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Water-tube boilers and auxiliary installations - Part 8: Requirements for firing systems for liquid and gaseous fuels for the boiler

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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Water-tube boilers and auxiliary installations - Part 8: Requirements for firing systems for liquid and gaseous fuels for the boiler

Chaudières à tubes d'eau et installations auxiliaires -Partie 8 : Exigences pour les équipements de chauffe pour combustibles gazeux et liquides de la chaudière Wasserrohrkessel und Anlagenkomponenten - Teil 8: Anforderungen an Feuerungsanlagen für flüssige und gasförmige Brennstoffe für den Kessel

This European Standard was approved by CEN on 15 August 2022.

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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

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European foreword

This document (EN 12952-8:2022) 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of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.

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 12952-8:2002.

The technical modifications in comparison with the previous edition are listed in Annex D.

The 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

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.

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, Türkiye and the United Kingdom.

1 Scope

1.1 Firing systems

This document specifies requirements for liquid and gaseous fuel firing systems of steam boilers and hot water generators as defined in EN 12952-1:2015.

These requirements also apply to firing systems of chemical recovery boilers (black liquor boilers) with the additions and amendments specified in Annex A.

These requirements also apply to gas turbines in combination with fired/unfired heat recovery steam generators with the additions and amendments specified in Annex B.

NOTE 1 This document is not applicable to coil type boilers (flash boilers/small boilers) that use burners in accordance with EN 12953-7 for single burner installations.

NOTE 2 This document is not applicable to the storage of liquid fuels and to transfer stations of long-distance gas pipelines.

1.2 Fuels

This document specifies requirements which cover the use of liquid and gaseous fuels as defined in this document. Fuels deviating from standardized commercially available types can require additional or alternative safety measures. For black liquor these safety measures are given in Annex A.

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 161:2011+A3:2013, Automatic shut-off valves for gas burners and gas appliances

EN 751-3:1996,¹ Sealing materials for metallic threaded joints in contact with 1st, 2nd and 3rd family gases and hot water – Part 3: Unsintered PTFE tapes

EN 12952-18:2012, Water-tube boilers and auxiliary installations - Part 18: Operating instructions

EN 12952-5:2021, Water-tube boilers and auxiliary installations - Part 5: Workmanship and construction of pressure parts of the boiler

EN 13480-2:2017, Metallic industrial piping - Part 2: Materials

EN 16678:2015, Safety and control devices for gas burners and gas burning appliances - Automatic shutoff valves for operating pressure of above 500 kPa up to and including 6 300 kPa

EN ISO 228-1:2003, Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)

EN ISO 9606-1:2017, Qualification testing of welders - Fusion welding - Part 1: Steels (ISO 9606-1:2012 including Cor 1:2012 and Cor 2:2013)

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¹ As impacted by EN 751-3:1996/AC:1997.

EN ISO 23553-1:2022, Safety and control devices for oil burners and oil-burning appliances - Particular requirements - Part 1: Automatic and semi-automatic valves (ISO 23553-1:2022)

ISO 7-1:1994, Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation

koniec náhľadu – text ďalej pokračuje v platenej verzii STN