

CENTRAL MARKS DEPARTMENT-3

Our Ref: CMD-3/16:269

08.09.2016

Subject: Implementation of revised STI (Doc. No. STI/269/7, August 2016) and switchover guidelines for IS 269:2015, Ordinary Portland Cement

Please find enclosed revised STI (Doc. No. STI/269/7, August 2016) and guidelines for IS 269:2015, Ordinary Portland Cement. These are being sent to all ROs/BOs for implementation by 30 10 2016.

**S.Hudson Singh)
Sc. C (CMD-3)**

Sc. E & Head (CMD-3)

Circulated to all ROs/BOs

Copy to: ITS for hosting on Intranet

केन्द्रीय मुहर विभाग 3

संदर्भ- केन्द्रीय मुहर विभाग-3/ 16:आई एस 269

08 सितम्बर 2016

विषय- आई एस – 269:2015 साधारण पौटलैंड सीमेंट के संशोधित एस टी आई
का कार्यान्वयन और अंतरण दिशा-निर्देश

आई एस 269:2015 साधारण पौटलैंड सीमेंट के लिए संशोधित एस टी आई (एस टी आई/269/7 अगस्त 2016)
और अंतरण दिशा-निर्देश कार्यान्वयन हेतु संलग्न हैं । एस टी आई के कार्यान्वयन की तिथि 30 अक्टूबर 2016 से
है ।

(एस हडसन सिंह)
वैज्ञानिक सी (सी एम डी-3)

वैज्ञानिक ई एवं प्रमुख (सी एम डी-3)

सभी क्षेत्रिय/ शाखा कार्यालय को परिचालित

प्रतिलिपि: आई टी एस को बीआईएस वेबसाइट/इंट्रानेट पर अपलोड करने के लिए

CENTRAL MARKS DEPARTMENT-3

Ref.: CMD-3/16: IS 269

24-08-2016

Subject: Guidelines for the Implementation of IS 269: 2015, revised specification for Ordinary Portland Cement

1. Changes in the revised IS 269: 2015.

IS 269: 2015 is a single Indian Standard for OPC and all the requirements of previously existing 33 Grade OPC (IS 269), 43 Grade OPC (IS 8112) and 53 Grade OPC (IS 12269) have been merged into this standard. Significant changes in this revision and are as follows:

- a)** Use of industrial by-products from Copper, Steel and Zinc industries and from oil refineries as performance improvers has been specified based on the extensive experimental research.
- b)** Manufacture of cement also by interblending, by intimately and uniformly blending the individually ground materials has been permitted.
- c)** Requirement of Insoluble residue of not more than 5 % has been specified for OPC 33, 43 & 53 grades and not more than 2% for OPC 43S and 53S.
- d)** Provisions for railway sleeper cement have been modified.
- e)** Requirement of marking the 'Best before date' of cement and "Need for testing of cement more than 3 months old to check conformity before its use" has been introduced
- f)** This version contains provision for agreement between purchaser and the supplier in respect of requirements at Table-2 Sl No. (viii); Cl 13.2.1; Table-3 Sl. NO. (v), Cl 10.2 to 10.4 and Cl 10.4.3.

2. The guidelines for existing licensees of IS 269 (33Grade OPC), IS 8112 (43 Grade OPC) and IS 12269 (53 Grade OPC) for switch over to new IS 269: 2015 version:

- i.** As per the revised version of IS 269, cement manufacturers will also have the option of manufacturing OPC in addition to the process of inter-grinding, by interblending intimately and uniformly blending the individually ground materials. Therefore a declaration shall be obtained from the licensees regarding manufacturing process adopted by them in the manufacturing of OPC and in case any manufacturing machinery/test equipment is added for the purpose, same shall be declared by the Manufacturer in CM/PF 305 & 306 and submitted to BIS along with manufacturing process. Licensees are also required to declare type and percentage of performance improvers if added as per Clause 5.1.1 & table -1 of IS 269:2015 and submit the same to BIS under switchover process.
- ii.** Licensees are holding licences for one or many grades of OPC. Licensees of OPC who have license for IS 269 and/or IS 8112 and /or IS 12269 should be given an option to retain any one licence of OPC and include OPC's under other licences as varieties, under the retained licence. As opted by the licensee, OPC under other licences shall be included as variety / varieties under the retained licence and thereafter other licenses shall be cancelled.
- iii.** All licensees will be required to modify marking details on the packing bags as per the revised version of the standard and to obtain approval from BIS prior to switch over. Wordings such as 'Best before 3 months from date of packing' and 'Beyond 3 months from the date of packing, test cement and check for conformity before use' shall be printed.

