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# **BSI Standards Publication**

# Water-tube boilers and auxiliary installations

Part 10: Requirements for safety devices against excessive pressure



BS EN 12952-10:2021 BRITISH STANDARD

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### **National foreword**

This British Standard is the UK implementation of EN 12952-10:2021. It supersedes BS EN 12952-10:2002, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PVE/2, Water Tube And Shell Boilers.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication has been prepared under a mandate given to the European Standards Organizations by the European Commission and the European Free Trade Association. It is intended to support requirements of the EU legislation detailed in the European Foreword. A European Annex, usually Annex ZA or ZZ, describes how this publication relates to that EU legislation.

For the Great Britain market (England, Scotland and Wales), if UK Government has designated this publication for conformity with UKCA marking (or similar) legislation, it may contain an additional National Annex. Where such a National Annex exists, it shows the correlation between this publication and the relevant UK legislation. If there is no National Annex of this kind, the relevant Annex ZA or ZZ in the body of the European text will indicate the relationship to UK regulation applicable in Great Britain. References to EU legislation may need to be read in accordance with the UK designation and the applicable UK law. Further information on designated standards can be found at <a href="https://www.bsigroup.com/standardsandregulation">www.bsigroup.com/standardsandregulation</a>.

For the Northern Ireland market, UK law will continue to implement relevant EU law subject to periodic confirmation. Therefore Annex ZA/ZZ in the European text, and references to EU legislation, are still valid for this market.

UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

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ICS 23.060.40; 27.040; 27.060.30

# Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 January 2022.

### Amendments/corrigenda issued since publication

Date Text affected

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### **EUROPÄISCHE NORM**

December 2021

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Supersedes EN 12952-10:2002

### **English Version**

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

Chaudières à tubes d'eau et installations auxiliaires -Partie 10 : Exigences pour la protection vis-à-vis des excés de pression Wasserrohrkessel und Anlagenkomponenten - Teil 10: Anforderungen an Sicherheitseinrichtungen gegen Überdruck

This European Standard was approved by CEN on 1 November 2021.

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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-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

### EN 12952-10:2021 (E)

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### European foreword

This document (EN 12952-10:2021) 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 June 2022, and conflicting national standards shall be withdrawn at the latest by June 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12952-10:2002.

EN 12952 series, *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 using liquefied pressurized ammonia and ammonia water solution;
- 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;
- Part 18: Operating instructions.

#### EN 12952-10:2021 (E)

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Although these parts can be obtained separately, it should be recognized that the parts are interdependent. 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 document to be satisfactorily fulfilled.

NOTE A "Boiler Helpdesk" has been established in CEN/TC 269 which may be contacted for any questions regarding the application of EN 12952 series and EN 12953 series, see the following website: <a href="http://www.boiler-helpdesk.din.de">http://www.boiler-helpdesk.din.de</a>

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

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

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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

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### 1 Scope

This document specifies the requirements for safety devices against excessive pressure in water-tube boilers as defined in EN 12952-1:2015.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN ISO 4126-1:2013,<sup>1</sup> Safety devices for protection against excessive pressure - Part 1: Safety valves (ISO 4126-1:2013)

EN ISO 4126-4:2013, Safety devices for protection against excessive pressure - Part 4: Pilot-operated safety valves (ISO 4126-4:2013)

EN ISO 4126-5:2013,<sup>2</sup> Safety devices for protection against excessive pressure - Part 5: Controlled safety pressure relief systems (CSPRS) (ISO 4126-5:2013)

EN 764-7:2002,<sup>3</sup> Pressure equipment - Part 7: Safety systems for unfired pressure equipment

EN 12952-1:2015, Water-tube boilers and auxiliary installations - Part 1: General

EN 13480-3:2017, Metallic industrial piping - Part 3: Design and calculation

ISO 4126-9:2008, Safety devices for protection against excessive pressure — Part 9: Application and installation of safety devices excluding stand-alone bursting disc safety devices

### 3 Terms and definitions

For the purposes of this document the terms and definitions given in EN 12952-1:2015, EN ISO 4126-1:2013, EN ISO 4126-4:2013 and EN ISO 4126-5:2013 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at http://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/

<sup>&</sup>lt;sup>1</sup> Document impacted by EN ISO 4126-1:2013/A1:2016 and EN ISO 4126-1:2013/A2:2019.

<sup>&</sup>lt;sup>2</sup> Document impacted by EN ISO 4126-5:2013/A1:2016.

<sup>&</sup>lt;sup>3</sup> Document impacted by EN 764-7:2002/AC:2006.