

**केन्द्रीय मुहर विभाग -2**

संदर्भ- : के मू वी-2/16: 10245 (Part 2)

22.12.2023

विषय: **IS 10245 (Part 2):2023** के **revision** के अनुपालन के दिशा निर्देश

यह उपरोक्त विषय के संदर्भ में है।

सक्षम अधिकारी द्वारा अनुमोदित दिशा निर्देश अनुपालन हेतु संलग्न है ।

अनुरोध है कि दिशा निर्देशों का तत्काल प्रभाव से अनुपालन सुनिश्चित करें।

(अमित चौधरी)  
वैज्ञानिक - डी

**प्रमुख (के मू वी 2)**

**सभी क्षेत्रीय/शाखा कार्यालय/प्रयोगशालाएँ/ CHD/LRMD**

**CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/16: 10245 (Part 2)

22.12.2023

**Subject: Guidelines for implementation of Revised IS 10245 (Part 2):2023**

This has reference to the subject mentioned above.

The Competent Authority has approved the enclosed Guidelines for implementation.

It is requested to ensure the implementation of the above Guidelines with immediate effect.

(Amit Choudhary)  
Scientist D

**Head (CMD-2)**

**All ROs/BOs/Labs/CHD/LRMD**

**CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/16: 10245 (Part 2)

22.12.2023

**Subject: Guideline for Implementation of revised IS 10245 (Part 2):2023 (Respiratory protective devices — specification part 2 self-contained open circuit breathing apparatus)**

1. **Respiratory protective devices - specification part 2 open circuit breathing apparatus as per IS 10245 (part 2) : 1994** has been revised to **Respiratory protective devices — specification part 2 self-contained open circuit breathing apparatus as per IS 10245 (part 2) : 2023**.
2. Respiratory protective devices — specification part 2 self-contained open circuit breathing apparatus as per IS 10245 (Part 2) : 2023 is currently under voluntary certification with 4 Licences in operation for the product in India. The licences for the product is operated under factory testing basis.
3. IS 10245 (Part 2) : 1994 and IS 10245 (Part 2) : 2023 are under concurrent running till 06 July 2024 and the last date for implementation of revised IS 10245 (Part 2) : 2023 is 06 July 2024
4. The major changes in the standard on account of the revision are given in the table below for the purpose of general guidance:

Clause No	Change
Cl 1	Scope has been made more elaborate outlining use and the conditions of use
Cl 3	Terminology has been updated;
Cl 4	Categorization of the breathing apparatus into 4 types according to the effective air volume has been deleted. As per the revised IS, the Self-contained open circuit breathing apparatus are classified into the two classes according to the purpose:  a) Class 1 — Apparatus for industrial use  b) Class 2 — Apparatus for fire fighting
Cl 5.1	Requirements for auxiliary components have been added;
Cl 5.2	Ergonomics requirement has been introduced
Cl 5.3, 5.4.1, 5.4.3, 5.5, 5.6, 5.8.1, 5.13, 5.15.2, 5.15.3	Test method for design, material/components, Cleaning and Disinfection, mass, connections, protection against particulate matter, Cylinder(s) and main valve, and outlet valve provided.  The dimensional requirement at para 2 of Cl 5.3 introduced

CI 5.3.6, 5.3.7	New requirement at CI 5.3.6 and 5.3.7 introduced
CI 5.4.2	Requirement for Protection of cylinders made from material such as magnesium, titanium, aluminium or alloys containing such proportions of these metals, removed
CI 5.7	Requirement for water immersion test given separately and test method specified at CI 6.10
CI 5.8.2	Requirement for couplings (if fitted ) modified. Test method for testing for the parameter provided.
CI 5.8.3	New requirement for Strength of connections introduced
CI 5.8.4	Requirements for thread connection between face mask and apparatus have been modified;  Test Method for breathing apparatus with positive pressure provided at Annex D  At para 3 of the clause it is specifically mentioned that thread according to IS 14138 (Part 2) shall not be used.  New requirement at para 6, 7 and 8 of the clause added
CI 5.8.5	Requirements for <i>High, Medium and Low pressure connections</i> introduced
CI 5.10	<i>Doff</i> word added in line 2 of para 1 of the Clause
CI 5.12.2	Requirement of flammability (Components, Flame engulfment and resistance to radiant heat) introduced
CI 5.14	Requirement for <i>Medium</i> pressure parts introduced (para 2)
CI 5.16.2	Air flow at medium pressure (not exceeding 30 bar) through pressure reducer relief valve has been specified.  The requirement and test method for maximum breathing resistance has been specified
CI 5.17.4	Test for Electronic pressure indicator has been introduced
CI 5.18	Requirement for Warning Device has been modified
CI 5.22	Requirement of static pressure has been included;
CI 5.23	Requirement of leak-tightness has been added;

CI 6.1	Pre-conditioning of samples before testing has been added;
CI 6.7	Test method for testing of pressure reducer has been modified; and
CI 6.8	Test method for test for warning device has been modified.

