

Content

Title :	Operation Directions Governing the Inspection of Cement Products Ch
Date :	2026.08.28
Legislative :	1. Adopted and promulgated by Order No. 09920016200, BSMI, MOEA on 11 October 2010. 2. Clauses 4 and 7 amended and promulgated by Order No. 10020009030, BSMI, MOEA on 25 July 2011. 3. All Clauses amended and promulgated by Order No. 10420001040, BSMI, MOEA on 1 April 2015. 4. Clauses 4 and 5 amended and promulgated by Order No. 11120003800, BSMI, MOEA on 26 May 2022, and enforced on 1 June 2022. 5. All Clauses amended and promulgated by Order No. 11220000320, BSMI, MOEA on 24 February 2023. 6. Clauses 5 amended and promulgated by Order No. 11530014580, BSMI, MOEA on 28 Aug 2026.
Content :	1. These Directions are stipulated by the Bureau of Standards, Metrology and Inspection (BSMI) for implementing the inspection of cement. 2. Scope of Inspection: Portland cement and blended hydraulic cement that are imported or domestically-manufactured to be placed on the market. 3. Inspection schemes: monitoring inspection or management-system-based monitoring inspection. 4. Inspection standards and inspection items: (1) Portland cement: CNS 61, including the following items: a. All items on chemical compositions and physical properties, among which the compressive strength shall be performed on cement age 3 days, except type IV. For type IV, the test shall be performed on cement age 7 days. b. Contents of additives: Contents of additives added to limestone used for Portland cement and manufacturing processes. (2) Blended hydraulic cement: CNS 15286, including the following items: a. All requirements for chemical compositions. b. Physical properties: (a) Autoclave expansion and contraction. (b) Time of initial setting. (c) Air content of mortar. (d) Compressive strength, performed on cement age 3 days for all types except IS (≥ 70) and IT ($S \geq 70$). For IS (≥ 70) and IT ($S \geq 70$), the test shall be performed on cement age 7 days. (3) The BSMI may develop other monitoring plans to monitor compressive strength of cement of other ages or decide items to be inspected when there are options provided by the standards. 5. The relevant requirements of monitoring inspection (including management-system-based monitoring inspection) are as follows: (1) Application: a. Monitoring inspection: The obligatory inspection applicant shall apply to the BSMI or its branch (hereinafter referred to as the Inspection Authority) for inspection by submitting an inspection application form before the product is imported or transported out of the production premises. b. Management-system-based monitoring inspection: (a) An applicant shall register in the monitoring inspection system and submit the application form, together with a quality management system registration certificate issued by a certification body recognized by the BSMI, and a list of basic inspection equipment, to the Inspection Authority. (b) The basic inspection equipment includes autoclave, Le Chatelier pycnometer, constant temperature and humidity curing chamber, air permeability apparatus, Vicat apparatus, compression machine (25 tons or above), flow table and flow mold, and muffle furnace (high temperature

furnace that can reach 1200°C or above and can operate continuously at high temperature).

(2) Commodity Inspection Mark:

a. Cement shall bear the Commodity Inspection Mark on the smallest packaging unit. But those in bulk can be exempted from labelling the Commodity Inspection Mark.

b. Where monitoring inspection procedure is selected, the obligatory inspection applicant may print the Commodity Inspection Mark by themselves if the product lot number or manufacture date is identified in the application form, and the smallest packaging unit is labelled with the product lot number or manufacture date. The identification number is composed of the letter "M" and the monitoring inspection registration number.

c. Where the production premises are registered under the management-system-based monitoring inspection, the obligatory inspection applicants may print the Commodity Inspection Mark by themselves. The identification number is composed of the letter "Q" and the monitoring inspection registration number.

(3) Inspection Requirements:

a. Monitoring inspection:

(a) The inspection is carried out by batch examination. Where the obligatory inspection applicant applies for inspection for products of the same origin, the same production premise or brand, and the same type, which have passed batch examination for three consecutive batches, the subsequent applications will be subject to randomly-sampled batch examination (one out of every two batches being sampled for inspection). Where non-compliance is found in the randomly sampled products, batch examination will be resumed.

