

केन्द्रीय मुहर विभाग-2

संदर्भ -: केमूवी-2/16:14606

17 06 2024

विषय: संशोधन सं 1 सहित संशोधित IS 14606:2022 के अनुपालन के दिशा निर्देश

यह उपरोक्त विषय के संदर्भ में है।

सक्षम अधिकारी द्वारा अनुमोदित दिशानिर्देश अनुपालन हेतु संलग्न है।

सभी क्षेत्रीय/शाखा कार्यालयों से अनुरोध है की दिशानिर्देशों का तत्काल प्रभाव से अनुपालन सुनिश्चित करें।

**आदित्य दास
वैज्ञानिक E**

प्रमुख (केमूवी 2)

सभी क्षेत्रीय/शाखाकार्यालय/प्रयोगशालाएँ/FAD/LRMD

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16:14606

17 06 2024

Subject: Guidelines for implementation of Revised IS 14606:2022 incorporating amendment no. 1

This has reference to the subject mentioned above.

The Competent Authority has approved the enclosed Guidelines for implementation.

All ROs/BOs are requested to ensure the implementation of the above Guidelines with immediate effect.

**(Aditya Das)
Scientist E**

Head (CMD-2)

All ROs/BOs/Labs/FAD/LRMD

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16: 14606

17 06 2024

Subject: Guidelines for implementation of Revised IS 14606:2022 incorporating amendment no. 1 (Irrigation Equipment — Granulated Media Filters — Specification)

1. IS 14606:1988 was revised as IS 14606:2022 and was earlier to be implemented from 6 Sept 2022. The significant changes through this revision are listed in the table for general guidance:

Clause	Changes
Title	Title was changed from Irrigation Equipment - Media Filters -Specification to Irrigation Equipment — Granulated Media Filters — Specification
Cl. 1	Scope of the standard was modified
Cl. 3	Terminology was updated by modification of the definition for flush valve. In the definition for Safe Maximum Pressure Drop, provision for 'replacement' of filter has been incorporated
Cl. 4	Classification clause introduced, wherein granulated media filters have been classified on the basis of flow direction, type and number of different media layers, mechanical structure and shape and velocity of filtration.
Cl. 5	Technical requirements were modified. Earlier, in addition to the general requirements, requirements for filter housing (vessel) and connection were specified whereas in the revised standard, in addition to the general requirements, requirements were specified for Inlet and Expansion Space Chamber, Media (main filtering) Compartment, Underdrain (Collection) and Back Flush Unit and requirement for connections modified. (Under connections, dimensions of flanged connection were specified in table 1.)
Cl. 6	Mechanical test requirement for 'Resistance of filter to internal hydrostatic pressure' has been modified w.r.t. dimensions of flanges, requirements of the material used in filters (Metal filter housing and Plastics filter housing)
Cl. 7	Clause has been incorporated elaborating the requirement for 'Resistance to cyclic pressure'
Cl. 8	Clause has been incorporated elaborating hydraulic parameters and tests (Flows, pressure and test sequence), back flushing hydraulic parameters and tests (Test for flushing mechanism and detection of media escape), automatic back flushing and controller (Backwash initiation, flushing control mechanism testing and mechanism activated by duration of operation, by volume of filtered water and other physical quantity).
Cl. 9	Clause has been incorporated elaborating Back flushing hydraulic parameters and tests (Test for flushing mechanism and detection of media escape)
Cl. 10	Clause has been incorporated elaborating automatic back flushing and controller (Backwash initiation, flushing control mechanism testing and mechanism activated by duration of operation, by volume of filtered water and other physical quantity).
Cl. 11	Information to be provided by the manufacturer has been modified and following additional requirements has been introduced: i) Duration of flushing ii) Flow of flush water in the range of pressures stated by the manufacturer; iii) Range of possibilities for flushing control according to time, volume, etc. (in case of automatic back flush filter); iv) Number of repeat flushing (in the event of failure) until flushing stops in filters equipped with a protective mechanism (in case of automatic back flush filter); v) Safe maximum pressure drop and closing of cover instructions; vi) Drawings that describe the filter and the filter battery, their parts and the manner of assembly; vii) Quantity, size and type of filter media; and

	viii) Head-loss versus flow at the recommended range chart for media defined by the manufacturer.
Cl. 12	Separate clause has been introduced for Back Flushing Controller
Cl. 13	Separate clause has been introduced for Maintenance
Cl. 14	Separate clause has been introduced w.r.t. Rough Media classification and General Guidelines for Media Parameters to be defined by the Supplier
Cl. 15	Separate clause has been introduced describing the Three Supply Phases of the filter
Cl. 16	The number of test specimens to be considered for Type tests like Resistance to cyclic pressure, Hydraulic parameter and tests, Test for flushing mechanism, Detecting media escape, Flushing control mechanism testing has been mentioned
Cl. 17	The marking clause has been modified and following additional particulars are also to be marked on the product: i) Type of filtration media, ii) Safety instructions, and iii) Input/output type and voltage requirements (only in case of automatic back flushing)