- iv. Acceptance to revised STI shall be submitted by the licensee. In case any licensee fails to give acceptance to revised STI within the stipulated time norm action shall be taken as per OMPC.
- v. This version contains provision for agreement between purchaser and the supplier in respect of requirements at Cl 13.2.1; Table-3 Sl. No. (v), Cl 10.2, 10.3, 10.4 and Cl 10.4.3. For compliance to these requirements, Declaration shall be obtained from licensees.
- vi. This standard requires the manufacturer to carry out test for alkali content, if so desired by the purchaser. For this purpose the licensee may have in-house test facility or avail test facility of any other laboratory recognized by BIS. Licensees are required to provide certificate indicating conformity to IS 269: 2015 as per clause 9.1 and alkali content as per clause 9.2 to the purchaser, if requested. Declaration to this effect shall be obtained from the licensee.
- vii. Licensees shall be informed about the above mentioned requirements for change over by BOs as early as possible. The implementation of revised ISS i.e. IS 269: 2015 by the licensees shall be ensured within the stipulated time i.e 30th Oct 2016. If the licensee desires to add any New performance improves or desires to change the combination of performance improvers, if already declared, the same may be supported by submitting test certificate showing conformance to IS 269: 2015 from BIS recognized lab. For this purpose, one sample from each group detailed below will be sufficient. After confirmation of satisfactory compliance on implementation of IS 269: 2015 from licensee, approval to be granted by Head BO/Authorized officer and suitable endorsement to the opted licence shall be issued endorsing IS 269: 2015 in the licence and product scope also be revised to incorporate different grades covered under existing licenses of OPCs and whether with or without the addition of performance improver.

Grouping Guidelines

Sl No	Group	Guidelines
1.	OPC 33	If OPC 33 grade in being operated, OPC 33 may be included as a variety
2.	OPC 33 and OPC 43	If OPC 43 grade in being operated, OPC 33 also may be included if opted by the licensee
3.	OPC 53	<p>(i) If license is being held for OPC 53 only, the same may be included as a variety under the IS 269:2015</p> <p>(ii) If license is held for OPC 53 along with license for OPC 33 endorsement for OPC 53 and OPC 33 shall be made.</p> <p>(iii) If license is held for OPC 53 along with OPC 43, endorsement for OPC 53, OPC 43 and if opted, for OPC 33 shall be made.</p>

4.	OPC 43S and OPC 53S	<p>(i) It 43S is included in the license the same may be included as a variety under IS 269:2015</p> <p>(ii) If 53S alone is already included in the licence. OPC 53S and if opted for OPC 43S may be endorsed.</p> <p>(iii) It 53S and 43S are already included in their respective licence, both may be endorsed in the licensee under IS 269: 2015</p>
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viii. In case any licensee doesn't complete all the actions for switchover to IS 269: 2015 by **30th Oct 2016**, action as per OMPC shall be taken.

ix. The additional manufacturing/testing facilities added, if any, in view of 2(i) above, where applicable, may be verified during subsequent surveillance visit.

