

**केन्द्रीय मुहर विभाग-2**

हमारा संदर्भ: के मू वी-2/16: 5382

24 07 2019

**विषय: संशोधित IS 5382:2018/ISO 4633:2015 के अनुपालन की तिथि में विस्तार, एवं अनुपालन के लिए व्याख्यात्मक नोट, अतिरिक्त दिशा निर्देश व संशोधित एस आई टी (Scheme of Inspection and Testing)**

1. यह उपरोक्त विषय व 06 02 2019 को जारी किए गए कार्यान्वयन दिशा निर्देशों के संदर्भ में है।
2. सक्षम अधिकारी द्वारा अनुमोदित उपरोक्त विषय से संबंधित परिपत्र अनुपालन हेतु संलग्न है।

(आदित्य दास)  
वैज्ञानिक सी

**प्रमुख (के मू वी-2)**

सभी क्षेत्रीय/शाखा कार्यालय

प्रतिलिपि :

आई टी एस विभाग – बी आई एस इंटरनेट पर डालने हेतु

**CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/16:5382

24 07 2019

**Subject: Extension in last date of implementation of Revised IS 5382:2018/ISO 4633:2015, explanatory note, additional implementation guidelines and revised Scheme of Inspection and Testing (SIT).**

1. This has reference to the above and further to the implementation guidelines issued on 06 02 2019
2. Circular regarding the subject matter, duly approved by the CA, is enclosed for implementation.

(Aditya Das)  
Scientist C

**Head (CMD-2)**

All ROs/BOs

Copy to:

ITSD - for hosting on BIS intranet

**CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/16:5382

18 07 2019

**Subject: Explanatory Note, additional implementation guidelines and revised Scheme of Inspection and Testing (SIT) for Revised IS 5382:2018/ISO 4633:2015**

1. This has reference to the above and further to the implementation guidelines issued on 06 02 2019.
2. At the outset, it is to inform that the Competent Authority has permitted extension in the last date of implementation of the revised IS 5382:2018/ISO 4633:2015 up to **23 Sept 2019**.
3. Reference is also invited to concerns raised by Branch Offices citing difficulties in implementation of the revised standard by licensees due to various factors. BOs had also cited difficulties in interpreting certain requirements of the revised standard and raised concerns regarding non-uniformity in certification methodology across BOs.
4. This note seeks to clarify the issues raised and thus help in resolving the issues being faced in implementation of the revised standard. A revised SIT has also been prepared accordingly and is enclosed for implementation.
5. In this regard, point-wise guidelines/clarifications/explanations for resolving the issues raised by BOs are given in **Annex 1**.
6. Revised SIT Doc: SIT/ 5382/2 July 2019 is enclosed as **Annex 2**.
7. All BOs are advised to bring these matters to the attention of licensees and applicants and ensure implementation within the last date.
8. Other provisions of the implementation guidelines issued earlier remain applicable.

**(Aditya Das)**  
**Sc. C**

**HCMD-2**  
**DDG (Cert.)**  
**ROs/BOs**

Encl:

a/a

## **ANNEXURE 1**

### **ADDITIONAL IMPLEMENTATION GUIDELINES AND EXPLANATORY NOTES**

#### **1) Test methods and requirements not defined for CI 4.1.1 to 4.1.3**

**Question:**

- i) For three requirements in the revised IS i.e. General - Cl. 4.1.1, Effect on water quality - Cl. 4.1.2, and Microbiological deterioration – Cl. 4.1.3, the test methods and requirements are not defined.
- ii) For Cl 4.1.2 and 4.1.3, it is mentioned that test methods and requirements shall be as per national requirement or national standards. However, no national standards or requirements have been defined.

**Answer:**

- iii) Since the relevant standards for the clauses of General - Cl. 4.1.1, Effect on water quality - Cl. 4.1.2, and Microbiological deterioration- Cl 4.1.3 are under development as informed by PCD, all BOs are advised to not insist on these tests for the purpose of ascertaining compliance to the implementation of the revised standard.
- iv) These requirements i.e. Cl 4.1.1 to 4.1.3 may be treated as being in abeyance. This is reflected in the revised SIT enclosed.

#### **2) IS equivalent not defined for referred ISO standards or standards not available**

**Question:**

- i) IS corresponding to ISO 815-1, ISO 815-2, ISO 2285, ISO 23529 and ISO 3387 are not available.
- ii) IS 3400 (Part 20): 1994 corresponding to ISO 1431-1 is not available.

**Answer:**

- i) PCD has informed that presently there is no IS equivalent to ISO 815-1, ISO 815-2, ISO 2285, ISO 23529 and ISO 3387.
- ii) As such, BOs shall convey to licensees that they will have to purchase and comply to the requirements of the ISO standards for which there is presently no IS equivalent.
- iii) BOs shall also guide licensees regarding methodology to purchase ISO standards (ISO standards can be purchased through ISO Store online: <https://www.iso.org/store.html>)
- iv) However, in case any Standard is unavailable, the BO concerned shall coordinate with Sales Department at BIS HQ and arrange for the standard to be provided to the licensee (on due payment).

### 3) Frequency of stress relaxation test

**Question:**

Since the duration of Stress relaxation test is up to 100 days, frequency of each control unit is impractical.

**Answer:**

As per justification given by BOs, the frequency for stress relaxation test has been reduced to once in **six months** as proposed by MUBO-2. The same is reflected in revised SIT enclosed.

### 4) Dimensional tolerances

**Question:**

It is not clear which dimensional tolerances as per IS 16752:2018 (ISO 3302-1) would be applicable?

