, select any one product as the main type.
- (3) Series type: of the same type, those with different buckle, ring, D-ring, D-buckle, rope clip (adjuster), hooks or materials shall be different series types.

16. The applicant only needs to attach documents according to Clause 2(1) of Article 4 for a type test application of the registration of production certification.

17. Items to be tested for the type test:

- (1) Main type: same as Article 12.
- (2) Series type (key items): impact absorption test and strength test for all components.

18. Inspection Agency:

- (1) Impact absorption test: Taichung Branch of the BSMI.
- (2) Tests aside from impact absorption: the 6th Division of the BSMI.

#### Chapter 4: Inspection Regulations for Protective Footwear types

19. Inspection standards and items

(1) Protective boots for occupational health:

- a. Appearance, outsole, impermeability (test for product), structure, dimensions, material, label and manual in accordance with CNS 12707.
- b. If the dimensions of the commodities were manufactured according to parties' agreement and not according to the inspection standard, the obligatory inspection applicant should submit the sales information (such as an agreement and purchase order) to the Inspection Authority when applying for the test. It is not necessary for the obligatory inspection applicant to obtain the BSMI's prior approval before applying for the test.

(2) Safety footwear and protective footwear:

- a. The inspection standard for safety footwear is CNS 20345; the inspection standard for protective footwear is CNS 20346.

b. Inspection items:

(a) Design: Height of upper and Seat region (design B、C、D、E).

(b) Whole footwear: Sole performance (Construction、Upper/outsole bond strength)、Toe protection

(General、Internal length of toecaps、Impact resistance、Compression resistance、Behavior of toecaps)、Leakproofness、Slip resistance.

(c) Upper: General、Thickness、Tear strength、Tensile properties、Flexing resistance、Water vapor

permeability and coefficient、pH value、Hydrolysis、Chromium VI content

(d) Exterior: Design, Tear strength, Abrasion resistance, Flexing resistance, Hydrolysis, Interlayer bond strength

(e) Labeling: according to the inspection standard in section 7 (a), (b), (c), (d) and (f).

c. Key Inspection Items: Whole footwear Impact resistance and Compression resistance, and Chromium VI content of the Upper.

20. Batch-by-batch inspection

(1) Principle of sampling:

- a. Protective boots for occupational health: samples will be taken for different categories (rubber or plastic) and test reagent ("reagent") classification. Sample of 2 pairs are taken if there are less than two thousand in a batch or reagent type and 4 pairs if there are more than two thousand pairs in a batch or reagent type.

b. The Inspection Authority may seal the number of samples set out terms of the above Clause, and deliver them to the obligatory inspection applicant for safe-keeping for further re-inspection.

(2) Processing time of inspection: 10 working days after sampling.

(3) Inspection agency: Tainan Branch of the BSML.

#### 21. Type Approved Batch Inspection

(1) For safety footwear and protective footwear that have already obtained type approval certificate, the Inspection Authority shall begin to accept applications beginning Jan. 1, 2018.

(2) After accepting the application for inspection for safety footwear and safety footwear, the following methods shall be available for inspection:

- a. Each batch has 1/5 probability of sampling for inspection, batches that were not sampled shall use documentary review, in order to simplify inspection process.
- b. For those disqualified after sampling and inspection, the same type product shall have to undergo and pass three consecutive batch sampling and inspection before being able to resume the simplified process of 1/5 probability for sampling inspection.
- c. Two pairs shall be taken from the batch undergoing sampling, and shall be inspected and the label verified according to Article 19, Clause 9, Item 3.
- d. Processing time of inspection: 10 working days after sampling.
- e. Inspection agency: Tainan Branch of the BSML.

#### 22. Principles of the Type Test :

(1) Protective boots for occupational health

- a. Same type: same category (rubber or plastic).
- b. Main type: of same type select any one reagent classification as the main type.
- c. Series type: of the same type, other reagent classification except for the main type shall be different series types.

