

Structural bearings - Part 2: Sliding elements

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

| | |
|---|--|
| See Eesti standard EVS-EN 1337-2:2001 sisaldab Euroopa standardi EN 1337-2:2000 ingliskeelset teksti. | This Estonian standard EVS-EN 1337-2:2001 consists of the English text of the European standard EN 1337-2:2000. |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. |
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| Standard on kättesaadav Eesti Standardikeskusest. | The standard is available from the Estonian Centre for Standardisation. |

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English version

Structural bearings - Part 2: Sliding elements

Appareils d'appui structuraux - Partie 2: Éléments de glissement

Lager im Bauwesen - Teil 2: Gleitteile

This European Standard was approved by CEN on 18 November 2000.

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 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 Management Centre has the same status as the official versions.

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



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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 167 "Structural bearings", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by June 2001, and conflicting national standards shall be withdrawn at the latest by June 2001.

This European Standard EN 1337 "Structural bearings", consists of the following 11 Parts:

Part 1: General design rules

Part 2: Sliding elements

Part 3: Elastomeric bearings

Part 4: Roller bearings

Part 5: Pot bearings

Part 6: Rocker bearings

Part 7: Spherical and cylindrical PTFE bearings

Part 8: Guide bearings and restraint bearings

Part 9: Protection

Part 10: Inspection and maintenance

Part 11: Transport, storage and installation

Further to CEN/TC 167's decision Part 1 and 2 form a package of standards and they come into force together, while the other parts come into force separately after the publication of parts 1 and 2.

Annexes A, B, C and L are informative. Annexes D, E, F, G, H, J and K are normative.

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.

Introduction

This standard considers a minimum operating temperature of -35°C .

An extension down to -40°C will be considered in a future amendment.

Applications beyond the range of temperature given in clause 1 need special consideration not covered by this standard. Characteristics and requirements given in this standard do not apply in such cases.

1 Scope

This European Standard specifies the characteristics for the design and manufacture of sliding elements and guides which are not structural bearings but only parts of them for combination with structural bearings as defined in other Parts of this European Standard.

Suitable combinations are shown in Table 1 of EN 1337-1:2000.

Sliding surfaces with a diameter of the circumscribing circle of single or multiple PTFE sheets less than 75 mm or greater than 1500 mm, or with effective bearing temperatures less than -35°C or greater than 48°C are outside the scope of this European Standard.

Sliding elements for use as temporary devices during construction, for example during launching of the superstructure, are also outside the scope of this European Standard.

In this standard the specification is also given for curved sliding surfaces which are not part of separate sliding elements but which are incorporated in cylindrical or spherical PTFE bearings as per EN 1337.

NOTE The general principles detailed in this European Standard may be applied for sliding elements outside this scope, but their suitability for the intended use should be proven.

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 1337-1:2000 | Structural bearings - Part 1: General design rules |
| prEN 1337-3:1996 | Structural bearings - Part 3: Elastomeric bearings |
| EN 1337-7 | Structural bearings - Part 7: Spherical and cylindrical PTFE bearings |
| EN 1337-9 | Structural bearings – Part 9: Protection |
| prEN 1337-10:1998 | Structural bearings - Part 10: Inspection and maintenance |
| EN 1337-11:1997 | Structural bearings - Part 11: Transport, storage and Installation |
| ENV 1992-1-1 | Eurocode 2: Design of concrete structures - Part 1-1: General rules and rules for building |

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|-----------------------|---|
| ENV 1993-1-1 | Eurocode 3: Design of steel structures - Part 1-1: General rules and rules for building |
| EN 10025:1990/A1:1993 | Hot rolled products of non-alloy structural steels –Technical delivery conditions (includes amendment A1:1993) |
| EN 10088-2 | Stainless steels – Part 2: Technical delivery conditions for sheet/plate and strip for general purposes |
| EN 10113-1 | Hot-rolled products in weldable fine grain structural steels - Part 1: General delivery conditions |
| EN 10137-1 | Plates and wide flats made of high yield strength structural steels in the quenched and tempered or precipitation hardened conditions – Part 1: General delivery conditions |
| EN 10204 | Metallic products - Types of inspection documents |
| ISO 527-2:1993 | Plastics - Determination of tensile properties - Part 2: Testing conditions for moulding and extrusion plastics |
| ISO 1083 | Spheroidal graphite cast iron - Classification |
| ISO 1183 | Plastics - Methods for determining the density and relative density of non-cellular plastics |
| ISO 2039-1 | Plastics - Determination of hardness - Part 1: Ball indentation method |
| ISO 2137 | Petroleum products - Lubricating grease and petrolatum - Determination of cone penetration |
| ISO 2176 | Petroleum products - Lubricating grease - Determination of dropping point |
| ISO 2409 | Paints and varnishes - Cross-cut-test |
| ISO 3016 | Petroleum products - Determination of pour point |
| ISO 3522 | Cast aluminium alloys - Chemical composition and mechanical properties |
| ISO 3755 | Cast carbon steels for general engineering purposes |
| ISO 4287 | Geometrical product Specifications (GPS) – Surface texture: Profile method – Terms, definitions and surface texture parameters |
| ISO 6158 | Metallic coatings - Electroplated coatings of chromium for engineering purposes |
| ISO 6506 | Metallic materials – Brinell hardness test |
| ISO 6507-1 | Metallic materials – Vickers hardness test - Part 1: Test method |
| ISO 6507-2 | Metallic materials - Vickers hardness test - Part 2: Verification of testing machine |