2. However, due to some issues with the standard, manufacturers had expressed difficulties in implementing the revised standard. Therefore, it was decided that FAD would issue suitable amendment to the standard to address the issues. Accordingly, it was agreed by the Competent Authority to extend the last date of implementation of the revised IS 14606:2022 till 30 May 2024.
3. Now, amendment no. 1 to IS 14606:2022 has been issued. The significant changes in the revised Standard due to the amendment are as listed in the table for the purpose of general guidance.

Clause No.	Change
2	References to IS 4984:2016, IS 4985:2021 and IS 15801:2008 have been added
4.1.1	In the classification of filter based on Velocity of Filtration (through the Filter): Relatively slow flow, has been reclassified from 36-49 m ³ /h-m ² to less than 50 m ³ /h-m ² .
6.2.3.1	The pressure test for Filters with plastic filter housing has been modified and an alternate test also specified
9	Following note has been added in Back flushing hydraulic parameters and tests – Note: Back flushing may be done either manually or automatically. Manufacturer is required to provide either manual back flushing or automatic back flushing mechanism with the filter for conducting the above test. Testing for controller mechanism of automatic back flushing is given in 10.
10.1	Backwash Initiation clause has been modified
16.2	Criteria for lot acceptance has been modified
Annex-A	In the test for RESISTANCE OF FILTER TO INTERNAL HYDROSTATIC PRESSURE, i. References to Cl. 6.2.3.1 have been replaced with Cl. 6.2.3.2 ii. formula for Pressure Calculations Based on SDR of Pipe(s) of the Test Piece has been changed

4. Since the amendment has been issued in May 2024 only and manufacturers will require some time to implement the revised standard, the Competent Authority has agreed to extend the last date of implementation of revised IS 14606:2021 (incorporating amendment no. 1), till **31 Dec 2024**.
5. BOs shall bring the above to the attention of licensees and applicants, and ensure that the product conforms to all the requirements, as applicable, as per the revised Standard incorporating the amendment.
6. Consequent upon the issuance of the revised Standard and amendment thereto, the existing product manual has been revised which is being circulated separately through BIS website.

Note: BOs shall review the scope of the licence based on the grouping guidelines given in the revised product manual and previous inspection reports/test reports based on which scope of licence was defined, as well as any additional information provided by the licensee, and recast the scope according to the revised product manual.

7. The guidelines for implementation of the revised Standard and amendment thereto is given below:

A. LICENSEES:

- i. The licensee shall implement the revised Standard by **31 Dec 2024**. Any difficulty in implementation shall be brought to the notice of CMD 2 at the earliest. BOs shall ensure that no Licences are under operation as per the old Standard after **31 Dec 2024**. **The status of implementation of the revised Standard shall be confirmed by Head (BO) to CMD-2 within two weeks of the last date of concurrent running.**
- ii. The licensee shall submit evidence of conformity to the additional/modified requirements through In-house/Independent Test Reports as well as revised list of test equipment (as per Form 2), if applicable. Verification of implementation of the revised Standard, wherever required, **shall be verified through a surveillance visit within 30 days of confirmation of implementation of the revised standard by licensee.**
- iii. If the Licensee fails to complete all actions by **31 Dec 2024** 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 the revised Standard, a declaration may be obtained from the Applicant to that effect and the Application may be processed accordingly. An undertaking shall from such Applicants also be obtained that if the sample fails while considering the provisions of the revised Standard, Licence will not be granted by BIS as per the old version.
- ii. Applications which are recorded henceforth may be processed as per the old Standard or the revised Standard. Processing of Applications as per the old Standard shall be permitted only up to **30 Dec 2024** and for such cases Applicant shall give a declaration that they will implement the revised Standard by **31 Dec 2024**.

iii. Beyond **31 Dec 2024** no Licence shall be granted as per the 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 the old Standard shall be permitted only up to the date of implementation of the revised Standard or up to **31 Dec 2024** whichever is earlier.

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

Aditya Das
Sc. E

Head (CMD-2)
DDG (Certification)