(2) Safety footwear and protective footwear :

a. Same type: same category of shoes and material (divided into four types: rubber soles with other parts in leather and other materials, polyurethane foam soles with other parts in leather and other materials, soles and other parts all in rubber, soles and other parts all in plastic).

b. Main type: of the same type, safety footwear with the most additional requirements is regarded as the main type; if there are more than two designs of safety footwear (designs are divided into five types A [Low shoes], B [Ankle boots], C [Half-knee boots], D [Knee-height boots], E [Thigh boots])

and possesses the most additional requirements at the same time, any of the safety footwear designs with the most additional requirements is regarded as the main type. If there are no safety footwear, then protective footwear is regarded as the main type, if there are more than two designs of protective footwear (designs also divided into five types as A, B, C, D, E) and possesses the most additional requirements at the same time, any of the safety footwear designs with the most additional requirements is regarded as the main type.

c. Series type: of the same type, those except for the main type and the additional features possessed shall be difference series types

#### 23. Relevant technical documents and samples to be submitted with the application for the registration of product certification or type approved batch inspection:

(1) Protective boots for occupational health:

a. Test reports for the materials of vamps and soles. For Protective footwear, Anti-electrostatic footwear which vamp is made of non-chromate tanned leather, the test reports shall include Chrome content test.

b. Descriptions for quality assurance system

c. Samples:

(a) Main type: two pairs of samples required for each reagent classification.

(b) Series type: two pairs of samples required for each reagent classification.

(2) Safety footwear and protective footwear:

a. Test reports for the materials of vamps and soles.

b. Test declarations, and test-reports from Taiwan Accreditation Foundation (TAF) or International Laboratory Accreditation Cooperation (ILAC) approved laboratories stating that additional requirements have been performed for products labelled with special requirements.

c. Descriptions for quality assurance system

d. Samples:

(a) Main type: seven pairs, if finished product cannot provide the sample size and weight for the test, vamp material equal to the finished product (including leather, coated fabric or textile, rubber or polymeric) shall be provided for the type test.

(b) Series type: two pairs

#### 24. Items to be tested for the type test:

- (1)Protective boots for occupational health:
  - a. Main type: same as Clause 1 of Article 19.
  - b. Series type (key items): non-permeation (test for products), for footwear products with metallic toecaps, additional toecap compression resistance and toecap corrosion resistance shall be conducted.
- (2)Safety footwear and protective footwear:
  - a. Main type: same as Item 2, Clause 2 of Article 19.
  - b. Series type (key item): same as Item 3, Clause 2 of Article 19.

#### 25. Type-test agency

- (1)Protective boots for occupational health: Tainan Branch of the BSMI.
- (2)Safety footwear and protective footwear: Tainan Branch of the BSMI or designated testing laboratories recognized by the BSMI.

### Chapter 5 – Inspection Regulations for Protective Helmets

#### 26. Inspection standards and items

- (1)Protective helmets for drivers and passengers of motorcycles and mopeds: test all items in accordance with CNS 2396.
- (2)Protective helmets for pedal cyclists and protective helmets for skating and similar activities: test all items in accordance with CNS 13371.
- (3)Industrial protective helmets: test all items in accordance with CNS 1336. Additional tests shall be conducted according to the optional performance claims on the label.
- (4)Helmet for baseball use: test all items in accordance with CNS 13338.
- (5)Helmet for soft baseball and softball use: test all items in accordance with CNS 13339.
- (6)Helmet of catcher for baseball and softball use: test all items in accordance with CNS 13340.