3. The guidelines for Applicants for change over from IS 269, IS 8112 and IS 12269 (any one or more) to a single IS 269: 2015 version.

i. Existing applications for OPCs where Test reports have been received, any one application will be retained. TR of other grades will be taken as variety / varieties under the retained application. Other applications shall be closed. Test report of each OPC shall be assessed as a variety. If all OPC samples pass all grades 53, 43 and 33 shall be included as a variety. If any sample fails to meet the requirements that particular OPC shall not be included for GOL.

ii. All fresh applications would be recorded as per IS 269:2015

iii. Existing applications where PIs have been completed and TRs are awaited, the same shall be processed as per (i) above.

iv. Recorded applications where PIs are pending, in such cases anyone application to be processed further as per the option of applicant and applications for other OPCs shall be processed for closure after incorporating other grades of OPC into the retained application as varieties.

4. Both the versions i.e. IS 269:2013, IS 8112:2013 & IS 12269:2013 and the revised version IS 269: 2015 (single ISS in lieu of pervious three ISS for OPCs) shall run con-currently up to **30th Oct 2016 after which the old versions i.e. IS 269:2013, IS 8112:2013 & IS 12269:2013 shall stand withdrawn.**

This is issued with the approval of competent authority for necessary compliance.

H CMD 3

(N.Shivanandan)
Sc-E, CMD 3

DDG (Certification)

**SCHEME OF TESTING AND INSPECTION
FOR CERTIFICATION OF ORDINARY PORTLAND CEMENT
ACCORDING TO
IS 269: 2015 (Sixth Revision)**

1. **LABORATORY** – A laboratory shall be maintained, which shall be suitably equipped and staffed where different tests given in the specification shall be carried out in accordance with the methods given in the specification.
2. **TEST RECORDS** - All records of tests, inspection and calibration shall be kept in suitable forms approved by the Bureau.
 - 2.1 All testing apparatus/measuring instruments shall be periodically checked and calibrated and records of such checks/calibration shall be maintained.
 - 2.2 Copies of any records and other related papers that may be required by the Bureau shall be made available at any time on request.
3. **QUALITY CONTROL** – It is recommended that, as far as possible, Statistical Quality Control (SQC) methods may be used for controlling the quality of the product during production as envisaged in this Scheme [See IS 397(Part I):2013, IS 397(Part 2):2013 and IS 397(Part 3):2013].
 - 3.1 In addition, effort should be made to introduce a Quality Management System in accordance with IS/ISO 9001.
4. **CALIBRATION** – Periodic calibration of various testing equipment shall be carried out and records of such calibrations kept. The following equipment shall be calibrated at a frequency shown against each and records kept.

SI No.	TEST EQUIPMENT	FREQUENCY OF CALIBRATION
1.	Blaine's apparatus	Daily with licensee's own Standard cement sample and monthly with standard cement samples supplied by NCCBM.
2.	Compressive strength Testing machine	Once in a month with Licensee's own Proving Ring and the Proving Ring shall be Calibrated once in two years from the Accredited Calibrating body or NPL or NPL accredited Proving Ring manufacturer.
3.	Autoclave pressure gauge	Once in a month by licensee's own dead weight pressure gauge tester OR once in six months from accredited calibrating body or NPL/NABL accredited manufacturer of such gauges.
4.	Vibration machine	Once in a month by licensee's own Tachometer. The tachometer shall be calibrated once in a year from accredited outside agency.
5.	Dead weight pressure gauge Tester (if available)	Once in four years from NABL accredited Tester (if available) Lab or OEM (original Equipment manufacturer) having NPL accredited calibrator.

5. **STANDARD MARK** – The Standard Mark, as given in Column (1) of the First Schedule of the licence, shall be printed or stenciled on each bag or drum of Ordinary Portland Cement or on the label applied to it, provided the material in each bag or package to which the mark thus applied conforms to the specification. The size of the Standard Mark shall be either 60 X 90 mm or 120 X 180 mm.
- 5.1 **MARKING** - In addition the following information should be given on each cement bag or package or on the label applied to it. Same information shall be provided in the delivery advices accompanying the shipment of packed or bulk cement and on cement drums. The ISI Mark and the following details shall be applied on each bag or package in **BLACK COLOUR**.

