उत्पाद मैन्यूअल
प्लास और चिमटियाँ भाग 1 विकर्ण काटने वाली चिमटियाँ - आयाम और परिक्षण मूल्य
आईएस 4378 (Part 1): 2017 / आईएसओ 5749: 2004 के अनुसर

PRODUCT MANUAL FOR
Pliers and Nippers Part 1 Diagonal Cutting Nippers — Dimensions and Tests Values
as per IS 4378 (Part 1): 2017/ ISO 5749: 2004

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 हैI

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 4378 (Part 1): 2017/ ISO 5749: 2004
	शीर्षक **Title**	:	Pliers and Nippers Part 1 Diagonal Cutting Nippers — Dimensions and Tests Values
	संशोधनों की संख्या **No. of amendments**	:	None
2.	**नमूना दिशानिर्देश** **Sampling Guidelines**		
a)	**कच्चामाल** **Raw material**	:	NA
b)	**समूहीकरण दिशानिर्देश** **Grouping Guidelines**	:	Please refer **ANNEX – A**
c)	**नमूने का परिमाण** **Sample Quantity**	:	5 Pcs
d)	**परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर** **Parameters to be Declared in Test Request**	:	• Type • Nominal length • Lever Ratio
3.	**परीक्षण उपकरणों की सूची**	:	Please refer **ANNEX – B**

	List of Test Equipment		
4.	**निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing**	:	Please refer **ANNEX – B**
5.	**एक दिन में संभावित परीक्षण Possible tests in a day**	:	All tests
6.	**लाइसेंस का दायरा /Scope of the Licence:**		

"License is granted to use Standard Mark as per ***IS 4378 (Part 1): 2017/ ISO 5749*** with the following scope:

Name of the product	Pliers and Nippers Part 1 Diagonal Cutting Nippers — Dimensions and Tests Values
Type	Diagonal cutting nippers for hard wire / Diagonal cutting nippers for medium hard wire / Toggle lever assisted side cutting nippers for hard wire
Nominal length	From ….mm to …..mm

ANNEX -A
Grouping Guidelines

1. Pliers and Nippers Part 1 Diagonal Cutting Nippers — Dimensions and Tests Values as per IS 4378 (Part 1): 2017/ ISO 5749 are classified based on the following:

Type	Diagonal cutting nippers for hard wire / Diagonal cutting nippers for medium hard wire / Toggle lever assisted side cutting nippers for hard wire
Nominal length	From ….mm to …..mm

2. For considering GoL / CSoL, samples of each type of Diagonal Cutting Nippers having maximum and minimum nominal length shall be tested.

3. The Scope of License may be restricted based on the manufacturing and testing capabilities of the manufacturer.

4. During the operation of License, it shall be ensured that all the varieties of plain washers covered in the License are tested in rotation, to the extent possible.

   Note: Firm shall declare the lever ratio for all types of Diagonal Cutting Nippers if differing from the values given in Table 2.

ANNEX- B
LIST OF TEST EQUIPMENTS
(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests used in with Clause Reference	Test Equipment
1.	Dimensions (Cl. No 3)	Bevel Protector Micrometer Vernier caliper
2.	Load test (Cl. No. 4 of ISO 5744)	Suitable Load test apparatus for applying the required force and measuring the displacement Newton meter Test piece of hardness – 30 HRC to 40 HRC Vernier Caliper
3.	Cutting test (Cl. No. 5 of ISO 5744)	Test equipment two tungsten carbide cutters, with edges ground to an inclusive angle of 60° ± 1° having a radius of 0,3 mm ± 0,02 mm, with the cutting edges parallel to each other and at right angles to the test wire Newton meter Test wire (hard and medium)
4.	Soft wire cutting test (Cl. No. 7 of ISO 5744)	Test wire (Soft)

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 subcontracting/sharing 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.

1.2 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.2.1 For the guidance of manufacturers, the recommended definition of control unit is: *Diagonal Cutting Nippers of same type having same nominal length manufactured in a day under similar process condition from the same consignment of raw materials* 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**. 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.

2. ENSURING COMPLIANCE THROUGH TESTING- Manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard. 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 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 incorporated legibly and indelibly on the packaging of the Diagonal Cutting Nippers provided always that the Diagonal Cutting Nippers so marked conforms to each requirement of the specification.

3.1 Marking shall be done as per Cl. 5 of IS 4378 (Part 1): 2017/ ISO 5749

3.2 **Additional Marking requirements**: The Diagonal Cutting Nippers shall also be marked with the following additional requirement on its packaging:

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 only 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)				(3)		
Test Details				**Levels of Control**		
Cl.	**Requirement**	**Test Methods**		**No. of Sample**	**Frequency**	**Remarks**
		Clause	**Reference**			
3	Dimension	3	IS 4378-1	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		
3 & Table 1 to Table 3	Load Test	4	IS 2615-2	One	Each Control Unit	
	Wire Cutting Test	5	IS 2615-2	One	Each Control Unit	
	Soft wire cutting test	7	IS 2615-2	One	Each Control Unit	