#### 27. Principle of sampling for batch-by-batch inspection

- (1)Protective helmets for drivers and passengers of motorcycle and mopeds:
  - a. With eye protector: 8 samples, 3 to be sealed and delivered to the obligatory inspection applicant for safe-keeping for re-inspection in future.
  - b. Without eye protector: 8 samples, 4 to be sealed and delivered to the obligatory inspection applicant for safe-keeping for re-inspection in future.
- (2)Protective helmets for pedal cyclists: 5 samples.
- (3)Protective helmets for skating and similar activities: 4 samples.
- (4)Industrial protective helmets:
  - a. For prevention of injuries caused by falling or randomly projected objects: 6 samples.
  - b. For protection in the events of tumbling and falling down: 6 samples.
  - c. Additional sampling for protective helmets with optional performance claims on the label are as following:
    - (a)For electrical insulation at high voltage: 1 sample.
    - (b)Ultra-low temperature: 2 samples (4 samples if two types are labeled).
    - (c)Lateral rigidity: 1 sample.
    - (d)Flame resistance: 1 sample.
- (5)Helmet for baseball use, helmet for soft baseball and softball use, and helmet of catcher for baseball and softball use: 4 samples if there are less than two hundred in a batch, 6 samples if there are less than four hundred in a batch, 8 samples if there are less than six hundred in a batch and 10 samples if there are more than six hundred in a batch.
- (6)Protective helmets other than protective helmets for drivers and passengers of motorcycles and mopeds, the Inspection Authority may seal the number of samples set out in terms of the above four Clauses, deliver it to the obligatory inspection applicant for safe-keeping for re-inspection in future.
- (7)If commodities in the same batch contain different specifications (size), the Inspection Authority may request the obligatory inspection application to provide a list of different specifications (size), the principle for sampling is to take the specification (size) containing the highest quantity.

#### 28. Processing time of batch-by-batch inspection

- (1)Protective helmets for drivers and passengers of motorcycles and mopeds, protective helmets for pedal cyclists , protective helmets for skating and similar activities, helmet for baseball use, helmet for soft baseball and softball use ,and helmet of catcher for baseball and softball use: 7 working days after sampling.
- (2)Industrial protective helmets: 7 working days after sampling.

#### 29. Same type, main type and series type mentioned in the test reports are defined as follows:

- (1)Protective helmets for drivers and passengers of motorcycles and mopeds:
  - a. Same type: same category (general type or enhanced type), shell and impact absorbing padding.
  - b. Main type: of the same type, select any one product as the main type.
  - c. Series type: of the same type, different materials used for shells, impact absorption padding, chinstrap, buckle or any other components shall be different series types.
- (2)Protective helmets for pedal cyclists and protective helmets for skating and similar activities:
  - a. Same type: same shell, impact absorption and vents.
  - b. Main type: of the same type, select any one product as the main type.
  - c. Series type: of the same type, different materials used for shells, impact absorption padding, chinstrap, buckle or any other components shall be different series types.
- (3)Industrial protective helmets
  - a. Same type: same shell, same harness and same types.
  - b. Main type: of the same type, select any one product as the main type.
  - c. Series type: of the same type, the materials used for shells and harness, and different adjustment approach for chinstrap with neck support (strap for back of head).
- (4)Helmet for baseball, helmet for soft baseball and softball use and, helmet of catcher for baseball and softball use:
  - a. Same type: same shell and impact absorption padding.
  - b. Main type: of the same type, select any one product as the main type.
  - c. Series type: of the same type, different materials used for shell shall be different series types.

30. Relevant technical documents must be submitted with the application for the registration of product certification:

- (1)Protective helmets for drivers and passengers of motorcycles and mopeds: material testing report for shell, chinstrap and absorption padding.
- (2)Protective helmets for pedal cyclists and protective helmets for Skating and similar activities: material testing report for shell, absorption padding, chinstrap and buckle.
- (3)Industrial protective helmets, helmet for baseball, helmet for soft baseball and softball use, and helmet of catcher for baseball and softball use: material testing report for shell.

