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Water-tube boilers and auxiliary installations - Part 10: Requirements for safeguards against excessive pressure



## EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

This Estonian standard EVS-EN 12952-
10:2002 consists of the English text of the
European standard EN 12952-10:2002.
This document is endorsed on 18.10.2002
with the notification being published in the
official publication of the Estonian national
standardisation organisation.
The standard is available from Estonian
standardisation organisation.
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Käsitlusala:	Scope:
This European Standard specifies the	This European Standard specifies the
requirements for safeguards against	requirements for safeguards against
excessive pressure in water-tube boilers	excessive pressure in water-tube boilers
as defined in prEN 12952-1.	as defined in prEN 12952-1.
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ICS 23.060.40, 27.040

**Võtmesõnad:** boilers, heat exchangers, overpres, pressure overload, production, safety, safety devices, safety engineering, safety valves, specification (approval), specifications, steam boilers, steam generators, steam heaters, steam heating, testing, water-tube boilers, vessels

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# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

## EN 12952-10

September 2002

ICS 23.060.40: 27.040

English version

### Water-tube boilers and auxiliary installations - Part 10: Requirements for safeguards against excessive pressure

Chaudières à tubes d'eau et installations auxiliaires - Partie 10: Exigences pour la protection vis-à-vis des excès de pression

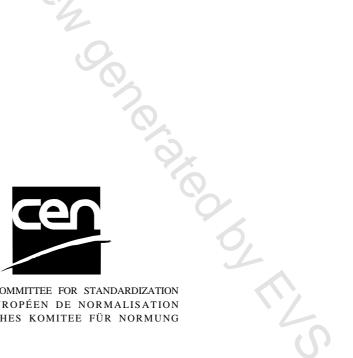
Wasserrohrkessel und Anlagenkomponenten - Teil 10 : Anforderungen an Sicherheitseinrichtungen gegen Drucküberschreitung

This European Standard was approved by CEN on 22 March 2002.

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, Malta, 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 document (EN 12952-10:2002) has been prepared by Technical Committee CEN/TC 269 "Shell and water-tube boilers", 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 March 2003, and conflicting national standards shall be withdrawn at the latest by March 2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

The European Standard EN 12952 concerning water-tube boilers and auxiliary installations consists of the following parts:

- Part 1: General.
- Part 2: Materials for pressure parts of boilers and accessories.
- Part 3: Design and calculation for pressure parts.
- Part 4: In-service boiler life expectancy calculations.
- Part 5: Workmanship and construction of pressure parts of the boiler.
- Part 6: Inspection during construction, documentation and marking of pressure parts of the boiler.
- Part 7: Requirements for equipment for the boiler.
- Part 8: Requirements for firing systems for liquid and gaseous fuels for the boiler.
- Part 9: Requirements for firing systems for pulverized solid fuels for the boiler.
- Part 10: Requirements for safeguards against excessive pressure.
- Part 11: Requirements for limiting devices of the boiler and accessories.
- Part 12: Requirements for boiler feedwater and boiler water quality.
- Part 13: Requirements for flue gas cleaning systems.
- Part 14: Requirements for flue gas DENOX-systems.
- Part 15: Acceptance tests.
- Part 16: Requirements for grate and fluidized bed firing systems for solid fuels for the boiler.

CR 12952 Part 17: Guideline for the involvement of an inspection body independent of the manufacturer.

Although these Parts can be obtained separately, it should be recognized that the Parts are inter-dependent. As such, the design and manufacture of water-tube boilers requires the application of more than one Part in order for the requirements of the standard to be satisfactorily fulfilled.

NOTE Parts 4 and 15 are not applicable during the design, construction and installation stages.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

#### 1 Scope

This Part of this European Standard specifies the requirements for safeguards against excessive pressure in water-tube boilers as defined in EN 12952-1.

### 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).

prEN 1268-1, Safety devices for the protection against excessive pressure — Part 1: Safety valves.

prEN 1268-5, Safety devices for the protection against excessive pressure — Part 5: Controlled safety pressure relief systems (CSPRS) — General requirements.

EN 12952-1:2002, Water-tube boilers and auxiliary installations — Part 1: General.

prEN ISO 4126-4, Safety devices for protection against excessive pressure — Part 4: Pilot-operated safety valves (ISO/DIS 4126-4:1999).

#### 3 Terms and definitions

For the purposes of this European Standard the terms and definitions given in EN 12952-1 apply.

#### 4 Symbols and abbreviations

For the purposes of this part of this European Standard, the symbols given in EN 12952-1:2002, Table 4-1 shall apply. Throughout this part of this European Standard, additional terminology and symbols have been included where necessary to meet the requirements of the specific text concerned (see Table 4-1 and Figure 4-1).

Symbol explanation unit
<i>D<sub>E</sub></i> inlet pipe internal diameter mm
d <sub>0</sub> smallest flow diameter (minimum free bore) mm
<i>L<sub>E</sub></i> developed length of inlet pipe mm
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Table 4-1 — S	ymbols and	units
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