**Answer:**

As mentioned in Cl 5.4 of IS 16752:2018, the tolerances to be applied shall be chosen, by agreement between the interested parties, from the classes of tolerance described in [5.2](#).

### 5) Scope of licence

**Question:**

Scope of the licence as per the revised standard may be clarified as different BOs are following different practices.

**Answer:**

Scope of of licence granted/operated as per IS 5382:2018/ISO 4633:2015 shall be as follows:

Licence is granted to use Standard Mark as per IS 5382:2018/ISO 4633:2015 with the following scope:	
<b>Name of the Product</b>	Rubber Seals-Joint Rings for Water Supply, Drainage and Sewerage Pipelines-Specification for Materials
<b>Material Hardness Class</b>	40/50/60/70/80
<b>Nominal Sizes</b>	DN 150 etc.
<b>Type of Application</b>	WAWC/WG

**ANNEXURE 2 – REVISED SIT**

**SCHEME OF INSPECTION AND TESTING  
FOR CERTIFICATION OF RUBBER SEALS-JOINT RINGS  
FOR WATER SUPPLY, DRAINAGE AND SEWERAGE PIPELINES SPECIFICATION FOR  
MATERIALS  
ACCORDING TO IS 5382:2018/ISO 4633:2015  
(Second Revision)**

1. **LABORATORY** - A laboratory shall be maintained, which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.
  - 1.1 The manufacturer shall prepare a calibration plan for the test equipments.
2. **TEST RECORDS** - The manufacturer shall maintain test records for the tests carried out to establish conformity.
3. **PACKING AND MARKING** -The Standard Mark as given in Schedule of the license shall be incorporated, on each sealing ring or packing or both, provided always the material thus marked conforms to all the requirement of the specification.
  - 3.1 The packing and marking shall be done as per the provisions of the Indian Standard. In addition, the following shall be marked on each sealing ring or packing or both
    - i) BIS Licence No. CM/L-.....
    - ii) Details of BIS website shall be marked as follows: "For details of BIS certification please visit [www.bis.gov.in](http://www.bis.gov.in)"
4. **CONTROL UNIT** – For the purpose of this scheme, all finished sealing rings of the same type, dimension, design, manufactured from the same type of rubber and produced in one day shall constitute a control unit.
  - 4.1 On the basis of tests and inspection results, the decision regarding conformity or otherwise of a control unit as a whole with the requirements of the standard, shall be taken as given in Table 1.
5. **LEVELS OF CONTROL** –The tests, as indicated in Table 1 and at the levels of control specified therein, shall be carried out on the whole production of the factory covered by this scheme and appropriate records and charts maintained in accordance with paragraph 2 above. All the production which conforms to the Indian Standard and covered by this licence shall be marked with Standard Mark.
  - 5.1 All production which conforms to the Indian Standard and covered in the licence should be marked with Standard mark.
6. **STORAGE** – Instructions for storage as given in the Indian Standard shall be complied.
7. **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. A separate record shall be maintain in giving information relating to the rejection of the production not conforming to the requirement of the specification and the method of

its disposal. Such material shall in no case be stored together with that conforming to the specification.

**SCHEME OF INSPECTION AND TESTING  
FOR IS 5382:2018/ISO 4633:2015  
(Second Revision)**

**TABLE 1: LEVELS OF CONTROL**  
(Para 5 of the Scheme of Inspection and Testing)

(1)			(2)	(3)		(4)
Test Details			Test equipment requirement R:required (or) S: Sub-contracting permitted	Levels of Control		Remarks
Clause	Requirements	Test Method		No. of Samples	Frequency	
		Clause	Reference			
4.1	Requirements for materials			Standards Under development. Kept in Abeyance.		
4.1.1	General	4.1.1	IS 5382:2018			
4.1.2	Effect on water supply	4.1.2	-do-			
4.1.3	Microbiological deterioration	4.1.3	-do			
4.2	Requirements for finished seals					
4.2.1	Dimensional tolerances		IS 16752:2018/ISO 3302-1	Five	Each Control Unit	
4.2.2	Imperfections and defects		IS 16751:2018/ISO 9691:1992	R	Each sealing ring	
4.2.3	Hardness		IS 3400 (Part 2):2014/ISO 48	R	Three	Each Control Unit
4.2.4	Tensile Strength and Elongation		IS 3400 (Part 1):2012/ISO 37	R	-do	-do-

	at Break						
4.2.5	Compression set in air		ISO 815-1, ISO 815-2	R	-do	-do-	
4.2.6	Accelerated ageing in air		IS 3400 (Part 4):2012/ISO 188	R	One	Every Tenth Control Unit	See Note 3
4.2.7	Stress relaxation in compression		IS 3400 (Part 28):2018/ISO 3384-1:2011	R	One	Every six months	
4.2.8	Volume change in water		IS 3400 (Part 6):2012/ISO 1817	R	One	Every Tenth Control Unit	See Note 3
4.2.9	Ozone Resistance		IS 3400 (Part 20):1994/ISO 1431-1	S	One	Once in three months	
4.2.10	Splices of prevulcanized profile ends		Annex A	R	One	Every Tenth Control Unit	See Note 3
4.3	Optional Requirements						
4.3.1	Low temperature performance at -25 deg C		ISO 815-2, ISO 3387	S	As agreed between purchaser and manufacturer		
4.3.2	Volume change in oil		IS 3400 (Part 6):2012/ISO 1817	S	-do-		

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empaneled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification.

Note-3: In case of any failure each and every control unit shall be tested till five consecutive control units are found to be satisfactory and only then the frequency suggested in this table may be followed.