(b) When the bulk cement, which has passed inspection, is repackaged into small units, the obligatory inspection applicants shall apply for re-inspection. For re-inspection applications that are accompanied by the ex-factory or import monitoring inspection certificate and proof of delivery, the procedure of document review is adopted. When necessary, on-site check of packaging, appearance

and labelling or sampling inspection may be conducted. For those not inspected or sampled for ten consecutive batches, the next batch shall be inspected or sampled.

b. Management-system-based monitoring inspection:

(a) For products manufactured domestically for sale in Taiwan: The production premises shall perform inspection of its cement and issue, by countersigning, the monitoring inspection certificate if compliance is demonstrated after the inspection.

(b) For imported products: After the production premises conducts inspection and confirms compliance, the obligatory inspection applicant shall submit a copy of the registration certificate for the production premises under management-system-based monitoring inspection and the original inspection records to the BSMI. The monitoring inspection certificate shall be issued after the BSMI reviews and confirms compliance.

(c) Production premises registered under management-system-based monitoring inspection are required to add fields for the contents of four additives, namely granulated blast furnace slag (hereinafter referred to as slag), fly ash, siliceous materials and limestone, to their inspection records and fill them out truthfully. The BSMI may conduct inspections or sampling tests at any time.

(4) Principles for the delivery of samples and confirming the content of the additives:

a. Imported products (including those subject to monitoring inspection and those subject to follow-up batch examination after having failed monitoring inspection): Upon receipt of the samples, the sampling office will mix them and divide them into three portions, and handle them as follows:

(a) For samples taken by the BSMI, its Keelung Branch, and Hualien Branch, one portion shall be retained by the respective sampling office, and the other two portions shall be sent to the Hualien Branch for testing of chemical composition and content of additives (for slag, only the quantity of sulfur in sulfide in the original cement sample shall be determined) and physical properties.

(b) For samples taken by the BSMI's Hsinchu Branch, Taichung Branch, and Tainan Branch, one portion shall be retained by the respective sampling office, and the other two portions shall be sent to the Taichung Branch for testing of chemical composition and content of additives (for slag, only the quantity of sulfur in sulfide in the original cement sample shall be determined) and physical properties.

(c) For samples taken by the BSMI's Kaohsiung Branch, one portion shall be retained by the branch,

one portion shall be tested by the branch for chemical composition and content of additives (for slag, only the quantity of sulfur in sulfide in the original cement sample is tested), and one portion shall be sent to the Taichung Branch for testing of physical properties.

b. Domestic products (including those from production premises registered under management-system-based monitoring inspection, domestic production premises and those subject

to follow-up batch examination after having failed monitoring inspection): Upon receipt of the samples, the sampling office will mix them and divide them into three portions, and handle them as follows:

(a) For samples taken by the BSMI, its Keelung Branch, and Hualien Branch, one portion shall be retained by the respective sampling office, and the other two portions shall be sent to the Hualien Branch for testing of chemical composition and content of additives (for slag, only the quantity of sulfur in sulfide in the original cement sample shall be determined) and physical properties.

(b) For samples taken by the BSMI's Hsinchu Branch, Taichung Branch, Tainan Branch, and Kaohsiung Branch, one portion shall be retained by the respective sampling office, and the other two portions shall be sent to the Taichung Branch for testing of chemical composition and content of additives (for slag, only the quantity of sulfur in sulfide in the original cement sample shall be determined) and physical properties.

c. The content of additives shall be tested in accordance with CNS 12459 for the contents of fly ash,

siliceous materials and limestone, and the quantity of sulfur in sulfide in the original cement sample shall be determined in accordance with Clause 7.3 of the same standard. A ratio of 1:100 shall be used as the estimated content of slag. The mass of limestone added to cement shall not be more than

5% of the total cement mass. The sum of the estimated slag quantity, fly ash, and siliceous materials shall not be more than 5% of the total cement mass. Cement will be deemed as a product containing questionable additive contents when the sum of the estimated slag quantity, fly ash, and siliceous materials is more than 5% of the total cement mass.

d. When cement is deemed as a product containing questionable additive contents after the above testing, the sampling office shall notify the Hualien Branch of the BSMI to conduct confirmation, and notify the obligatory inspection applicant that a confirmation procedure is required. At the same time, the extension of the inspection case shall be processed in the "Specialized Laboratory Management System."

e. The Hualien Branch of the BSMI shall provide the confirmation results to the sampling office within six working days after receiving the notification.

(5) Period of inspection: Except that the inspection period is eight working days upon receipt of samples when the inspection items include compressive strength at the age of seven days, the inspection period for other inspection items is six working days upon receipt of samples. However, for products containing questionable additive contents as referred to in Subparagraph (4)(c), where confirmation of the slag content is required, the inspection period will be extended for another six working days.