- a) Name of the manufacturer and its registered trade mark, if any;
- b) Name and Designation of cement;
- c) Net quantity, in Kg.;
- d) The word 'Use no Hooks' on the bags;
- e) Batch/control unit number in terms of week, month and year of packing;
- f) Best before date (that is, 3 months/12 weeks from date of packing);
- g) Wording as 'Cement to be tested before use if more than 3 months old from date of packing'
- h) The words "FOR EXPORT", if required;
- i) Licence Number (CM/L-----);
- j) Address of the manufacturer;
- k) Type and percentage of performance improver(s) added, in case of addition of performance improver and
- l) Any other marking required under current Legal Metrology Act and Rules framed there under.

NOTE :-

- 1) For each calendar year the first week shall be counted as 7 days, from 1st of January and subsequent weeks numbered serially accordingly as W01/MM/YY.....W51/MM/YY.....etc.
- 2) Label mentioned at 5 and 5.1 above shall be attached to the seal of the container. The seal shall be such a design that it shall automatically get destroyed on opening.
- 3) For Bulk packing units all the cement of one consignment received shall constitute a batch. Batch mixing may be permitted for those packing units which are extended packing terminals of cement manufacturer, subject to packing units obtaining test certificates from the same manufacturer and keep proper records. If cement is received from different manufacturer (licensee) batch mixing is not permitted. Adequate care shall be taken to prevent/preempt mixing of cement even of the same grade.
- 4) In case of packing bulk terminals being extended packing facility of a cement manufacturer, name of the original manufacturer and/or his trade mark or BIS Certification mark need not be given on the bag/drum/packing.
- 5) If source of the cement for packing is not from the same manufacturer the source details (CML number) is to be indicated on the bag.
- 6) The colour of the bag (other than red) and background colours should be in contrast to the colour of the Standard Mark and the details so that the markings are conspicuous.

6. **LEVELS OF CONTROL**

- 6.1 **For manufacturing units of Ordinary Portland Cement:-** The tests, as indicated in Table -1 attached and at the levels of control specified therein, shall be carried out on the whole production which is covered by this scheme and appropriate records and charts maintained in accordance with clause-2 above. All the production which conforms to the Indian Standards and covered by the licence shall be marked with certification mark of the Bureau.

- 6.2 **For packing of Ordinary Portland Cement at bulk cement terminal:-** The tests, as indicated in Table -2 attached and at the levels of control specified therein, shall be carried out on the whole packing of Ordinary Portland cement and appropriate records and charts maintained in accordance with clause-2 above. All the packing quantity which conforms to the Indian Standards shall be marked with certification mark of the Bureau.
- 6.2.1 The Batch integrity shall be ensured at all stages of packing, the packer shall maintain appropriate controls and checks to ensure that there is no chance of mix up of different batches of the cement if received from different manufacturer Adequate care shall be taken to avoid spoilage during handling, packing and storage.
- 6.2.2 **BATCH:** For the purpose of clause 6.2 of this scheme all cement of one consignment received shall constitute one batch.
- 6.2.3 Test Certificate of each original batch of cement shall be obtained from the supplier and test results recorded. On the basis of tests and inspection, the decision regarding conformity or otherwise of the consignment/batch to a given requirement shall be taken.
- 6.3 **WEIGHMENT**- 12 filled bags shall be taken at random twice in each shift of operation and weighed and appropriate records maintained in Form 1. The bags shall be so chosen for weighment such that bags from each nozzle are taken for weighment. The weighing and packing machines shall be adjusted as and when necessary in such a way that net quantity of each bag shall be in accordance with the tolerances given in Annex-B or clause 10.1.1 & 10.2 of IS: 269:2015.
- 6.3.1 For packing of ordinary Portland cement in bulk cement terminal the weighment of hourly check of mass of drums also shall be done in addition weighment of bags mentioned in para 6.4 above. The records of weighments shall be maintained in the formats as per forms 10 to 13 given below.
7. **RAW MATERIALS** -Routine analysis of various raw materials going into the manufacture of Ordinary Portland Cement shall be made at intervals of a month or whenever there is a change in the source/mine area stratification whichever is earlier and appropriate records of the analysis and of the Physical composition of the mixtures shall be maintained. (See form 2). This clause is not applicable to packing of Ordinary Portland Cement at bulk cement terminal.
- 7.1 **Performance Improvers** – Licensees shall declare name(s) and percentage(s) of performance improver(s) they intend to add. At the first instance, conformity of the cement with addition of declared performance improver(s) and test certificates for each performance improvers added shall be assessed by the licensee through testing in a BIS/ BIS recognized

