# Roostevabast terasest pikikeevitatud terastorust muhvliitega kanalisatsioonitorud ja –liitmikud. Osa 1: Nõuded, katsetamine, kvaliteedikontroll

Pipes and fittings of longitudinally welded stainless steel pipes with spigot and socket for waste water systems - Part 1: Requirements, testing, quality control



#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1124-1:2001 sisaldab Euroopa standardi EN 1124-1:1999 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 18.06.2001 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Standard on kättesaada

standardiorganisatsioonist

This Estonian standard EVS-EN 1124-1:2001 consists of the English text of the European standard EN 1124-1:1999.

This standard is ratified with the order of Estonian Centre for Standardisation dated 18.06.2001 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

timent is a preview generated by the The The standard is available from Estonian standardisation organisation.

ICS 23.040.10, 23.040.40, 23.040.60

#### Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

#### Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation: Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: +372 605 5050; E-mail: info@evs.ee

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# EN 1124-1

January 1999

ICS 23.040.10; 23.040.40; 23.040.60

Descriptors: water removal, sewage, water pipelines, non-pressure pipes, steel tubes, welded tubes, pipe fittings, stainless steels, pipe sockets, characteristics, tests, marking, quality control

English version

Pipes and fittings of longitudinally welded stainless steel pipes with spigot and socket for waste water systems - Part 1:

Requirements, testing, quality control

Tubes et raccords de tube soudés longitudinalement en acier inoxydable, à manchon enfichable pour réseaux d'assainissement - Partie 1: Prescriptions, essais, contrôle de qualité

Rohre und Formstücke aus längsnahtgeschweißtem, nichtrostendem Stahlrohr mit Steckmuffe für Abwasserleitungen - Teil 1: Anforderungen, Prüfungen, Güteüberwachung

This European Standard was approved by CEN on 16 December 1998.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium Zech 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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Page 2 EN 1124-1:1999

Conte	nts	Page			
Foreword 3					
1	Scope	. 4			
2	Normative references	. 4			
3	Definitions	. 5			
4	Materials and prefabricated components	. 5			
<b>5</b> 5.1 5.2	Dimensions Socket shape Nominal sizes	. 5 . 6			
6 6.1 6.2 6.3 6.4 6.5 6.6 6.7	Requirements of pipes and fittings  Straightness Ends of pipes and fittings Inner surface finish Outside surface finish Roundness Welds Annealing	6 6 6 6 7			
7 7.1 7.2 7.3 7.4 7.5	Requirements of pipe joints Seals Watertightness Airtightness Thermal stressing Joint assembling Thermal requirements	7 7 7			
<b>9</b> 9.1 9.2	Corrosion protection	8			
10 10.1 10.2 10.3 10.4 10.5 10.6 10.7	Testing Straightness of the pipes Squareness of the ends of the pipes and fittings Surfaces Roundness Appearance and watertightness of the welds Materials Corrosion protection Dimensions	8 9 9 9 9 10			

	Pag	е
10.10 10.11	Temperature resistance	0 1
11	Marking 1	2
<b>12</b> 12.1	Quality control	
12.2	Initial testing (type testing) 1	2
12.3	, actory produced to the control of	_
Annex	A (informative) Third party control 1	4
A.1	Method and frequency	4
A.2	Sampling	4
A.3	Sampling	
Annex	B (informative) Bibliography 1	6
	To the second se	

#### **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 July 1999, and conflicting national standards shall be withdrawn at the latest by July 1999.

This European standard consists of the following parts:

- Part 1: Requirements, testing, quality control
- Part 2: System S; Dimensions
- Part 3: System X; Dimensions

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 specifies requirements, tests and quality control for longitudinally welded, stainless steel pipes and fittings with spigot and socket for use in waste water systems usually operating under gravity or at a low head of pressure.

For the purposes of this standard, components are pipes, fittings, joints and seals.

This standard is for components used for the discharge of

- domestic waste water
- surface water and
- groundwater

This standard is also for components discharging other waste water (e.g. industrial waste water) as long as it does not camage the components or endanger the health and safety of personnel.

#### 2 Normative references

This European Standard incorporates detection and 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.

rotottou to upplico.	2
EN 476	General requirements for components used in discharge pipes, drains and sewers for gravity systems
EN 681-1	Elastomeric seals - Materia Pequirements for pipe joint seals used in water and drainage applications - Part 1: Vulcanized rubber
EN 1123-1:1999	Pipes and fittings of longitudinally welded hot-dip galvanized steel pipes with spigot and socket for vaste water systems - Part 1: Requirements, testing, quality control
EN 1124-2:1999	Pipes and fittings of longitudinally welded stainless steel pipes with spigot and socket for waste water systems - Part 2: System S; Dimensions.
EN 1124-3:1999	Pipes and fittings of longitudinally welded stainless steel pipes with spigot and socket for waste water systems - Part 3: System X; Dimensions
EN 12068	Cathodic protection - External organic coatings for the corrosion protection of buried or immersed steel pipelines used in

materials

conjunction with cathodic protection - Tapes and shrinkable

ISO 559:1991

Steel tubes for water and sewage

ISO 683-13:1986

Heat-treatable steels, alloy steels and free-cutting steels - Part

13: Wrought stainless steel

ISO 8770:1991

High-density polyethylene (PE-HD) pipes and fittings for soil and waste discharge (low and high temperature) systems inside

buildings - Specification

# 3 Definitions

For the purposes of this standard, the definitions of nominal size (DN), inside diameter (ID) and outside diameter (PD) as specified in EN 476 apply.

# 4 Materials and prefabricated components

Pipe and fittings are made of precision steel tube of austenitic stainless steels, manufactured generally of material No. 11 ISO 683-13:1986, No. 19a ISO 683-13:1986 and No. 21 ISO 683-13:1986. Comparable materials are permissible.

Until a European Standard for as welded precision steel pipes is produced, national specifications remain available for the testing of steel pipe before finished into pipes and fittings for drainage.

The choice of the material depends on the application (see ISO 683-13:1986, EN 10088-2). The steel tube from which the pipes and fittings are made shall be of the materials specified in the first paragraph.

Prefabricated components are assembled at the manufacturer's plant. They shall be designed so as to function permanently and be interchangeable.

### 5 Dimensions

The dimensions shall comply with EN 1124-2 or EN 1124-3.

### 5.1 Socket shape

The socket shape shall comply with EN 1124-2 or EN 1124-3.

#### 5.2 Nominal sizes

The nominal sizes for pipes and fittings to EN 1124-2 shall be in the range of DN/OD 50, 75, 110 and 160. The nominal sizes for pipes and fittings to EN 1124-3 shall be in the range of DN/ID 40, 50, 70, 80, 100, 125, 150 and 200.