



उत्पाद मैनुअल
बंधक - एक कुण्डली वाले आयताकार सेक्शन स्प्रिंग लॉक वॉशर
आईएस 3063:1994 के अनुसार

PRODUCT MANUAL
FASTENERS - SINGLE COIL RECTANGULAR SECTION SPRING LOCK WASHERS
According to IS 3063:1994

यह उत्पाद नियमावली सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसधारियों द्वारा विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना-I 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 3063:1994
	शीर्षक / Title	:	Fasteners - Single Coil Rectangular Section Spring Lock Washers
	संशोधनों की संख्या No. of amendments	:	01
2.	नमूनाकरण दिशानिर्देश / Sampling Guidelines		
a)	कच्चा माल Raw material	:	Steel as per IS 4072 (Cl. 5 of IS 3063:1994) <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	:	Please refer ANNEX - A
c)	नमूने का परिमाण Sample Quantity	:	100 pieces for complete testing (including raw material tests)
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 - B
4.	निरीक्षण एवं परीक्षण योजना Scheme of Inspection and Testing	:	Please refer ANNEX - C
5.	एक दिन में संभावित परीक्षण Possible tests in a day	:	All tests except Permanent Load Test (Cl. 11.3) <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 3063:1994 with the following scope:		
Name of the product		Single Coil Rectangular Section Spring Lock Washers
Designation*	Type	Type A / Type B
	Nominal Size	From mm upto and including mm
	Finish (Surface Protection)	Natural Finish / Coated (to be declared by the manufacturer)

* - For guidance refer example given in Cl. 8 of IS 3063

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9, BAHADUR SHAH ZAFAR MARG, NEW DELHI-110002
www.bis.gov.in

ANNEX -A
Grouping Guidelines

1. “Single Coil Rectangular Section Spring Lock Washers” covered in IS 3063:1994 are classified based on the following parameters:

Type	Type A / Type B
Nominal Size	From mm upto and including mm
Finish (Surface Protection)	Natural Finish / Coated (to be declared by the manufacturer)

2. Based on the above classification, following grouping guidelines shall be followed for considering Grant of Licence (GoL)/Change in Scope of Licence (CSoL):
- Sample of each type of Spring Lock Washers shall be tested separately.
 - Sample(s) of Spring Lock Washers of lowest nominal size and highest nominal size shall be tested for all requirements to cover all the nominal sizes for which the firm intends to take the licence.
 - When samples of Spring Lock Washers with coated finish is tested, Natural Finish may also be covered in the scope of licence without any further testing.
3. The Firm shall declare the varieties of Spring Lock Washers intended to be covered in the Licence.
4. The Scope of Licence may be restricted based on the Manufacturing and testing capabilities of the manufacturer.
5. During the operation of Licence, it shall be ensured that all the varieties covered in the Licence are tested in rotation, to the extent possible.

ANNEX- B
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.	4 Table 1A, 1B	Dimensions	• Micrometer • Vernier Caliper • Height Gauge • Angle Measuring Device
2.	5	Material	• Spectrometer • Sample Preparation Tools • Reference Materials
3.	11.1	Hardness Test	• Hardness Tester • Sample Preparation Tools
4.	11.2 Table 2A, 2B	Permanent Set Test	• Compression Testing Machine (or) Universal Testing Machine • Hardened, Flat Ground Washers (with hardness not less than 60 HRC) • Vernier Caliper • Height Gauge
5.	11.3 Table 2A, 2B	Permanent Load Test	• Compression Testing Machine (or) Universal Testing Machine • Parallel-faced Washers (hardened to minimum 500 HV) • Conditioning machine
6.	11.4	Twist Test	• Test Fixture comprising Vice Jaws and Wrench Jaws • Bench Vice • Suitable Wrench / Lever

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

ANNEX C

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 Spring Lock Washers of same nominal size, same type manufactured from same grade of steel, having same finish (surface protection) and heat treated under similar conditions in a day* 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 Spring Lock Washers provided always that the Spring Lock Washers so marked conforms to each requirement of the specification.

3.1 Packing and Marking of Spring Lock Washers shall be done as per Cl. 12 and 13 of IS 3063:1994.

3.2 **Additional Marking requirements:** The Spring Lock Washers shall also be marked with the following additional requirement on its packaging:

a) "For BIS certification details please visit www.bis.gov.in"

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	Material		IS 4702	Each Consignment		No further testing is required if accompanied with the Test Certificate or ISI marked.
4	Dimensions	4, Table 1A, Table 1B	IS 3063	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		
6	Heat Treatment	6	IS 3063			
7	Finish	7	IS 3063			
9	General Requirements	9	IS 3063			
7	Finish	7	IS 3063	01	Each Surface Treatment Batch	
11.1	Hardness Test	11.1	IS 3063	01	Each Heat Treatment Batch	
11.2	Permanent Set Test	11.2, Table 2A, Table 2B	IS 3063	01	Each Control Unit	
11.3	Permanent Load Test	11.3, Table 2A, Table 2B	IS 3063	01	Once in a month	
11.4	Twist Test	11.4	IS 3063	01	Each Control Unit	