lab. Test certificates shall be submitted to BIS for approval. During regular production percentage of declared performance improver(s) may be adjusted to suit other raw materials within the overall percentage provided in IS 269: 2016 for which further BIS approval is not required and if any such adjustment is made such percentage of the performance improver(s) shall be printed on the bag/package accordingly. However if any new performance improver is added, actions stated for first approval above shall be followed.

8. In respect of all other clauses of the specification, the factory shall maintain appropriate controls and checks to ensure that their product conforms to the various requirements of the specification.
9. **REJECTIONS** – A separate record shall be maintained giving information relating to the rejection of the production not conforming to the requirements of the specification and the method of its disposal. Such material shall in no circumstances be stored together with that conforming to the specification. (See Form 3)
10. **PACKING** – The packing of Ordinary Portland Cement shall be in conformance to clause -10 of IS 269: 2015. A test certificate either from the manufacturer or from any BIS recognized testing laboratory shall be received along with each consignment. Alternatively the sample of bag from each consignment shall be tested by the cement manufacturer either in his own laboratory or any other BIS recognized laboratory before they are used for packing cement. No testing would be required if bags carry BIS Certification Mark. The bags shall be in good condition at the time of packing.
 - 10.1 Colour of bags: Any colour except red can be used. However, the colour of bags shall be in contrast to the colour of marking so that marking on the bags is clear and legible.
11. **STORAGE:** Storage shall conform to clause -8 of IS 269: 2015
12. **SAMPLES** – The licensee shall supply, free of charge, the samples required in accordance with the Bureau of Indian Standards (Certification) Regulations, 1988, as subsequently amended, from the factory or go-downs. The Bureau shall pay for the samples taken by it from the open market.
13. **REPLACEMENT** – Whenever a complaint is received soon after the goods with Standard Marks have been purchased and used, and if there is adequate evidence that the goods have not been misused, the material under complaint shall be replaced free of cost by the licensee in case the complaint is proved to be genuine. The final authority to judge the conformity of the product to the Indian Standard shall be with the Bureau.
 - 13.1 In the event of any damages caused by the goods bearing the Standard Mark, or claim being filed by the consumers against products not conforming to the relevant Indian Standard,

entire liability arising out of such non-conforming product shall be of the licensee and BIS shall not in any way be responsible in such cases.

14. **STOP MARKING** – The marking of the product shall be stopped under intimation to the Bureau if, at any time, there is any difficulty in maintaining the conformity of their product to the specification, or the testing equipment goes out of order. The marking may be resumed as soon as the defects are removed under intimation to Bureau.
 - 14.1 The marking of the product shall be stopped immediately if directed to do so by Bureau for any reason. The marking may then be resumed only after permission by the Bureau. The information regarding resumption of markings shall also be sent to the Bureau.
 - 14.2 If Bulk packing unit is instructed by the Bureau to stop marking due to the failure of the samples, such instruction will automatically apply to the manufacturer of the cement, as per relevant stop marking guidelines. An undertaking to this effect is to be obtained from the bulk packers and the cement manufacturer.
15. **PRODUCTION DATA** – The licensee shall send the production details to BIS as per the enclosed **Proforma-1**, at the end of each quarter of the operative period. The proforma to be submitted at the end of each operative year shall be authenticated by a Chartered Accountant authenticating the statement of quantity produced, marked and exported by him and the trade value thereof.

Table -1.....

