



केन्द्रीय मुहर विभाग - III

हमारा संदर्भ- केन्द्रीय मुहर विभाग-३/१६: भा.मा. 3224

21 जनवरी 2022

विषय: अनुपालन हेतु गाइडलाइन

सभी शाखा कार्यालयों से आग्रह है कि संलग्न गाइडलाइन का अनुपालन तत्काल प्रभाव से सुनिश्चित करें।

(राकेश कुमार)
वैज्ञानिक 'डी' (के मु वि III)

प्रमुख (के मु वि III)

सभी क्षेत्रीय/शाखा कार्यालय

CENTRAL MARKS DEPARTMENT-III

Our Ref: CMD-3/16: IS 3224

21 Jan 2022

Subject: Guidelines for implementation of revised Indian Standard IS 3224: 2021- Valve Fittings for Compressed Gas Cylinders excluding Liquefied Petroleum Gas (LPG) Cylinders

This has reference to the subject mentioned above. The approved implementation guidelines are attached in this regard. BOs may kindly ensure implementation of the guidelines with immediate effect.

(Rakesh Kumar)
Scientist D (CMD III)

Head (CMD - III)

Circulated to: All ROs/BOs

CENTRAL MARKS DEPARTMENT III

Our Ref: CMD-3/16: IS 3224

21 Jan 2022

Subject: Guidelines for implementation of revised Indian Standard IS 3224: 2021- Valve Fittings for Compressed Gas Cylinders excluding Liquefied Petroleum Gas (LPG) Cylinders

1. IS 3224: 2002 has been revised and published as IS 3224: 2021. The last date for implementation of the revised Standard is 22 Dec 2022 after which the old Standard shall stand withdrawn.
2. All BOs shall inform the Applicants and Licensees under their jurisdiction about implementation of the revised Standard **within a week of issuance of these guidelines**.
3. The significant changes in the Standard brought through this revision as listed in the Table below is given for the purpose of general guidance. BOs shall ensure that the product conforms to all the requirements, as applicable, as per the revised Standard.

Sl. No.	Page no, clause reference	Change
1.	Page 1, Cl. 1.3	Solenoid operated Valves have now been excluded from scope
2.	Page 2, Cl. 3.26	Definition of leak rate has been changed.
3.	Page 4, Cl. 4.1	Classification of Valves has been changed.
4.	Page 8, Cl. 5.2.1.1	Time for heat treatment of valve body of Aluminium Silicon Bronze material for Valve of Chlorine and Boron Trifluoride Cylinders has been specified.
5.	Page 8, Cl. 5.2.1.1	Brass material has been removed for Chlorine Cylinders.
6.	Page 8, Cl. 5.3.1	Tensile strength and Elongation requirement for CO2 and N2O gas application has been separately specified
7.	Page 10, Cl. 6.3	New requirements have been added for Valve operating mechanism
8.	Page 12, Cl. 6.4	New requirements have been added for Valve operating device
9.	Page 12, Cl. 6.5	New requirements have been added for Safety.
10.	Page 14, Cl. 7.2.3	Requirements of Safety relief device for CNG Valves has been changed.
11.	Cl. 8	Reference Standard for checking Type 1 threads has been updated.
12.	Cl. 8.3	New type of threads- Parallel threads on the valve stem with cylinder neck dimensions- has been added in addition to taper screw threads in inlet connection

13.	Cl. 10.4.1	New test – Hydraulic Burst Pressure test has been added as type test
14.	Cl. 10.4.2	Requirement of impact energy has been changed for valve impact test. Further, the procedure for verification of compliance (after impact) has also been changed (Cl. 10.4.2.11)
15.	Cl. 10.4.3	Test method of Valving Torque test has been changed
16.	Cl. 10.4.4	New test – Excessive Torque test has been added as type test
17.	Cl. 10.5	Leakage tests have been modified as Internal and External Leak tightness tests with changed procedure and requirements.
18.	Cl. 10.6	New test – Endurance test has been added as type test.
19.	Cl. 10.8	New test – Flame impingement test has been added as type test.
20.	Cl. 11	New type tests for PRD of CNG Valve have been added.
21.	Cl. 12	New type tests for Excess Flow valve of CNG Valve have been added.

4. Consequent upon the revision, existing Product Manual has been revised as Doc: PM/ IS 3224/ 3/ January 2022. In this revision, changes have been made in grouping guidelines, Sample size, List of test equipment, Scheme of Inspection and testing (Levels of control for type tests, Inspection of finished batch before issuance of test certificate by BIS), Possible tests in a day and Scope of licence as per the revised Standard.

5. The guidelines for implementation of the revised Standard is given below:

A. LICENSEES:

- (i) All Licensees shall implement the revised Standard by 22 Dec 2022. Any difficulty in implementation shall be brought to the notice of CMD III at the earliest but in any case at least 30 days before the last date of implementation. BOs shall ensure that no Licences are under operation as per IS 3224: 2002 without the amendment after 22 Dec 2022. **The status of implementation of the revised Standard shall be confirmed by Head (BO) to CMD-III within two weeks of the last date of concurrent running.**
- (ii) Scope of all licences shall be reviewed and revised as per revised Product Manual. Licensee shall submit the specifications, as per revised Standard, of each variety currently covered under their licence. Based on this information submitted, scope of licence will be revised by BOs.
- (iii) Licensees shall install the test equipment for new tests (Such as Excessive Torque test (Cl. 10.4.4), Endurance test (Cl. 10.6), Flame impingement test (Cl. 10.8), new requirements for Valve operating mechanism (Cl. 6.3) etc.) and for modified tests (Leakage test as per Cl. 10.5, Valving torque as per Cl. 10.4.3 etc.). Licensee shall also submit evidence of

conformity of the product to the additional/modified requirements through In-house/Independent Test Reports or Test Certificates, as applicable.

- (iv) Verification of implementation of the revised Standard may be done during the next visit which may normally be completed within **one month from the date of submission of compliance by licensee or latest by three months from the last date of concurrent running.**
- (v) If the Licensee fails to complete all actions by 22 Dec 2022 it shall be dealt with as per the prevailing guidelines.

B. APPLICATIONS FOR GRANT OF LICENCE:

- (i) Existing Applications where Sample has been submitted in the Laboratory/Test Report has been issued by the Laboratory may be processed as per the Old Standard. However, if the Applicant is desirous of considering the application as per revised Standard, 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 as per revised Standard, Licence will not be granted by BIS as per Old Standard.
- (ii) Applications which are recorded henceforth may be processed as per Old or revised Standard. Processing of Applications as per old Standard shall be permitted only up to 22 Dec 2022 and for such cases Applicant shall give a declaration that they will implement the revised Standard by 22 Dec 2022.
- (iii) Beyond 22 Dec 2022 no Licence shall be granted as per old Standard.

C. 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 Old Standard shall be permitted only upto the date of implementation of revised Standard by the licensee or up to 22 Dec 2022 whichever is earlier.

6. The above guidelines come into force with immediate effect.

(Rakesh Kumar)
Scientist D

Head (CMD III)
DDG (Certification)

Circulated to : All ROs/BOs