

## **Valves - Materials for bodies, bonnets and covers - Part 2: Steels other than those specified in European Standards**

Valves - Materials for bodies, bonnets and covers -  
Part 2: Steels other than those specified in European  
Standards

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1503-2:2001 sisaldab Euroopa standardi EN 1503-2:2000 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 09.03.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1503-2:2001 consists of the English text of the European standard EN 1503-2:2000.</p> <p>This document is endorsed on 09.03.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This Standard lists steels for pressure containing valve bodies, bonnets and covers which are given in Standards other than European Standards.</p>	<p><b>Scope:</b> This Standard lists steels for pressure containing valve bodies, bonnets and covers which are given in Standards other than European Standards.</p>
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**ICS** 23.060.01, 77.140.30

**Võtmesõnad:** capacitive loads, compression stresses, enclosures, lids, materials, pressure, steels, steels for pressure vessels, structural steel members, upper side, valve housings, valves

**English version**

**Valves – Materials for bodies, bonnets and covers**

**Part 2: Steels other than those specified in European Standards**

Appareils de robinetterie – Matériaux pour les corps, chapeaux et couvercles – Partie 2: Autres aciers que ceux spécifiés dans les normes européennes

Armaturen – Werkstoffe für Gehäuse, Oberteile und Deckel – Teil 2: Stähle, die in Europäischen Normen nicht festgelegt sind

This European Standard was approved by CEN on 2000-10-06.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 69 "Industrial valves", the secretariat of which is held by AFNOR.

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 2001, and conflicting national standards shall be withdrawn at the latest by April 2001.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association. This European Standard is considered to be a supporting standard to those application and product standards which in themselves support an essential safety requirement of a New Approach Directive and which make reference to this European Standard.

EN 1503 comprises four parts :

- Part 1 : Steels specified in European Standards ;
- Part 2 : Steels other than those specified in European Standards ;
- Part 3 : Cast irons specified in European Standards ;
- Part 4 : Copper alloys specified in European Standards.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard lists steels for pressure containing valve bodies, bonnets and covers which are given in Standards other than European Standards.

## 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 incorporate in it by amendments or revision. For undated references, the latest edition of the publication referred to applies (including amendments).

EN 1503-1, *Valves – Materials for bodies, bonnets and covers – Part 1 : Steels specified in European Standards.*

prEN 1092-1:1997, *Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 1: Steel flanges.*

ASTM A 105-95, *Carbon Steel Forgings.*

ASTM A 106-94a, *Seamless Carbon Steel Pipe.*

ASTM A 182-94c, *Alloy Steel Forged or Rolled Parts.*

ASTM A 203-93, *Nickel Alloy Steel Plates.*

ASTM A 204-93, *Pressure Vessel Plates, Carbon Steel, Molybdenum.*

ASTM A 216-93, *Carbon Steel Castings.*

ASTM A 217-93, *Alloy Steel Castings.*

ASTM A 240-94b, *Stainless Steel Plate.*

ASTM A 302-93, *Pressure Vessel Plates, Carbon Steel, Manganese-Molybdenum and Manganese-Molybdenum-Nickel.*

ASTM A 312-94b, *Stainless Steel Pipe, Seamless or Welded.*

ASTM A 335-94, *Seamless Ferritic Alloy Steel Pipe.*

ASTM A 350-95, *Low-Temperature Alloy Steel Forged or Rolled Parts.*

ASTM A 351-94, *Stainless Steel Castings.*

ASTM A 352-93, *Low-Temperature Carbon and Alloy Steel Castings.*

ASTM A 358-94, *Electric Fusion-Welded Stainless Steel Pipe.*

ASTM A 369-92, *Ferritic Alloy Forged or Bored Pipe.*

ASTM A 376-93, *Stainless Steel Pipe, Seamless for Central Station Service.*

ASTM A 387-84, *Alloy Steel Plates.*

ASTM A 430-91, *Stainless Steel Forged or Bored Pipe.*

ASTM A 479-95, *Alloy Steel Bars and Shapes.*

ASTM A 515-92, *Carbon Steel Plates, High Temperature.*

ASTM A 516-90, *Carbon Steel Plates, Low Temperature.*

ASTM A 537-91, *Carbon-Manganese-Silicon Steel Plates.*

ASTM A 672-94, *Electric-Fusion Welded Steel Pipe.*

ASTM A 675-90a, *Carbon Steel Bars.*

ASTM A 691-93, *Carbon & Alloy Steel Pipe - Electric-Fusion Welded.*

ASTM A 696-90a, *Carbon Steel Bars.*

ASTM A 739-90a, *Alloy Steel Bars.*

ASTM A 789-94, *Seamless and Welded Ferritic/Austenitic Stainless Steel Tubing for General Service.*

ASTM A 790-94, *Seamless and Welded Ferritic/Austenitic Stainless Steel Pipe.*

### **3 Materials**

As well as the EN-steels which are listed in EN 1503-1 all ASTM-steels given in Tables 1, 2 and 3 can also be used for the manufacture of pressure containing valve bodies, bonnets and covers.

Table 1 lists unalloyed steels, Table 2 low alloy steels and Table 3 high alloy steels.

The materials shall be used within the limits specified in the tables.

The material shall not be used at temperatures below  $-29^{\circ}\text{C}$  or the standard impact test temperature specified in the material standard.

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