IS 269: 2015, Ordinary Portland cement,
Table -1, LEVELS OF CONTROL
(Para 6.1 of the Scheme of Testing and Inspection)

Test Details			Levels of Control			
Cl.	Requirement	Test Method	Clinker	Cement grinding / blending stage	Packed Cement	Remarks
		Reference				
6.1 & Table-2	Chemical Requirements					
-do-	Chemical composition Full analysis	IS 4032	Daily composite sample	Weekly composite sample	Weekly composite sample	See Note-3 below
-do-	Loss on Ignition	IS 4032	-	Daily composite sample		
-do-	Sulphuric anhydride	IS 4032	-	-do-	-	
-do-	Magnesia	IS 4032	-	-do-	-	
-do-	Insoluble residue	IS 4032	-	-do-	-	
-do-	Alkali Content	IS 4032	-	-	-	See Note-2 below
-do-	Chloride content	IS4032 / IS 12423	-	-	Weekly composite sample	This test shall also be carried out whenever there is any change in source of any raw material
7 & Table-3	Physical Requirements					
-do-	Fineness	IS 4031 (Pt.2)	Laboratory Ball-mill Testing is required to be done when there is change in the source of Raw Material or change in Design.	1) Every alternate hour from each mill separately. 2)Daily composite sample	Daily composite sample	
-do-	Soundness by i. Le-Chatelier Method ii. Autoclave Method	IS 4031(Pt.3)	-do-	Daily composite sample	-do-	
-do-	Setting time i. Initial Setting Time (IST) ii. Final Setting Time (FST)	IS 4031 (Pt.5)	-do-	1) Once in a shift from each mill separately. 2)Daily composite sample	-do-	
-do-	Compressive strength	IS 4031 (Pt.6)	-do-	Daily composite sample	-do-	
-do-	Transverse Strength	IS 4031 (Pt.8)	-do-	Weekly composite Sample	Weekly composite Sample	Optional, See Note-6 below

NOTE -1. Composite sample shall be made out of hourly samples for the required period (Pl See IS 3535 Methods of sampling hydraulic cements).

If clinker is manufactured from more than one kiln, clinker sample from each kiln shall be tested as per the above table. If clinker is manufactured using different proportion of raw materials such different clinkers shall be tested considering it as separate production.

If cement is manufactured using same proportion of raw materials (Clinker, gypsum and other additives) from more than one cement mill, sample from each mill shall be tested for fineness as per the above table. For all other parameters composite samples from all the mills shall be tested.

If cement is manufactured using different proportion of raw materials (Clinker, gypsum and other additives) sample from each mill shall be tested for all requirements as per the above table.

If blending of additives is adopted, sample at 'Cement grinding/blending stage' shall be drawn after blending such additives.

2. If desired by the purchaser, the manufacturer shall carry out test for alkali content. The manufacturer shall furnish a certificate indicating the alkali content, if requested
3. For manufacturing units where there is no packing silo and cement is packed directly from cement grinding /blending stage, the frequency of tests specified for cement grinding stage would apply for the various tests to be carried out on samples taken from cement mill spouts along with weekly chloride content test.
4. Sleeper Grade Cement shall additionally satisfy the requirements as per clause 6 & 7 of the standard.
5. Limit of addition of performance improver shall be as given in Table 1 of the standard and shall be inclusive of 1 percent additives.
6. When asked for by agreement between purchaser & manufacturer. The permissible Transverse strength value is to be agreed between purchaser and supplier at the time of placing the order.

Table-2

**IS 269: 2015, Ordinary Portland cement,
Table -2, LEVELS OF CONTROL
(Para 6.2 of the Scheme of Testing and Inspection)**