31. Items to be tested for the type test:

- (1)Protective helmets for drivers and passengers of motorcycles and mopeds:
  - a. Main type: same as Clause 1 of Article 26.
  - b. Series type (key items): impact absorption tests and penetration resistance test shall be conducted for different shell; impact absorption test shall be conducted for different impact absorption padding, and chinstrap strengthening test and roll off test shall be conducted for different chinstrap or buckle.
- (2)Protective helmets for pedal cyclists:
  - a. Main type: same as Clause 2 of Article 26.
  - b. Series type (key items): impact absorption tests shall be conducted for different shell or impact absorption padding, chinstrap strengthening test and roll off test shall be conducted for different chinstrap or buckle.
- (3)Protective helmets for skating and similar activities:
  - a. Main type: same as Clause 2 of Article 26.
  - b. Series type (key items): impact absorption tests shall be conducted for different shell or impact absorption padding, and chinstrap strengthening test shall be conducted for different chinstrap or buckle.
- (4)Industrial protective helmets:
  - a. Main type: same as Clause 3 of Article 26.
  - b. Series type: same as Clause 3 of Article 26.
- (5)Helmet for baseball use:
  - a. Main type: same as Clause 4 of Article 26.
  - b. Series type (key items): impact absorption test.
- (6)Helmet for soft baseball and softball use:
  - a. Main type: same as Clause 5 of Article 26.
  - b. Series type (key items): impact absorption test.
- (7)Helmet of catcher for baseball and softball use:
  - a. Main type: same as Clause 6 of Article 26.
  - b. Series type (key items): impact absorption test.

32. Inspection agency: Tainan Branch of the BSMI.

33. Industrial protective helmets for electrical insulation at high voltage should be labelled "have electrical insulation ability (7kV or under in service voltage)" and "have passed withstanding



voltage (20kV and 10mA or under)" in accordance with the inspection standards. Any restriction on the voltage, for example under 440V, must be added to the label.

## Chapter 6 – Inspection Regulations for Eye Protectors

### 34. Inspection standards and items

#### (1) Eye protector for welding:

a. The inspection standard is CNS 7177 and CNS 7175.

#### b. Inspection items:

(a) Transmittance (Maximum spectral transmittance in the ultraviolet, Luminous transmittance, Maximum mean spectral transmittance in the infrared), Variation in transmittance, Quality of material and surface, Ocular minimum robustness or ocular increased robustness, Stability at an elevated temperature and Marking are tested in accordance with CNS 7177.

(b) Design and manufacture (General construction, Headbands), Dimensions, Resistance to ignition and Resistance to corrosion are tested in accordance with CNS 7175.

#### c. Key Inspection Items:

(a) Transmittance (Maximum spectral transmittance in the ultraviolet, Luminous transmittance, Maximum mean spectral transmittance in the infrared), Stability at an elevated temperature and Marking are tested in accordance with CNS 7177.

(b) Resistance to ignition is tested in accordance with CNS 7175.

(c) Variation in transmittance and Ocular minimum robustness or ocular increased robustness are additionally tested in accordance with CNS 7177 for different lens materials

(d) Design and manufacture (General construction, Headbands) and Dimensions are additionally tested in accordance with CNS 7175 for different structures.

#### (2) Eye protector of ultraviolet filtering, infrared filtering, sunglare filter for industrial use, and ocular without filtering effect:

a. The inspection standard is CNS 7177.

b. Inspection items: Design and manufacturing requirements (General construction, Headbands), Field of vision, Spherical, astigmatic and prismatic refractive powers, Transmittance (Spectral transmittance and Recognition of signal lights are additionally tested for eye protector of sunglare filter for industrial use), Variation in transmittance, Quality of material and surface, Ocular minimum robustness or ocular increased robustness, Stability at an elevated temperature, Resistance to corrosion, Resistance to ignition and Marking.

#### c. Key Inspection Items:

(a) Transmittance, Stability at an elevated temperature, Resistance to ignition and Marking.

(b) Spherical, astigmatic and prismatic refractive powers, Variation in transmittance, Ocular minimum robustness or ocular increased robustness are additionally tested for different lens materials. Spectral transmittance and Recognition of signal lights are additionally tested for eye protector of sunglare filter for industrial use.

(c) Design and manufacturing requirements (General construction, Headbands), Field of vision are additionally tested for different structures.

