



**उत्पाद मैनुअल
अलौह धातु के टक्करदार कब्जे
आई एस 205:1992 के अनुसार**

**PRODUCT MANUAL FOR
NON-FERROUS METAL BUTT HINGES
ACCORDING TO IS 205:1992**

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 205 : 1992
	शीर्षक Title	:	Non-Ferrous Metal Butt Hinges
	संशोधनों की संख्या No. of amendments	:	3
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Please refer to Annex-A 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
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer to Annex-B
c)	नमूने का परिमाण Sample Quantity	:	For Mechanical test – 6 Nos For chemical test – 5 pcs of 5 cm x 5 cm Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (in case of market surveillance, effort may be made to procure the required quantity of product sample, as far as possible since raw material sample may not be available in market)

d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request	-	Same as the scope of licence
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer to Annex-C
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please refer to Annex-D
5.	एक दिन में संभावित परीक्षण Possible tests in a day (i) Dimension and Tolerance (Clause 5), (ii) Manufacture (Clause 6), (iii) Workmanship and finish (Clause 7) 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 readyreference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.		
6.	लाइसेंस का दायरा /Scope of the Licence: Licence is granted to use Standard Mark as per IS 205 : 1992 with the following scope:		
	Name of the product	Non- Ferrous Metal Butt Hinges	
	Type		
	Designation		

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 New Delhi – 110002

ANNEX- A

Details of Raw Materials

Raw Material	Indian Standard
Aluminium alloy	Aluminium alloy shall conform to designation 64430 WP or 65032 WP or 63400 WP of IS 733
Extruded Brass	Extruded Brass shall conform to IS 319
Cast brass	Cast brass shall conform to LCB2 of IS 292
Brass Sheet	Brass Sheet shall conform to designation CuZn 40 of IS 410
Phosphor bronze wire or rod	Phosphor bronze wire or rod shall conform to IS 7608
Mild steel wire or rod	Mild steel wire or rod shall conform to IS 280
Brass wire	Brass wire shall conform to half hard conditions of IS 4413
Stainless steel	Stainless steel shall conform to designation 04 Cr 18 Ni or 04 Cr 17 Ni 12 M 02 of IS 6528

ANNEX-B

Grouping Guidelines

1. Stainless Steel Butt Hinges covered in IS 205: 1992 are classified based on the following:

(a) Type

- i) Extruded aluminium alloy butt hinges
- ii) Extruded brass butt hinges
- iii) Cast brass butt hinges
- iv) Sheet brass butt hinges

(b) Size of Hinges

- i) Extruded aluminium alloy butt hinges - As per Table 2 of IS 205: 1992.
- ii) Extruded brass butt hinges - As per Table 3 of IS 205: 1992.
- iii) Cast brass butt hinges - As per Table 4 of IS 205: 1992.
- iv) Sheet brass butt hinges - As per Table 5 of IS 205: 1992.

2. Considering the above, following grouping guidelines is developed for GoL/CSoL:

- One sample from each type of Hinges with minimum and maximum size (i.e. length) shall be tested to cover all the sizes of Hinges in that size range for that particular type.

3. The Firm shall declare the varieties they intend to cover in the Licence. The Scope of 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.

ANNEX-C

List of Test Equipment

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Dimensions and tolerances (Clause 5)	- Vernier Callipers - Micrometer - Dial thickness Gauge
2	Manufacture (Clause 6)	- Screws of appropriate number - Vernier Callipers - Try Square
3	Anodizing thickness (Clause 7.2)	- Stripping method to be used as per IS 1868 - Single Pan Balance - Glass Beaker - Phosphoric Acid - Chromic acid (AR quality) - Distilled Water - Stop watch Or Microsection method, Or Eddy current method (Clause 9.2 of IS 1868: 1996)

ANNEX D

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that manufacturers (licensees/applicants) will implement a Quality 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 Assurance Plan 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 2.4.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit: All hinges of same type and size manufactured from same lot of raw materials under identical conditions, in two hours shall 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**.

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. Alternatively, the manufacturer has the option of adherence to the quality plan as per levels of control recommended in column 3 of Table 1.

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.

2.3 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given below. Column 2 of Table 1 indicates routine tests where test equipment is required in house as “R” or other tests which can be subcontracted as “S”. Subcontracting is permitted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.4 For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility for routine tests (indicated as “R” in Column 2 of Table 1) is also optional.

2.4.1 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.

2.5 Large Scale manufacturers shall maintain an in-house laboratory equipped at least with test facilities for routine tests (indicated as “R” in Column 2 of Table 1), 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 in-house test equipment.

2.5.1 Alternatively, in lieu of an in-house laboratory, large scale manufacturers can also utilize the provisions of Sharing of testing facilities as per the Guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process). Even for subcontracted tests, provisions for sharing of testing facilities can be utilized.

2.6 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 NABL 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 legibly and indelibly marked on each hinge, provided always that the product so marked conforms to all requirements of the specification.

3.1 Packing and Marking shall be done as per Clause 8 and Clause 10 of IS 205:1992 respectively.

3.2 Additional Marking requirements: Each hinge or its packaging shall also be marked with the following detail:

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

4 REJECTION - All 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
(ONLY FOR GUIDANCE PURPOSE)

(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				
4	Material	4.1, Table 1	IS 205 IS 733 IS 319 IS 292 IS 410 IS 739 IS 7608 IS 280 IS 4413 IS 6258	S	One	Each cast	For products which are under mandatory certification of BIS, the materials shall be ISI marked and received with manufacturers test certificate. For other materials, further testing is not required, if consignment received with test certificate or ISI marked. @@
5	Dimensions and Tolerances	5.1, 5.2 Table 2 to Table 6	IS 205	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.		
6	Manufacture	6.1 to 6.3 Table 2 to Table 6	IS 205	R			
7	Workmanship and Finish	7.1, 7.2	IS 205 IS 1868	R			

@@ For inhouse cast product, sample for physical and chemical test shall be carried out as per frequency given below:

Frequency of testing shall be one sample for each melt of 1000 kg or part thereof for first three melts. After that one sample shall be tested from every tenth melt, if manufactured from tested ingots/billets else one sample from every fifth melt shall be tested. On failure of any sample, every melt shall be tested till three consecutive samples pass.