5. In the revised IS, Categorization of the breathing apparatus according to the effective air volume has been abolished. Instead, in the revised IS, the Self-contained open circuit breathing apparatus is classified into two classes based on end use, viz a) Class 1 — Apparatus for industrial use; b) Class 2 — Apparatus for firefighting. In the revised IS among other tests, test for Flammability as per CI 5.12.2 has been introduced. Flame engulfment test as per CI 5.12.2.2 and test for Resistance to radiant heat as per CI 5.12.2.3 are specific for class 2 breathing apparatus.
  
6. The existing Product manual has been revised to incorporate the changes due to the revised IS and it is being circulated separately, through BIS website, as Product Manual Doc: PM/IS 10245 (Part 2)/2 December 2023.
  
7. The guidelines for implementation of the revised IS are as given below:
  - A. LICENSEES:
    - (i) The licensee shall implement the revised Indian Standard by 06<sup>th</sup> July 2024. Any difficulty in implementation shall be brought to the notice of CMD-2 immediately after issuance of these guidelines. BO shall ensure that the Licence is not under operation as per IS 10245 (Part 2):1994 (old standard) after 06<sup>th</sup> July 2024. The status of implementation of the revised Indian Standard shall be confirmed by Head (BO) to CMD-II within two weeks of the last date of implementation of concurrent running.
    - (ii) The licensee is required to declare **Class and variety** of their breathing apparatus as per the revised IS and Product Manual and submit evidence of conformity through In-house Test Reports. Additional Testing equipment, as required, shall be declared by Licensee in Form no 2.
    - (iii) All **Types** of breathing apparatus already included in the scope of Licence, shall be replaced with Class 1. If Licensee intends to cover Class 2 variety of breathing apparatus in the scope of licence, the case shall be processed as per the guidelines for change in scope of Licence.
    - (iv) The scope of licence shall be updated by BO as per the revised Product manual based on the available test reports and verification of the documentary evidence submitted by the licensee towards compliance of their product to the revised IS 10245 (Part 2): 2023, and shall issue endorsement with revised scope of licence.
    - (v) Verification of implementation of the revised IS, shall be done during next visit, within 30 days of confirmation of implementation of the revised standard by licensee
    - (vi) If the Licensee fails to complete all actions by 06<sup>th</sup> July 2024, it shall be dealt with as per the prevailing guidelines.

## B. APPLICATIONS FOR GRANT OF LICENCE:

- (i) Since the licence is operated on factory testing basis, for existing Applications where Preliminary Inspection is yet to be done, application may be processed as per the old standard or the revised standard. However, if the Applicant is desirous of considering the Application, as per the revised IS, a declaration may be obtained from the Applicant to that effect and the Application may be processed accordingly. An undertaking shall also be obtained from such Applicants that if the sample fails while considering the provisions of the revised IS, Licence will not be granted by BIS as per the old version. For existing Applications where Preliminary Inspection has been completed and sample tested in factory, the application may be processed as per the old standard. In such cases where application is processed as per old IS, Applicant shall give a declaration that they will implement the revised Standard by 06<sup>th</sup> July 2024
- (ii) Applications which are recorded henceforth may be processed as per the old standard / revised Standard. Processing of Applications as per the old Standard, shall be permitted only upto 06<sup>th</sup> July 2024. For such cases Applicant shall give a declaration that they will implement the revised Standard by 06<sup>th</sup> July 2024.
- (iii) Beyond 06<sup>th</sup> July 2024 no Licence shall be granted as per IS 10245 (Part 2): 1994.

## A. CHANGE IN SCOPE OF LICENCE:

- (i) For change in scope of licence, the relevant provisions as given above for Applicants shall apply.
  - (ii) However, processing of such applications for change in scope of licence as per the old Standard shall be permitted only up to the date of implementation of the revised Standard.
8. BOs are requested to circulate this guideline to licensees and applicants immediately within 7 days of issuance of this circular.
9. The above guidelines come into force with immediate effect.

(Amit Choudhary)  
Scientist D

Head (CMD-2)  
DDG(Certification)  
Circulated to:

- i) All RO/BOs
- ii) All other concerned - through BIS intranet