## ᲡᲐᲥᲐᲠᲗᲕᲔᲚᲝᲡ ᲔᲠᲝᲕᲜᲣᲚᲘ ᲡᲢᲐᲜᲦᲐᲠᲢᲘ

წყალმილა ქვაბები და დამხმარე მოწყობილობები- ნაწილი 11: მოთხოვნები წყალმილა ქვაბების შემზღუდავი მექანიზმებისა და მოწყობილობების მიმართ

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- 1 შემუშამებულია საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტებისა და ტექნიკური რეგლამენტების დეპარტამენტის მიერ
- 3 მიღებულია გარეკანის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი მნ 12952-11 : 2007 "წყალმილა ქვაზები და დამხმარე მოწყობილობებინაწილი 11: მოთხოვნები წყალმილა ქვაზების შემზღუდავი მექანიზმებისა და მოწყობილობების მიმართ"

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**5 რმბ0სტრ0რმბშლ0ა** საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2010 წლის 29 ივნისი №268-1.3-4692

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 12952-11

July 2007

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#### **English Version**

## Water-tube boilers and auxiliary installations - Part 11: Requirements for limiting devices of the boiler and accessories

Chaudières à tubes d'eau et installations auxiliaires - Partie 11: Exigences pour les dispositifs de limitation de la chaudière et de ses accessoires Wasserrohrkessel und Anlagekomponenten - Teil 11: Anforderungen an Begrenzungseinrichtungen an Kessel und Zubehör

This European Standard was approved by CEN on 26 May 2007.

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 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 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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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#### **Foreword**

This document (EN 12952-11:2007) 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 January 2008, and conflicting national standards shall be withdrawn at the latest by January 2008.

This document 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 document.

The European Standard EN 12952 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.

Although these Parts can be obtained separately, it should be recognised 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 standard to be satisfactorily fulfilled.

NOTE Parts 4 and 15 are not applicable during the design, construction and installation stages.

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

### Introduction

The types of limiters which shall be fitted to boilers are specified in EN 12952-7 and the design of the safety systems are specified in EN 50156-1.

A limiter (or limiting device) is one element of a water-tube boiler safety system. It comprises a sensor and monitoring elements to achieve the desired level of reliability.

In order to provide the necessary safety function, for example, to cut off the heat supply to the boiler in the event of a low water fault, the limiter is connected to other elements in the safety system such as actuators and safety logic circuits.