НАЦІОНАЛЬНИЙ СТАНДАРТ УКРАЇНИ

SHELL BOILERS
Part 5: Inspection during construction, documentation and marking of pressure parts of the boiler

uk: КОТЛИ ЖАРОТРУБНІ
Частина 5: Огляд під час виготовляння; документація та маркування складників котлів, що перебувають під тиском
(EN 12953-5:2002, IDT)

ДСТУ EN 12953-5:2006

КИЇВ

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Shell boilers - Part 5: Inspection during construction, documentation and marking of pressure parts of the boiler

Chaudières à tubes de fumée - Partie 5: Contrôles en cours de construction, documentation et marquage des parties sous pression des chaudières

Großwasserraumkessel - Teil 5: Prüfung während der Herstellung, Dokumentation und Kennzeichnung für drucktragende Kesselteile

This European Standard was approved by CEN on 15 May 2002.

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Foreword

This document (EN 12953-5:2002) 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 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 standard.

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of an identical text or by endorsement, at the latest by November 2002, and conflicting national standards shall be withdrawn at the latest by November 2002.

The European Standard 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 feedwater and boiler water quality.*

— *Part 11: Acceptance tests.*

— *Part 12: Requirements for firing systems for solid fuels for the boiler.*

— *Part 13: Operational instructions.*

CR 12953-14: *Guidelines 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 shell boilers requires the application of more than one Part in order for the requirements of the standard to be satisfactorily fulfilled.

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 the European Standard specifies requirements for the inspection during construction, documentation and marking of shell boilers as defined in EN 12953-1.

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).

EN 288-3:1992, *Specification and approval of welding procedures for metallic materials — Part 3: Welding procedure tests for the arc welding of steels.*

EN 473, *Non destructive testing — Qualification and certification of NDT personnel — General principles.*

EN 571-1, *Non-destructive testing — Penetrate testing — Part 1: General principles.*

EN 764, *Pressure equipment — Terminology and symbols — Pressure, temperature, volume.*

EN 875, *Destructive tests on welds in metallic materials — Impact tests — Test specimen location, notch orientation and examination.*

EN 876, *Destructive tests on welds in metallic materials — Longitudinal tensile test on weld metal in fusion welded joints.*

EN 895, *Destructive tests on welds in metallic materials — Transverse tensile test.*

EN 910, *Destructive tests on welds in metallic materials — Bend tests.*

EN 970, *Non-destructive examination of fusion welds — Visual examination.*

EN 1290, *Non-destructive examination of welds — Magnetic particle examination of welds.*

EN 1321, *Destructive tests on welds in metallic materials — Macroscopic and microscopic examination of welds.*

EN 1435, *Non-destructive examination of welds — Radiographic examination of welded joints.*

EN 1712, *Non-destructive examination of welds — Ultrasonic examination of welded joints — Acceptance levels.*

EN 1713, *Non-destructive examination of welds — Ultrasonic examination — Characterization of indications in welds.*

EN 1714, *Non-destructive examination of welds — Ultrasonic examination of welded joints.*

EN 12953-1:2002, *Shell boilers — Part 1: General.*EN 12953-3:2002, *Shell boilers — Part 3: Design and calculation for pressure parts.*

EN 12953-4:2002, *Shell boilers — Part 4: Workmanship under construction of pressure parts of the boiler.*

EN 25817, *Arc-welded joints in steel — Guidance on quality levels for imperfections (ISO 5817:1992).*

EN ISO 6520-1, *Welding and allied processes - Classification of geometric imperfections in metallic materials - Part 1: Fusion welding (ISO 6520-1:1998).*