



उत्पाद मैनुअल
साइकिल चेन
आईएस 15511:2026 के अनुसार

PRODUCT MANUAL
CYCLE CHAINS
According to IS 15511:2026

यह उत्पाद नियमावली सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसधारियों द्वारा विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना-1 के अंतर्गत प्रमाणन के संचालन में एकरूपता और पारदर्शिता सुनिश्चित करने के लिए संदर्भ सामग्री के रूप में उपयोग की जाएगी। बीआईएस प्रमाणन प्राप्त करने के इच्छुक भावी आवेदक भी इस दस्तावेज़ का उपयोग कर सकते हैं।

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 15511:2026
	शीर्षक / Title	:	Cycle Chains
	संशोधनों की संख्या No. of amendments	:	0
2.	नमूनाकरण दिशानिर्देश / Sampling Guidelines		
a)	कच्चा माल Raw material	:	No requirement <i>Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/Factory Surveillance.</i>
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Cycle Chain of each ISO Chain Number and Chain Structure shall be tested to cover that particular variety in the scope of licence.
c)	नमूने का परिमाण Sample Quantity	:	02 chains
d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request	:	Same as the parameters given in scope of the licence under S. No. 6. <i>Note: Apart from the above, any other requirements/ parameters may also be declared as per the standard, as applicable.</i>
3.	परीक्षण उपकरण की सूची List of Test Equipment	:	Please refer ANNEX – A
4.	निरीक्षण एवं परीक्षण योजना Scheme of Inspection and Testing	:	Please refer ANNEX – B
5.	एक दिन में संभावित परीक्षण Possible tests in a day	:	All tests <i>Note: This section is for the guidance of BIS Certification Officers/ Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide ready reference regarding the tests which can be witnessed during the inspection in the factory by the officer/ auditor.</i>

6.	लाइसेंस का दायरा / Scope of the Licence:	
“License is granted to use Standard Mark as per IS 15511:2026 with the following scope:		
Name of the product	Cycle Chains	
Chain Designation Number and Chain Structure	• 081 C, Type I • 081 C, Type II • 082 C, Type I • 082 C, Type II	

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ANNEX- A
List of Test Equipments
(Indicative List, For Guidance Only)

Major test equipment required to test as per the Indian Standard

Sl. No.	Cl. Ref.	Tests used in with Clause Reference	Test Equipment
1.	5.1, Table 1	Dimensions	Micrometer Vernier Caliper Scale Suitable Gauges Test bench to measure length
2.	5.2, 5.3, Table 1	Preloading & Length Accuracy	Chain Preloading Machine Test apparatus for measurement of length accuracy
3.	6.1, Table 1	Tensile Testing	Tensile Testing arrangement
4.	6.2, Table 1	Push-Out Force	Test apparatus for measurement of pin push-out resistance as per Fig. 3
5.	6.3, Table 3	Hardness	Vickers or Rockwell Hardness Tester Sample Preparation Tools
6.	6.4	Determination of Twist	Test apparatus for determination of twist as per Fig. 4
7.	6.5, Table 4	Determination of Lateral Deviation	Straight Edge Holder Assembly as per Fig. 7
8.	6.6	Detection of a Stiff Link	Test fixture for determination of stiff link
9.	6.7	Determination of Side Bow	Test fixture for determination of side bow as per Fig. 10

The above list is indicative only and may not be treated as exhaustive.

ANNEX B

Scheme of Inspection and Testing

1. QUALITY ASSURANCE PLAN

- 1.1 It is expected that during operation of BIS licence manufacturers will implement a Quality Assurance Plan (QAP) 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 Assurance Plan (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or sub-contracting/ sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with para 2.1.
- 1.3 Recommended Levels of Control/ Control Unit:**
- 1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: *entire quantity of Cycle Chains of same Chain designation number and same Chain Structure manufactured every 4 hours under similar manufacturing conditions* constitute a control unit.
- 1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in [Table 1](#). Manufacturer has the discretion of declaring their own levels of control or accept the levels of control given in this document.
- 1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan.
- 1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING

The manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred:

- i) Shared testing resources like common facility,
- ii) Cluster based testing facility,
- iii) Sub-contracting to outside laboratories which may either be:
 - a) BIS recognised/ empanelled laboratories, or
 - b) Any accredited laboratory as per ISO/IEC 17025

2.1 Test Records- The manufacturers shall maintain test records for the tests carried out (either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

3. PACKING AND MARKING

The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on the packaging of the Cycle Chains provided always that the Cycle Chains so marked conforms to each requirement of the specification.

3.1 Marking of Cycle Chains shall be done as per Cl. 7 of IS 15511:2026. Non-standard Cycle Chains shall be marked with the designation defined in ANNEX – A of Product Manual.

3.2 **Additional Marking requirements:** The Cycle Chains shall also be marked with the following additional requirement on its packaging:

- a) “For BIS certification details please visit www.bis.gov.in”
- b) Batch Number and Date of Manufacture

4. REJECTION

The production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. 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
(Recommended Levels of Control by BIS- for Guidance Only)

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods		No. of Sample	Frequency	Remarks
		Clause	Reference			
5.1	Dimensions	5.1, Table 1	IS 15111	05 chains	Each Control Unit	In case of failure, 5 samples shall be tested after every hour. Original frequency shall be restored only if all the samples from 3 consecutive hours meet the requirements.
5.2	Preloading	5.2, Table 1	IS 15111	Each Chain		
6.1	Tensile Testing	6.1, Table 1	IS 15111	01 chain	Each Control Unit	In case of failure the control unit may be re-heat treated and shall be retested at twice the original frequency. The material shall be marked only if both the samples pass.
6.3	Hardness	6.3, Table 3	IS 15111	01 chain	Each Control Unit	
6.2	Push-Out Force	6.2, Table 1	IS 15111	02 chains	Each Control Unit	In case of failure the particular control unit shall be rejected
5.3	Length Accuracy	5.3, Table 1	IS 15111	02 chains	Each Control Unit	In case of failure, all the chains in the control unit shall be checked and only such chains which pass shall be marked.
6.4	Determination of Twist	6.4	IS 15111	01 chain	Each Control Unit	
6.5	Determination of Lateral Deviation	6.5, Table 4	IS 15111	01 chain	Each Control Unit	
6.6	Detection of a Stiff Link	6.6	IS 15111	02 chains	Each Control Unit	
6.7	Determination of Side Bow	6.7	IS 15111	02 chains	Each Control Unit	