Test Details			Level of Controls	
Cl.	Requirement	Test Method	Frequency	Remarks
		Reference		
6.1 & Table-2	Chemical Requirements			
-do-	Loss on Ignition	IS 4032	One sample from each batch	To be tested in laboratory at bulk terminal packing unit
-do-	Insoluble residue	-do-	-do-	-do-
7 & Table-3	Physical Requirements			
-do-	Fineness	IS 4031 (Pt.2)	-do-	May be tested at bulk terminal packing unit or got tested from a pre-declared approved testing laboratory if in-house testing facilities are not available.
-do-	Soundness by i. Le- Chatelier Method ii. AutoclaveMethod	IS 4031(Pt.3)	-do-	-do-
-do-	Setting time i. Initial Setting Time ii. Final Setting Time	IS 4031 (Pt.5)	-do-	-do-
-do-	Compressive strength	IS 4031 (Pt.6)	-do-	-do-
-do-	Transverse Strength (Optional*)	IS 4031 (Pt.8)	-do-	-do-

NOTE:

1. If desired by the purchaser, the manufacturer shall carry out test for alkali content. The manufacturer shall furnish a certificate indicating the alkali content, if requested
2. Sleeper Grade Cement shall additionally satisfy the requirements as per clause 6 & 7 of the standard.
3. Limit of addition of performance improver shall be as given in Table 1 of the standard and shall be inclusive of 1 percent additives.
4. When asked for by agreement between purchaser & manufacturer. The permissible Transverse strength value is to be agreed between purchaser and supplier at the time of placing the order.

FORMATS RECORDS TO BE MAINTAINED AS PER TABLE-1 OF STI
(FOR MANUFACTURING UNIT)

Form No. 1
FORMAT FOR MAINTENANCE OF TEST RECORDS
WEIGHMENT CONTROL AT PACKING STAGE

Date	Shift	Time (Hourly)	No of Bags	Net mass of bags from nozzles No.1, No. 2,	Date of Calibration / Remarks

Form No.2
RAW MATERIAL TESTING

Date of receipt of material	Date of testing	Name of the Material	Source of supply and consignment No.	Details of analysis for specified requirements

Note: Separate register to be maintained for each raw material.

Form No.3
PRODUCTION DATA
(POST GRINDING/BLENDING DETAILS OF PRODUCTION ACCEPTED & REJECTED FOR ISI MARK)

Date	Shift	Quantity	Passed for ISI Marking	Rejected	Remarks

Form No.4
CLINKER (DAILY COMPOSITE SAMPLE)

Date of Mfr.	Total loss on ignition	Insoluble Residue	SiO ₂	CaO	Al ₂ O ₃ +	Fe ₂ O ₃	SO ₃	MgO	LSF (Lime Saturation Factor)	Alumina Factor	Sample Pass/Fail	Remarks

Form No.5
CLINKER GROUND WITH GYPSUM
(DAILY COMPOSITE SAMPLE)

Date of grinding	Fineness	Soundness by Lechatelier method	Soundness by Autoclave method	Setting Time		Comprehensive Strength 3, 7 and 28 ..days..	Transverse Strength (Optional)	Sample pass/fail	Remarks
				Initial (IST)	Final (FST)				

Note : Laboratory Ball-mill Testing is required to be done when there is change in the source of Raw Material or change in Raw Mix Design.

Form No.6
CEMENT GRINDING/BLENDING STAGE (DAILY/WEEKLY COMPOSITE SAMPLES)

Date of grinding	IR	SO ₃	MgO	CaO	Al ₂ O ₃	Fe ₂ O ₃	SiO ₂	LSF	Alumina	Fineness	Soundness by Autoclave method	Soundness by Le-Chat method	Setting time		Compressive strength 3, 7 & 28days	Transverse (Optional)	Sample pass/fail	Remark
													IST	FST				

Form No.7
CEMENT GRINDING/BLENDING STAGE (FOR ALTERNATE HOURLY SAMPLES)

Date of grinding	Time	Fineness	Setting Time		Sample Pass/Fail
			Initial Setting time (IST)	Final Setting Time (FST)	

Form No.8
CEMENT PACKING STAGE
(DAILY/WEEKLY AVERAGE SAMPLE)

Date of packing	LOI	IR	SO ₃	MgO	CaO	Al ₂ O ₃	Fe ₂ O ₃	SiO ₂	LSF	Chloride content	Alumina Factor	Fineness	Soundness by Lechatelier	Soundness by Autoclave	Setting Time		Compressive strength 3, 7 & 28 ..days..	Transverse Strength Optional	Sample pass/fail	Remarks
															IST	FST				

Form No.9
RECORD OF CALIBRATION

Sl. No	Date of calibration	Calibration Record	Name of equipment	Sl.No. (If any)
		Result of calibration	Action taken if equipment found defective	Remarks

Note – The above records are to be kept separately for each equipment.

