Wastewater treatment plants - Part 8: Sludge treatment and storage

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12255-
8:2002 sisaldab Euroopa standardi EN
12255-8:2001 ingliskeelset teksti.

Käesolev dokument on jõustatud 16.01.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12255-8:2002 consists of the English text of the European standard EN 12255-8:2001.

This document is endorsed on 16.01.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This European Standard gives design principles and specifies construction requirements for sludge treatment and storage facilities in wastewater treatment plants for more than 50 PT. Other sludges or organic wastes may be treated together with the municipal sewerage sludge.

Scope:

sewerage sludge.

This European Standard gives design principles and specifies construction requirements for sludge treatment and storage facilities in wastewater treatment plants for more than 50 PT.
Other sludges or organic wastes may be treated together with the municipal

ICS 13.060.30

Võtmesõnad: management, sewage purification, sewage purification plant, sewage treatment, sewage treatment plants, sewage treatment sludges, sewage treatment works, sludge, sludge stabilization, sludge treatment, specification (approval), specifications, water practice

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EUROPÄISCHE NORM

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English version

Wastewater treatment plants - Part 8: Sludge treatment and storage

Stations d'épuration - Partie 8: Stockage et traitement des boues

Kläranlagen - Teil 8: Schlammbehandlung und -lagerung

This European Standard was approved by CEN on 8 March 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 165 "Waste water engineering", the secretariat of which is held by DIN.

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 November 2001, and conflicting national standards shall be withdrawn at the latest by December 2001.

It is the eighth part prepared by the Working Groups CEN/TC 165/WG 42 and WG 43 relating to the general requirements and processes for treatment plants for over 50 PT. The parts of the series are as follows:

Part 1: General construction principles

Part 3: Preliminary treatment

Part 4: Primary settlement

Part 5: Lagooning processes

Part 6: Activated sludge processes

Part 7: Biological fixed-film reactors

Part 8: Sludge treatment and storage Part 9: Odour control and ventilation

Part 10: Safety principles

Part 11: General data required

Part 12: Control and automation¹)

Part 13: Chemical treatment

Part 14: Disinfection¹)

Part 15: Measurement of the oxygen transfer in clean water in aeration tanks of activated sludge plants

Part 16: Physical (mechanical) filtration¹)

NOTE For requirements on pumping installations at wastewater treatment plants, provided initially as part 2 "Pumping installations for wastewater treatment plants", see EN 752-6 "Drain and sewer systems outside buildings — Part 6: Pumping installations".

The parts EN 12255-1, EN 12255-3 to EN 12255-8 and EN 12255-10 and EN 12255-11 became implemented together as a european package (Resolution BT 152/1998). The date of withdrawl (dow) of all conflicting national standards is 2001-12-31. Until the date of withdrawl is reached the National and the already published European standards both coexist.

This standard includes a Bibliography.

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

1 Scope

This European Standard gives design principles and specifies construction requirements for sludge treatment and storage facilities in wastewater treatment plants for more than 50 PT.

Other sludges and organic wastes may be treated together with the municipal sewage sludge.

Differences in wastewater treatment throughout Europe have led to a variety of systems being developed. This standard gives fundamental informations about the systems; this standard has not attempted to specify all available systems.

Detailed information additional to that contained in this standard may be obtained by referring to the bibliography.

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¹⁾ in preparation

EN 12255-8:2001

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1085

Wastewater treatment — Vocabulary

EN 12176

Characterization of sludge -- Determination of pH-value

prEN 12255-1:1996

Wastewater treatment plants — Part 1: General construction principles

prEN 12255-4:1997

Wastewater treatment plants — Part 4: Primary settlement

EN 12255-5

Wastewater treatment plants — Part 5: Lagooning processes

prEN 12255-6:1997

Wastewater treatment plants — Part 6: Activated sludge processes

prEN 12255-9:1999

Wastewater treatment plants — Part 9: Odour control and ventilation

EN 12255-10

Wastewater treatment plants — Part 10: Safety principles for the construction of wastewater treatment plants

EN 12880

Characterisation of sludges — Determination of dry residue and water content

EN ISO 5667-13

Water quality — Sampling — Part 13: Guidance on sampling of sludges from sewage and water treatment works (ISO 5667-13: 1997)

3 Terms and definitions

For the purposes of this European standard the terms and definitions given in EN 1085 and the following apply.

3.1

psychrophilic

process conditions for organisms which are active below 30 $^{\circ}\text{C}.$

3.2 mesophilic

process conditions for organisms which are active at temperatures between 30 $^{\circ}$ C and 45 $^{\circ}$ C, with an optimum of 32 $^{\circ}$ C to 37 $^{\circ}$ C.

3.3

thermophilic

process conditions for organisms which are active at temperatures between 45 °C and 80 °C, and have an optimum of 55 °C to 65 °C.

3.4

pseudo stabilisation

process which prevents organic degradation so long as particular conditions (such as pH value or dryness) are maintained, but for which degradation recommences when the conditions are no longer met.