



**उत्पाद मैनुअल
कंक्रीट कीलें – विशिष्टि
आईएस 18741: 2024**

**PRODUCT MANUAL FOR
CONCRETE NAILS - SPECIFICATIONS
ACCORDING TO IS 18741: 2024**

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो) अनुरूपता मूल्यांकन (विनियम, 2018 की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification.

1.	मानक संख्या IS No.	: IS 18741: 2024
	शीर्षक Title	: Concrete Nails - Specifications
	संशोधनों की संख्या No. of amendments	: Nil
2.	नमूना दिशानिर्देश Sampling Guidelines	
a)	कच्चा माल Raw material	: HC38, HC42, HC46, HC48, HC50, HC52 or HC56 - IS 7904
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	: Please refer ANNEX – A
c)	नमूने का परिमाण Sample Quantity	: 30 Nails
3.	परीक्षण उपकरणों की सूची List of Test Equipment	: Please refer ANNEX – B
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and	: Please refer ANNEX – C

	Testing		
5.	एक दिन में संभावित परीक्षण Possible tests in a day	:	• Dimensions – Cl. 5 • Hardness – Cl. 7 • Bend Test – Cl. 9.1 • Workmanship – Cl. 10
6.	लाइसेंस का दायरा /Scope of the Licence:		
“License is granted to use Standard Mark as per IS 18741: 2024 with the following scope:			
Name of the product		Concrete Nails	
Types		Concrete nails, grooved / Concrete nails, twisted (spiral) / Concrete cable clip nails	
Shank Dia			
Length			
Coating		Electroplating with Zinc / Any other coating as declared manufacturer	

ANNEX -A

Grouping Guidelines

1. Concrete nails covered under IS 18741: 2024 are classified as based on the following:
 - i. Types - Concrete nails, grooved / Concrete nails, twisted (spiral) / Concrete cable clip nails
 - ii. Shank Dia
 - iii. Length
 - iv. Coating - Electroplating with Zinc / Any other coating as declared manufacturer
2. For considering GoL / CSOL:
 - a) Sample of lowest Shank Dia and highest Shank Dia from each Type of Concrete Nails of any length to cover all other Shank Dia and other lengths (including the Shank Dia tested) of that particular Type of Concrete Nails.
 - b) The samples selected from the above shall cover all the types of surface coatings for which firm intends to get the licence.
3. The firm shall declare the variety they intend to cover in the licence. The scope of the Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.
4. During the operation of the licence, BO shall ensure that all the varieties covered in the Licence are tested in rotation to the extent possible.

Note: Firm shall submit the declare the requirements of additional coatings (if any) and the corresponding test methods for testing the requirements declared as agreed between the user/purchaser and the manufacturer.

ANNEX- B**List of Test Equipment & Documents****Major test equipment required to test as per the Indian Standard**

Sl. No.	Tests Used in With Clause Reference	Test Equipment/Chemical
1.	Dimension (Cl. 5)	Vernier Caliper Micrometer Protractor
2.	Hardness (Cl 7.2 & Cl. 7.3)	UTM / Rockwell Hardness tester as per IS 1586 (Part 1)
3.	Bend Test	Bevel Protractor Bench vice Mandrel Scale
4.	Salt Spray Test	Coat meter Salt spray tester with heater and temperature controller

ANNEX C

Scheme of Inspection and Testing

1. QUALITY ASSURANCE PLAN

1.1 It is expected that manufacturers (licensees/applicants) will implement a Quality Control Assurance Plan i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Control system defining the control unit (i.e. lot/batch etc.) and the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and submit the same to BIS Branch Office for information. The manufacturer shall comply with the same and maintain test records in accordance with para 2.5.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: *Concrete Nails of same Type having same Shank Dia manufactured from same of Raw material under similar conditions in a day* shall constitute a control unit.

1.3.2 As mentioned above, recommended levels of control are given in **Table 1 for guidance only**.

1.3.3 The tests as indicated in Table 1 and at the levels of control in column 3 of Table 1 or the Quality Assurance Plan as submitted by the manufacturer to BIS may be carried out on the whole production of the factory which is covered by this plan and records maintained in accordance with para 2.5.

1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING- It is expected that manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In house testing facility) for testing at least those parameters of the Indian Standard which require routine testing for ensuring quality of the product. This includes in-process controls as may be defined and put in place by the manufacturer and testing parameters/requirements which can only be performed in the factory.

2.1 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given below. Column 2 of Table 1 indicates where test equipment is required in house i.e “R” or whether it can be subcontracted as “S”. Subcontracting is permitted to BIS recognized/empanelled laboratory or any other laboratory having valid accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be available for inspection by BIS.

2.2 For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility is optional.

2.2.1 MSME manufacturers may utilize common cluster based facilities as per guidelines for the utilization of cluster based test facilities by MSMEs or the provisions of Sharing of testing facilities or get testing done from BIS recognized/empaneled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 Large Scale manufacturers (including foreign manufacturers) shall maintain an in-house laboratory, which shall be suitably equipped (as given in column 2 of Table 1) and staffed, where different tests given in the

specification shall be carried out in accordance with the method given in the specification. They shall also implement a calibration plan for the test equipment.

2.3.1 Alternatively, in lieu of an in-house laboratory, these manufacturers can also utilize the provisions of Sharing of testing facilities as per the Annexure-X (Relaxation in test facilities) of the guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process)

2.4 TEST RECORDS- The manufacturers maintaining an in-house laboratory or utilizing common cluster based facilities or shared test facilities shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratory or any other laboratory having valid accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be available for inspection by BIS.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be marked legibly and indelibly on the packaging of the Concrete Nails provided always that the material so marked conforms to each requirement of the specification.

3.1 Marking on each packaging of Concrete Nails shall be done as per Cl. 12 of IS 18741: 2024.

3.2 **Additional Marking requirements:** The following additional requirement shall also be marked on the packaging of the Concrete Nails:

- a) “For BIS certification details please visit www.bis.gov.in”

3.3 All the production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark.

4. HYGIENIC CONDITIONS (if applicable) – NA.

5. REJECTION - Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act,2016.

TABLE-1

(1)				(2)	(3)		
Test Details				Test Equipment requirement R: Required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
6	Materials		IS 7904	S	-	Each Consignment	No further testing is required if accompanied with Test Certificate or ISI Marked
5	Dimensions	Cl. 5 Table 1 & Table 2	IS 18741	R	Firm to have adequate in-process controls to check compliance of this parameter as per the tolerances given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity		
7.2 7.3	Hardness		IS 1586 (Part 1)	R	One	Each Control Unit	
9.1	Bend Test	Cl 9.1.1 & Cl. 9.1.2	IS 19741	R	One	Each Control Unit	
9.2	Salt Spray test		IS 5528	S	One	Once in a month	
10	Workmanship	Cl. 10	IS 18741	R	Firm to have adequate in-process controls to check compliance of this parameter as per the tolerances given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity		