



उत्पाद मैनुअल
आई एस 16301: 2017 के अनुसार
चाकू के लिए

दस्तावेज संख्या - पी एम/आई एस 16301/1/नवम्बर 2025

इस उत्पाद मैनुअल का उपयोग 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 कार्यप्रणाली की सुसंगतता और पारदर्शिता सुनिश्चित करने हेतु संदर्भ सामग्री के रूप में किया जाएगा। इस दस्तावेज का उपयोग बीआईएस प्रमाणन लाइसेंस/प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदक भी कर सकते हैं।

**PRODUCT MANUAL FOR
KNIVES
ACCORDING to IS 16301:2017**

Document No.- PM/IS 16301/1/November 2025

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence 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 license/certificate.

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1.	Indian Standard	:	IS 16301: 2017
	Title	:	Knives
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	• Blade – As per Clause 3.1 of IS 16301 • Handle – As per Clause 3.2 (Table 1) of IS 16301 • Rivets – As per Clause 3.3 of IS 16301 • Springs – As per Clause 3.4 of IS 16301 • Bolster - As per Clause 3.5 of IS 16301 • Ferrules - As per Clause 3.6 of IS 16301 • Washer - As per Clause 3.7 of IS 16301 • Handle Scale - As per Clause 3.8 of IS 16301
b)	Grouping guidelines	:	Please refer ANNEX – <u>A</u>
c)	Sample Size	:	• 5 Pcs • 10 Pcs for varieties where additional tests (Cl. 8.2, 8.4, 8.5) are applicable
3.	List of Test Equipment	:	Please refer ANNEX – <u>B</u>
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – <u>C</u>
5.	Possible tests in a day	:	All test except Staining Test, Handle boiling Test, Impact test
6.	Scope of the License	:	Please refer ANNEX – <u>D</u>

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ANNEX A

Grouping Guidelines

1. Knives as per IS 16301:2017 shall be grouped based on the following:

a) Type of Knife

- Table Knife- Cold forged
- Table Knife- Hot forged
- Desert knife- Cold forged
- Desert knife- Hot forged
- Fruit knife- Cold forged
- Fruit knife- Hot forged
- Cheese knife
- Fish knife
- Steak knife
- Bread and Butter knife
- Vegetable knife
- Pocket knife
- Pocket knife with cork opener
- Bread knife
- Carving knife
- Chef or Cook's knife
- Butcher's Flaying knife
 - Large
 - Small
- Butcher's Cutting knife
- Butcher's Sticking knife
- Butcher's Meat chopper

b) Type of handle of Knife:

- Solid handle knife
- Hollow handle knife
- Plastic handle knife
- Riveted handle knife

2. The guidelines given below shall be followed for Grant of Licence/ Change in Scope of licence:

- a) The manufacturer shall submit the details of Knives, along with drawing mentioning dimensions of each knives which are intended to be covered in scope of licence.
- b) Separate sample shall be tested for "Hot forged" and "Cold forged" knives.
- c) **For knives of all types, except for Pocket Knife and Butcher's knife-** One sample of any type of Knife (except Pocket Knife and Butcher's knife) of any shape and dimension shall be tested for all the requirements to cover all types of Knife and of all shapes and dimensions, except Pocket Knife and Butcher's knife for which guidelines given at para 2 (b) and 2 (c) respectively shall be applicable

- d) **For Butcher's knife-** One sample of any size (Small/Large) of Butcher's flaying Knife or Butcher's Cutting knife or Butcher's Sticking knife of any shape and dimension shall be tested for all the requirements to cover both sizes of Butcher's flaying Knife and Butcher's Cutting knife or Butcher's Sticking knife of all shapes and dimensions. Further, one sample of any shape and dimension of Butcher's Meat chopper shall be tested.
- e) **For Pocket knife-** One sample of Pocket knife of any shape and dimension shall be tested to cover all shapes and dimensions.
- f) Knives with different types of handles shall be tested separately.
- g) In addition to the samples drawn for independent testing as per the above guidelines, factory test reports of any size of all other types of knives intended to be covered in the scope shall also be submitted..

3. The Firm shall declare the varieties intended to be covered in the license. The Scope of license may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.

4. During the operation of the license, BO shall ensure that all the varieties covered in the license are tested in rotation, to the extent possible.

