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BSI Standards Publication

Water-tube boilers and auxiliary installations

Part 9: Requirements for firing systems for pulverized solid fuels for the boiler

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National foreword

This British Standard is the UK implementation of EN 12952-9:2022. It supersedes BS EN 12952-9:2002, which is withdrawn.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.

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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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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 30 November 2022.

Amendments/corrigenda issued since publication

Date	Text affected
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Supersedes EN 12952-9:2002

English Version

Water-tube boilers and auxiliary installations - Part 9: Requirements for firing systems for pulverized solid fuels for the boiler

Chaudières à tubes d'eau et installations auxiliaires -
Partie 9: Exigences pour les équipements de chauffe
pour combustibles solides de la chaudière

Wasserrohrkessel und Anlagenkomponenten - Teil 9:
Anforderungen an Staubfeuerungsanlagen für den
Kessel

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

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

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European foreword

This document (EN 12952-9:2022) 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 12952-9:2002.

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

The EN 12952 series 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 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.*

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- *Part 18: Operating instructions*

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 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.

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1 Scope

1.1 Firing systems

This document applies to pulverized fuel firing systems of steam boilers and hot water generators and commences at the filling equipment for the boiler bunkers or for the pulverized fuel storage system and ends at the ash extraction plant. For multifuel firing systems using separate or combined burners, these requirements apply to the pulverized fuel firing part involved. For other fuels or firing systems used in combination, other requirements apply, e.g. EN 12952-8:2022.

1.2 Fuels

These requirements cover the use of pulverized fuels (e.g. coke, anthracite, bituminous coal or hard coal, lignite or brown coal, petrol coke, oil shale and pulverized bio mass) ranging from low to high volatile matter content.

1.3 Operation

Requirements for operational equipment apply for steam boilers and hot water generators with permanent supervision by properly trained persons.

As firing systems using pulverized fuel can be designed either as direct-firing or as indirect-firing systems, operational requirements have to be differentiated. Annex A summarizes the operational requirements for firing systems including the pulverizing system.

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 1127-1:2019, *Explosive atmospheres - Explosion prevention and protection - Part 1: Basic concepts and methodology*

EN ISO 4126-1:2013,¹ *Safety devices for protection against excessive pressure - Part 1: Safety valves (ISO 4126-1:2013)*

EN 12952-8:2022, *Water-tube boilers and auxiliary installations — Part 8: Requirements for firing systems for liquid and gaseous fuels for the boiler*

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

¹ As impacted by EN ISO 4126-1:2013/A1:2016 and EN ISO 4126-1:2013/A2:2019.