RECORDS TO BE MAINTAINED AS PER TABLE-2 OF STI
(FOR PACKING AT BULK CEMENT TERMINAL)

Form No. 10
FORMAT FOR MAINTENANCE OF TEST RECORDS
WEIGHTMENT CONTROL AT PACKING STAGE
HOURLY CHECK OF MASS OF DRUMS

Date	Time (Hourly)	Condition of drum	Net quantity of cement	Record of calibration of weighing scale. Date of calibration

Form No. 11
FORMAT FOR MAINTENANCE OF TEST RECORDS FOR THE CONDITIONS OF THE EMPTY DRUMS/BULKERS FOR
PACKING CEMENT

Date	No. of empty Drums/Bulkers checked	No. of empty Drums/Bulkers rejected	Reasons/Remarks	Sign of firm's inspector

Form No. 12
FORMAT FOR MAINTENANCE OF TEST RECORDS
WEIGHMENT CONTROL AT PACKING STAGE

Date	Shift	Time (Hourly)	No of Bags	Net mass of bags from nozzles No.1, No. 2,.....No. 12	Records of calibration/date of calibration of Nozzle(s)

Form No. 13
RECEIPT OF CEMENT

Date of receipt	Batch No.	Supply received from	Test Certificate No.

Form No. 14
CEMENT DESPATCH DATA FROM BULK PACKING TERMINAL

Date	Quantity	Passed for ISI Marking	Rejected (if any)	Reasons for not marking/Method of disposal

Form No. 15 & 16
TESTS DONE AT FACTORY
(At receipt stage and at bulk packing terminal)

Date	Batch No.	LOI	IR	Fineness	Alkali Content Refer Note 2 under Table 1	Setting Time		Remarks
						Initial Setting time (IST)	Final Setting Time (FST)	

Form No. 17 & 18
PHYSICAL TEST REPORT
(Tests done at factory or pre-declared lab)
(At receipt stage and at bulk packing terminal)

Date	Batch No.	Test Report No.	Soundness		Compressive Strength			Transverse strength (optional)	Remarks
			LC	AC	3 D	7 D	28 D		

Proforma – 1

PROFORMA – 1

PROFORMA FOR OBTAINING QUARTERLY PRODUCTION DETAILS

Period covered *

Name of Licensee

CM/L No.

Name of Articles (s)

IS No.

Grade/Type/Size

1.1 Brand/Trade/Name(s) of BIS Certification Marked Products

2. Total production of the articles(s)
licensed for certification marking

2.1 Total production of the article(s)
conforming to Indian Standard

3. Production covered with
BIS Certification Mark and its value
i. Quantity packed (tonne)
ii. Invoice sale price

3.1 Brand Name used on production covered under BIS Certification Mark

3.2 Calculation of marking fee as per agreed Rate of Marking Fee

- a) Unit
- b) Quantity covered with BIS
Certification Mark
- c) Marking fee rounded off in
whole rupees as obtained by
applying unit rates given in
(a) on quantity given in (b)

4. Quantity not covered with BIS
Certification Mark. If any, and
the reasons for such non-coverage

4.1 Brand Name under with non-certified goods were sold

5.0 Quantity Exported with BIS Standard Mark and its value

5.1 Brand Name under which BIS Certified goods are exported

6.0 Authentication by Chartered Accountant**

Signature of Authorised Signatory
Name
Date

*Information to be filled up by BO before forwarding to the licensee.

** Authentication by CA shall be made on this proforma to be submitted at the end of operative period.

Note : Incase a clause is not applicable, suitable remarks may be given against it.