ANNEX-B**List of Test Equipment**

Indicative list of major test equipment required to test as per the Indian Standard (For guidance only)

Sl. No.	Tests used in with Clause Reference	Test Equipment
1.	Shape and Dimension, Cl. 4.2	Measuring Scale Vernier Caliper
2.	Thickness of Knife Cl. 4.3	Micrometer
3	Burst Test of Plastic handle, Cl. 3.2	Match Light Lighter Tea Stainer
3.	Hardness Testing, Cl. 6	Vickers or Rockwell Hardness Tester
4.	Test of cutting edge, Cl. 8.1	Test set up with Aluminum block of purity 99% (IS 617)
5.	Flexibility Test, Cl. 8.2	Wooden block segment of 100 mm radius and at least 22 mm in thickness
6.	Corrosion or Staining Test, Cl. 8.3	Hot Soapy Water Acetone or methylated Spirits Soft Cloth Conditioning Chamber Glacial Acetic Acid Distilled Water Sodium Chloride Stop Watch Beaker Weight Balance
7.	Boiling Test, Cl. 8.5.1	Hot Soapy Water Distilled water Oven Water Bath Stop watch
8.	Impact Test, Cl. 8.5.2	concrete floor or a flat stone
9.	Staining Test (Handle), Cl. 8.5.3.1	Sodium chloride solution Acetic acid solution Sodium carbonate solution Plastic cutter

10.	Staining Test (Handle), Cl. 8.5.3.2	Tap Water Dry Cloth Sodium chloride solution Acetic acid solution Sodium carbonate solution Stop Watch
11	Cutting, Cl. 8.5.4	seasoned Timber
12	Striking, Cl. 8.5.5	Brass rod conforming to IS 4170

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 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. Batch 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 below.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 **Batch:** For the guidance of manufacturers, the recommended definition of Batch is quantity of knife of the same Type, same Type of Handle, and same Blade Material manufactured from the same consignment of material and following the same manufacturing process in a day.

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.

2.1 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 sub-contracted as “S”. Subcontracting is permitted to BIS recognized/empaneled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025. However, compliance to raw material requirement as mentioned at para 5 below shall be obligatory in case utensil is purchased in unfinished/semi-finished condition.

2.2 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.

2.2.1 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 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.

2.3.1 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.

2.4 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 NABL accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be available for inspection by BIS.

3. PACKAGING, LABELLING AND MARKING – As per the requirement of IS 16301:2017. The Standard Mark, as given in the Schedule of the license, shall be marked on each Knife provided always that the product thus marked conforms to all the requirement of the specification. In addition, the license no. CM/L-_____and details of BIS website shall be marked at an appropriate place on product or package as follows: “For details of BIS certification please visit www.bis.gov.in”.

4. REJECTION - All the production which conforms to the Indian Standard and covered under scope of the license shall be marked with 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

(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				
3	Material	3.1 to 3.5	IS 6911 IS 15997 IS 1570 IS 2283 IS 422 IS 292 IS 620 (Table 1) Any other food grade stainless steel	S	One	Each Consignment	No further testing is required if accompanied with Test Certificate or ISI marked.
4	Shapes and Dimensions	4.1	IS 16301	R	Manufacturer shall exercise adequate levels of control to ensure that the entire production conforms to the specified requirements. Records shall be maintained		
		4.2, 4.3 Table 2	IS 16301	R			
6	Hardness	6	IS1501 IS 1586	R	One	Every batch	
7	Workmanship and Finish	7.1, 7.2	IS 16301	R	Manufacturer shall exercise adequate levels of control to ensure that the entire production conforms to the specified requirements. Records shall be maintained		
8	TESTS						
8.1	Cutting Edge Test	8.1	IS 16301 IS 617	R	One	Once in a Month	
8.2	Flexibility Test	8.2	IS 16301	R	One	Once in a Month	
8.3	Corrosion & Staining Test	8.3	IS 16301	R	One	Once in 3 Months	
8.4	Knives with hollow handle	8.4	IS 16301	R	One	Once in a Month	

8.5	<i>Tests on Plastic Handles</i>						
8.5.1	Boiling	8.5.1	IS 16301	S	One	Once in 3 Month	
8.5.2	Impact Test	8.5.2	IS 16301	S			
8.5.3	Staining	8.5.3.1 8.5.3.2	IS 16301	S			
8.5.4	Cutting (<i>For Meat chopper only</i>)	8.5.4	IS 16301	S			
8.5.5	Striking (<i>For Meat chopper only</i>)	8.5.5	IS 16301	S			

ANNEX D**Scope of License**

“License is granted to use Standard Mark as per IS 16301:2017 with the following scope:	
Name of the product	Knife
Type of knife	• Table Knife- Cold forged • Table Knife- Hot forged • Desert knife- Cold forged • Desert knife- Hot forged • Fruit knife- Cold forged • Fruit knife- Hot forged • Cheese knife • Fish knife • Steak knife • Bread and Butter knife • Vegetable knife • Pocket knife typical • Pocket knife with cork opener • Bread knife • Carving knife • Chef or Cook’s knife • Butcher’s Flaying knife ➤ Large ➤ Small • Butcher’s Cutting knife • Butcher’s Sticking knife • Butcher’s Meat chopper
Type of handle of Knife	• Solid handle knife • Hollow handle knife • Plastic handle knife • Riveted handle knife