#### (3) Filter:

a. The inspection standard is CNS 7177.

b. Inspection items: Transmittance (Maximum spectral transmittance in the ultraviolet, Luminous transmittance, Maximum mean spectral transmittance in the infrared), Variation in transmittance, Quality of material and surface, Ocular minimum robustness or ocular increased robustness, Stability at an elevated temperature, Resistance to ignition and Marking.

c. Key Inspection Items: Transmittance (Maximum spectral transmittance in the ultraviolet, Luminous transmittance, Maximum mean spectral transmittance in the infrared)

#### (4) Welding face shield:

a. The inspection standard is CNS 7175. Those with filter or with filter function shall be inspected according to the above Clause.

b. Inspection items: Design and manufacture (General construction, Field of vision, Materials, Headbands, Heat insulation, Replacement), Dimensions, Area of coverage for welder's face shields and safety helmet mounted welder's face shields, Resistance of welder's shields to damage when dropped, Light reflectance of welder's shields, Light attenuation of welder's shields, Electrical insulation of welder's shields, Resistance to ignition, Resistance of welder's shields to hot penetration, Resistance to corrosion, Mass and Marking.

#### c. Key Inspection Items:

(a) Resistance of welder's shields to damage when dropped, Light reflectance of welder's shields, Electrical insulation of welder's shields, Resistance to ignition, Resistance of welder's shields to hot penetration, Mass and Marking.

(b) Design and manufacture (General construction, Field of vision, Materials, Headbands, Heat

insulation, Replacement), Dimensions, Area of coverage for welder's face shields and safety helmet mounted welder's face shields, Light attenuation of welder's shields are additionally tested for different structures.

(5)Eye protector for vehicular users: test all items in accordance with CNS 13370.

(6)Eye-protection of helmets for pedal cyclists and similar activities: test all items in accordance with Section 8 of CNS 13371. Label all items in accordance with Sections 9.1(i) and 9.2(g) of CNS 13371.

### 35. Principle of sampling for batch-by-batch inspection

(1)Eye protector for welding: 4 samples for each category (spectacle, front, and goggle), scale number, lens material and structure.

(2)Eye protector of ultraviolet filtering, infrared filtering, sunglare filter for industrial use, and ocular without filtering effect: 4 samples for each category (spectacle, front, goggle and face shield), scale number (a combination of the code number and the shade number), lens material and structure.

(3)Filter: 3 samples for each scale number.

(4)Welding face shield: 3 samples for each structure.

(5)Eye protector for vehicular users:

a. Goggle type: 4 samples if there are less than two hundred in a batch, 6 samples if there are less than four hundred in a batch, 8 samples if there are less than six hundred in a batch and 10 samples if there are more than six hundred in a batch.

b. Visor and helmet type: 10 samples (including 2 samples for protectors installed on the protective helmet).

(6)Eye-protection of helmets for pedal cyclists and similar activities:

a. Goggle type: 4 samples if there are less than two hundred in a batch, 6 samples if there are less than four hundred in a batch, 8 samples if there are less than six hundred in a batch and 10 samples if there are more than six hundred in a batch.

b. Visor and helmet type: 10 samples (including 2 samples for protectors installed on the protective helmet).

(7)The Inspection Authority may, upon the completion of sampling, seal the sampled quantities respectively required by the above six Clauses, and return them to the obligatory inspection applicant for re-inspection.

### 36. Processing time of batch-by-batch inspection: 7 working days after sampling.

### 37. Same type, main type and series type mentioned in the test reports are defined as follows:

(1)Eye protector for welding:

a. Same type: same category (spectacle, front, and goggle).

b. Main type: of the same type, one product with the most additional requirements is regarded as the main type. If there is more than one product which possesses the same numbers of additional requirements at the same time, the one which possesses the largest scale number is regarded as the main type.

c. Series type: of the same type, different additional requirement, scale number, lens material or structure except for the main type shall be the series types.

