

**Water conditioning equipment inside  
buildings - Mechanical filters - Part 1:  
Particle rating 80 µm to 150 µm -  
Requirements for performances, safety  
and testing KONSOLIDEERITUD TEKST**

Water conditioning equipment inside buildings -  
Mechanical filters - Part 1: Particle rating 80 µm to  
150 µm - Requirements for performances, safety  
and testing CONSOLIDATED TEXT

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13443-1:2003+A1:2007 sisaldab Euroopa standardi EN 13443-1:2002+A1:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.11.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13443-1:2003+A1:2007 consists of the English text of the European standard EN 13443-1:2002+A1:2007.</p> <p>This document is endorsed on 22.11.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> Part 1 of this European Standard applies to mechanical filters for drinking water installations inside buildings, of nominal size from DN 15 to DN 100, minimum nominal pressure PN10, particle rating of 80 µm to 150 µm, and "maximum" design temperature of 30 °C. It specifies requirements relating to the construction and mode of operation of filters and describes relevant methods of testing. It only concerns units which are permanently connected to the mains supply at the point of entry into the building. Part 2 of this European Standard (!EN 13443-2:2005+A1") is a separate document and deals with filters with a particle size limit less than 80 µm.</p>	<p><b>Scope:</b> Part 1 of this European Standard applies to mechanical filters for drinking water installations inside buildings, of nominal size from DN 15 to DN 100, minimum nominal pressure PN10, particle rating of 80 µm to 150 µm, and "maximum" design temperature of 30 °C. It specifies requirements relating to the construction and mode of operation of filters and describes relevant methods of testing. It only concerns units which are permanently connected to the mains supply at the point of entry into the building. Part 2 of this European Standard (!EN 13443-2:2005+A1") is a separate document and deals with filters with a particle size limit less than 80 µm.</p>
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ICS 13.060.20, 91.140.60

**Võtmesõnad:** mech, mechanical separation, potable water, safety, safety requirements, separation methods, specification (approval), specifications, testing, water practice, water purification, water supply, water supply (buildings), water supply installations, water treatment

English Version

## Water conditioning equipment inside buildings - Mechanical filters - Part 1: Particle rating 80 µm to 150 µm - Requirements for performances, safety and testing

Appareils de traitement d'eau à l'intérieur des bâtiments -  
Filtres mécaniques - Partie 1: Particules de dimension  
comprise entre 80 µm et 150 µm - Exigences de  
performances et de sécurité, essais

Anlagen zur Behandlung von Trinkwasser innerhalb von  
Gebäuden - Mechanisch wirkende Filter - Teil 1:  
Filterfeinheit 80 µm bis 150 µm - Anforderungen an  
Ausführung, Sicherheit und Prüfung

This European Standard was approved by CEN on 23 October 2002 and includes Amendment 1 approved by CEN on 9 August 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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## Foreword

This document (EN 13443-1:2007+A1:2007) has been prepared by Technical Committee CEN/TC 164 "Water supply", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2008, and conflicting national standards shall be withdrawn at the latest by March 2008.

This document supersedes EN 13443-1:2002.

This document includes Amendment 1, approved by CEN on 2007-08-09.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\boxed{A1}$   $\boxed{A1}$ .

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## Introduction

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this standard:

- 1) this standard provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA;
- 2) it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

## 1 Scope

Part 1 of this European Standard applies to mechanical filters for drinking water installations inside buildings, of nominal size from DN 15 to DN 100, minimum nominal pressure PN10, particle rating of 80 µm to 150 µm, and <sup>A1</sup> maximum <sup>A1</sup> design temperature of 30 °C. It specifies requirements relating to the construction and mode of operation of filters and describes relevant methods of testing. It only concerns units which are permanently connected to the mains supply at the point of entry into the building.

Part 2 of this European Standard (<sup>A1</sup> EN 13443-2:2005+A1 <sup>A1</sup>) is a separate document and deals with filters with a particle size limit less than 80 µm.

## 2 Normative references

<sup>A1</sup> The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. <sup>A1</sup>

EN 1333, *Flanges and their joints - Pipework components - Definition and selection of PN*

EN 1567, *Building valves - Water pressure reducing valves and combination water pressure reducing valves - Requirements and tests*

EN 1717, *Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow*

<sup>A1</sup> EN 15161, *Water conditioning equipment inside buildings — Installation, operation, maintenance and repair* <sup>A1</sup>

EN ISO 3822-3, *Acoustics - Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 3: Mounting and operating conditions for in-line valves and appliances (ISO 3822-3:1997)*

EN ISO 6509, *Corrosion of metals and alloys - Determination of dezincification resistance of brass (ISO 6509:1981)*

<sup>A1</sup> *deleted text* <sup>A1</sup>

<sup>A1</sup> ISO 2591-1, *Test sieving — Part 1: Methods using test sieves of woven wire cloth and perforated metal plate*

ISO 9276-1, *Representation of results of particle size analysis — Part 1: Graphical representation*

ISO 13320-1, *Particle size analysis — Laser diffraction methods — Part 1: General principles* <sup>A1</sup>

## 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

### 3.1

<sup>A1</sup> **drinking water** <sup>A1</sup>

water intended for human consumption as defined in Directive 98/83/EC <sup>A1</sup> (see Annex A) <sup>A1</sup>

### 3.2

<sup>A1</sup> **mechanical filter** <sup>A1</sup>

<sup>A1</sup> appliance <sup>A1</sup> designed to remove undissolved substances from water, down to a specified particle size

### 3.3

**filter element**

part of a filter designed to ensure the retention of particles