

BRITISH STANDARD 1438 : 1971

**SPECIFICATION FOR
MEDIA
FOR BIOLOGICAL
PERCOLATING
FILTERS**

Amendment Slip No. 2
published and effective from 31 December 1980
to BS 1438 : 1971

Media for biological percolating filters

Revised text

Page 2. In the list of reference standards insert after the title of BS 812, 'Part 1 Sampling, size, shape and classification'.

Contents. Delete the title to clause 4 and substitute 'Classification'.

Delete the titles for appendices C and D and substitute in each case '*Text deleted*'.

Delete the titles for Figures 1 and 2 and substitute in each case '*Figure deleted*'.

Foreword. General. At the end of paragraph 1 insert the following:

'Following the revision of BS 812, the tests included in that standard are now referred to in Clauses 3 and 4.'

Foreword. Shape of medium. At the end of the last sentence of paragraph 2 insert 'Part 1 Sampling, size, shape and classification'.

Clause 3. Sizes of medium. In paragraph 2, delete 'in the manner described in Appendix C' and substitute 'in accordance with BS 812 : Part 1'.

Clause 4. Shape, nature of surface and classification of medium. Delete the whole clause and substitute the following:

'**4. Classification.** The description, group classification, particle size and surface texture of medium shall be determined in accordance with BS 812 : Part 1.'

Clause 5. Flakiness. After 'BS 812' insert the words ': Part 1'. Delete 'but using slots of the dimensions given in Fig 2.'

Clause 6. Cleanness. Delete the text of the whole clause and substitute the following:

'The medium shall be clean and shall not contain too high a proportion of impurities, e.g. grit particles finer than 5 mm, dust, clay or pieces of wood, root or leaves that may lead to clogging of the filter (see Appendix E). The material shall not be contaminated with any substance that is toxic to living organisms including organisms present in the filter.'

Clause 7. Sampling and testing. Delete the first two paragraphs and substitute the following:

‘The method of sampling and the amount of material to be provided shall be in accordance with Appendix A.

The tests required in connection with this standard shall be carried out in the manner prescribed in the appropriate part of the standard or in the appendices.’

In paragraph 3, delete ‘(Appendix C)’ and substitute ‘(sieve analysis)’.

Clause A.1 Sampling and submission of samples. In paragraphs 3 and 4, after ‘BS 812’ insert ‘: Part 1’.

Table 3. Size of samples (as amended by Amendment No. 1). Delete column 2 and renumber the following columns accordingly.

Clause B.8 Sieve analysis. In line 7 delete the words ‘Appendix C’ and substitute ‘BS 812 : Part 1’.

Appendix C. Method for the determination of size (sieve analysis). Delete the whole of this appendix and substitute ‘*Appendix C deleted*’.

Appendix D. Shape, nature of surface and classification of medium. Delete the whole of this appendix and substitute ‘*Appendix D deleted*’.

Clause E.2 ‘Dust and fine material’. Delete the whole clause and substitute the following:

‘**E.2 Impurities.** It is important that the filter medium should not include too high a proportion of impurities, e.g. grit particles finer than 5 mm, dust, clay or pieces of wood, root or leaves that may lead to clogging of the filter or cause difficulty in humus tanks during treatment of effluent from a filter. Care should be taken to ensure that any vehicle used for transport of filter medium is clean, so that the material is not contaminated.

Because of the possibility of the formation of grit particles finer than 5 mm during transport and handling of the material, it is necessary to allow under-size material up to a maximum of 5 % and 7 % of the limits given in Table 1 or Table 2.

It should be clearly understood, however, that grit particles finer than 5 mm and dust are undesirable, and on no account should grit particles finer than 5 mm and dust of as high a percentage as the maximum given in Table 1 or Table 2 find their way into the filter bed. A figure not exceeding 2 %, evenly distributed, would be the maximum tolerable.

When an excess of grit particles finer than 5 mm and dust forms during the transport and handling of the medium, it should not be placed in the filter until the proportion of such impurities has been reduced to conform with the 2 % maximum given above. This should be achieved by suitable screening, hand forking (when the quantity is small) or washing. Wherever possible,

this operation should be carried out away from the area of placing, either within or without the perimeter depending on the size of the bed. If within, the area used for this operation should be carefully cleansed before placing proceeds.'

Clause E.5 Shape and nature of surface of medium. Delete the last sentence.

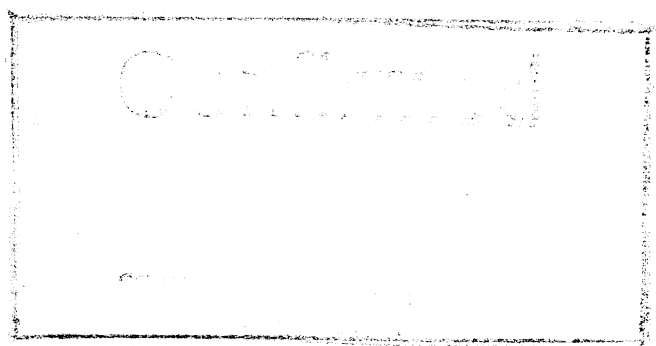
Figure 1. Typical particle shapes. Delete this figure and substitute '*Figure 1 deleted*'.

Figure 2. Thickness gauge. Delete this figure and substitute '*Figure 2 deleted*'.

SPECIFICATION FOR MEDIA FOR BIOLOGICAL PERCOLATING FILTERS

BS 1438 : 1971

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The Institution desires to call attention to the fact that this British Standard does not purport to include all the necessary provisions of a contract.

In order to keep abreast of progress in the industries concerned, British Standards are subject to periodical review. Suggestions for improvements will be recorded and in due course brought to the notice of the committees charged with the revision of the standards to which they refer.

A complete list of British Standards, numbering over 5000, fully indexed and with a note of the contents of each, will be found in the British Standards Yearbook, which may be purchased from BSI Sales Department. It may also be consulted in many public libraries and similar institutions.

This standard makes reference to the following British Standards:

BS 410. Test sieves.

BS 812. Methods for sampling and testing of mineral aggregates, sands and fillers.

BS 2648. Performance requirements for electrically-heated laboratory drying ovens.

British Standards are revised, when necessary, by the issue either of amendment slips or of revised editions. It is important that users of British Standards should ascertain that they are in possession of the latest amendments or editions.

The following BSI references relate to the work on this standard:

Committee reference STB/13

Draft for comment 69/34986

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