(2)Eye protector of ultraviolet filtering, infrared filtering, sunglare filter for industrial use, and ocular without filtering effect:

a. Same type: same category (spectacle, front, goggle and face shield).

b. Main type: of the same type, one product with the most additional requirements is regarded as the main type. If there is more than one product which possesses the same numbers of additional requirements at the same time, the one which possesses the maximum shade number of the scale number is regarded as the main type. If there is more than one product which possesses the same numbers of additional requirements and the same shade number of the scale number at the same time, the one which possesses the maximum code number of the scale number is regarded as the main type.

c. Series type: of the same type, different additional requirement, scale number (a combination of the code number and the shade number), lens material or structure except for the main type shall be the series types.

(3)Filter:

a. Type: all filter submitted by the obligatory inspection applicant.

b. Main type: of the same type, select any scale number as the main type.

c. Series type: of the same type, any other scale number except the main type shall be the series type.

(4)Welding face shield:

a. Same type: same category (helmet or handshield).

- b. Main type: of the same type, select any one product as the main type.
- c. Series type: of the same type, with different material or structure except for the main type shall be the series types.
- (5)Eye protector for vehicular users:
  - a. Same type: same category (goggle, visor, and helmet), material and eye-protecting component.
  - b. Main type: of the same type, select any one product as the main type.
  - c. Series type: of the same type, different color or structure (connection methods to the helmet) other than the main type shall be the series types.
- (6)Eye-protection of helmets for pedal cyclists and similar activities
  - a. Same type: same category (goggle, visor, and helmet), material and eye-protecting component.
  - b. Main type: of the same type, select any commodity as the main type.
  - c. Series type: of the same type, any other items with colors or structures (the way to attach the helmet) different from the main type shall be the series type.

38. Material testing report for lens must be submitted with the application for the registration of product certification; no such report is required if the material is glass. If an optional requirement is claimed when applying for the inspection of eye protector for welding, eye protector of ultraviolet filtering, infrared filtering, sunglare filter for industrial use, and ocular without filtering effect, filter, welding face shield, the testing report from the third-party laboratory stating that the product conforms to the optional requirement shall be submitted.

39. Items to be tested for the type test:

- (1)Eye protector for welding:
  - a. Main type: same as Item 2 of Clause 1 of Article 34.
  - b. Series type (key items): same as Item 3 of Clause 1 of Article 34.
- (2)Eye protector of ultraviolet filtering, infrared filtering, sunglare filter for industrial use, and ocular without filtering effect:
  - a. Main type: same as Item 2 of Clause 2 of Article 34.
  - b. Series type (key items): same as Item 3 of Clause 2 of Article 34.
- (3)Filter:
  - a. Main type: same as Item 2 of Clause 3 of Article 34.
  - b. Series type (key items): same as Item 3 of Clause 3 of Article 34.
- (4)Welding face shield:
  - a. Main type: same as Item 2 of Clause 4 of Article 34.
  - b. Series type (key items): same as Item 3 of Clause 4 of Article 34.
- (5)Eye protector for vehicular users:
  - a. Main type: same as Clause 5 of Article 34.
  - b. Series type (key items): optical properties (parallelism, dioptric power and degree of transparency) shall be conducted for different color; strength, cold resistance and adjustable items shall be conducted for different structure (connection methods with the helmets).
- (6)Eye-protection of helmets for pedal cyclists and similar activities :
  - a. Main type: as specified in Clause 6 of Article 34.
  - b. Series type (key items): optical properties (parallelism, dioptric power and degree of transparency) shall be conducted for different color; strength, cold resistance and adjustable items shall be conducted for different structure (connection methods with the helmets).

40. Inspection Agency: Tainan Branch of the BSMI.

Attachments : Appendix 1 Table of the Registration of Product Certification Type Classification.odt  
 Appendix 2 Table of the Registration of Product Certification Type Classification.odt  
 Appendix 3 Table of the Registration of Product Certification Type Classification.odt  
 Appendix 4 Table of the Registration of Product Certification Type Classification.odt  
 Appendix 5 Table of the Registration of Product Certification Type Classification.odt  
 Appendix 6 Table of the Registration of Product Certification Type Classification.odt

