



SLOVENSKI STANDARD
oSIST prEN 12953-2:2024

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Mnogovodni kotli - 2. del: Materiali za tlačno obremenjene dele in opremo kotla

Shell boilers - Part 2: Materials for pressure parts of boilers and accessories

Großwasserraumkessel - Teil 2: Werkstoffe für drucktragende Kesselteile und Zubehör

Chaudières à tubes de fumée - Partie 2: Matériaux des parties sous pression des chaudières et des accessoires

Ta slovenski standard je istoveten z: prEN 12953-2

ICS:

27.060.30 Grelniki vode in prenosniki toplote Boilers and heat exchangers

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EUROPEAN STANDARD
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ICS

Will supersede EN 12953-2:2012

English Version

Shell boilers - Part 2: Materials for pressure parts of boilers and accessories

Chaudières à tubes de fumée - Partie 2: Matériaux des
parties sous pression des chaudières et des accessoires

Großwasserraumkessel - Teil 2: Werkstoffe für
drucktragende Kesselteile und Zubehör

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 269.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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European foreword

This document (prEN 12953-2:2024) has been prepared by Technical Committee CEN/TC 269 “Shell and water-tube boilers”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

Annex B provides details of significant technical changes between this document and the previous edition.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

The European Standard series EN 12953 concerning shell boilers 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: Workmanship and construction of pressure parts of the boiler*
- *Part 5: Inspection during construction, documentation and marking of pressure parts of the boiler*
- *Part 6: Requirements for equipment for the boiler*
- *Part 7: Requirements for firing systems for liquid and gaseous fuels for the boiler*
- *Part 8: Requirements for safeguards against excessive pressure*
- *Part 9: Requirements for limiting devices of the boiler and accessories*
- *Part 10: Requirements for boiler feed water and boiler water quality*
- *Part 11: Acceptance tests*
- *Part 12: Requirements for firing systems for solid fuels for the boiler*
- *Part 13: 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 shell boilers requires the application of more than one part in order for the requirements of the standard to be satisfactorily fulfilled.

NOTE A “Boiler Helpdesk” has been established in CEN/TC 269 which can be contacted for any questions regarding the application of the European Standards series EN 12952 and EN 12953 see the following website: <http://www.boiler-helpdesk.din.de>

prEN 12953-2:2024 (E)

1 Scope

This document specifies the following materials for the pressure parts of shell boilers and equipment of shell boilers (e.g. valves), subjected to internal and external pressure including integral attachments:

- flat products (plate) and parts formed from flat products (e.g. shell, furnace, dished ends);
- tubes and parts formed from tubes (e.g. bending, elbows, reducers, fittings);
- forgings and cast products ;
- bolting materials;
- welding consumables.

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 764-4:2014, *Pressure equipment - Part 4: Establishment of technical delivery conditions for metallic materials*

EN 1092-1:2018, *Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 1: Steel flanges*

EN 1092-2:2023, *Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 2: Cast iron flanges*

EN 1515-4:2021, *Flanges and their joints - Bolting - Part 4: Selection of bolting for equipment subject to the Pressure Equipment Directive 2014/68/EU*

EN 1561:2011, *Founding - Grey cast irons*

<https://standards.iteh.ai/catalog/standards/sist/6ba05b2c-7ec1-4f2b-a847-4abd684bf4f8/osist-pren-12953-2-2024>

EN 1563:2018, *Founding - Spheroidal graphite cast irons*

EN 1759-1:2004, *Flanges and their joint - Circular flanges for pipes, valves, fittings and accessories, Class designated - Part 1: Steel flanges, NPS 1/2 to 24*

EN 10028-2:2017, *Flat products made of steels for pressure purposes - Part 2: Non-alloy and alloy steels with specified elevated temperature properties*

EN 10028-3:2017, *Flat products made of steels for pressure purposes - Part 3: Weldable fine grain steels, normalized*

EN 10204:2004, *Metallic products - Types of inspection documents*

EN 10213:2007+A1:2016, *Steel castings for pressure purposes*

EN 10216-1:2013, *Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 1: Non-alloy steel tubes with specified room temperature properties*

EN 10216-2:2013+A1:2019, *Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties*