

## **Konstruksioonilaagrid. Osa 6: Sillatalad**

Structural bearings - Part 6: Rocker bearings

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                             |
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| <p>Käesolev Eesti standard EVS-EN 1337-6:2004 sisaldab Euroopa standardi EN 1337-6:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.07.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 1337-6:2004 consists of the English text of the European standard EN 1337-6:2004.</p> <p>This document is endorsed on 27.07.2004 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></p> <p>This part of EN 1337 specifies the requirements for the design and manufacture of rocker bearings. In order to accommodate displacements rocker bearings can be combined with a sliding element in accordance with EN 1337-2. Bearings which are subjected to rotation greater than 0,05 rad resulting from the characteristic combination of actions are outside the scope of this part of EN 1337. This part of EN 1337 does not apply to rocker bearings made with materials other than those specified in clause 5.</p> | <p><b>Scope:</b></p> <p>This part of EN 1337 specifies the requirements for the design and manufacture of rocker bearings. In order to accommodate displacements rocker bearings can be combined with a sliding element in accordance with EN 1337-2. Bearings which are subjected to rotation greater than 0,05 rad resulting from the characteristic combination of actions are outside the scope of this part of EN 1337. This part of EN 1337 does not apply to rocker bearings made with materials other than those specified in clause 5.</p> |
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Võtmesõnad:

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English version

## Structural bearings - Part 6: Rocker bearings

Appareils d'appui structuraux - Partie 6: Appareils d'appui à balanciers

Lager im Bauwesen - Teil 6: Kipplager

This European Standard was approved by CEN on 2 February 2004.

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.

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 Central Secretariat 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 1337-6:2004) 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 October 2004, and conflicting national standards shall be withdrawn at the latest by January 2006.

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 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 restrain bearings    |
| Part 9  | Protection                              |
| Part 10 | Inspection and maintenance              |
| Part 11 | Transport, storage and installation     |

Annex A is normative and annex B is informative.

This document includes a Bibliography.

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

## 1 Scope

This part of EN 1337 specifies the requirements for the design and manufacture of rocker bearings. In order to accommodate displacements rocker bearings can be combined with a sliding element in accordance with EN 1337-2. Bearings which are subjected to rotation greater than 0,05 rad resulting from the characteristic combination of actions are outside the scope of this part of EN 1337. This part of EN 1337 does not apply to rocker bearings made with materials other than those specified in clause 5.

## 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*.

EN 1337-2:2004, *Structural bearings — Part 2: Sliding elements*.

EN 1337-7, *Structural bearings - Part 7: Spherical and cylindrical PTFE bearings*.

EN 1337-9:1997, *Structural bearings — Part 9: Protection*.

EN 1337-10, *Structural bearings — Part 10: Inspection and maintenance*.

EN 1990, *Eurocode - Basis of structural design*.

EN 10025, *Hot rolled products of non-alloy structural steels — Technical delivery conditions*.

EN 10083-1, *Quenched and tempered steels — Part 1: Technical delivery conditions for special steels*.

EN 10083-2, *Quenched and tempered steels — Part 2: Technical delivery condition for unalloyed quality steels*.

EN 10088-2, *Stainless steels — Part 2: Technical delivery conditions for sheet/plate and strip for general purposes*.

EN 10160, *Ultrasonic testing of steel flat product of thickness equal or greater than 6 mm (reflection method)*.

EN 10204, *Metallic products — Types of inspection documents*.

EN ISO 4287, *Geometrical product specifications (GPS) - Surface texture: Profile method - Terms, definitions and surface texture parameters (ISO 4287:1997)*.

EN ISO 6506-1, *Metallic materials - Brinell hardness test - Part 1: Test method (ISO 6506-1:1999)*.

ISO 1083, *Spheroidal graphite cast iron – Classification*.

ISO 3755, *Cast carbon steels for general engineering purposes*.

## 3 Terms, definitions and symbols

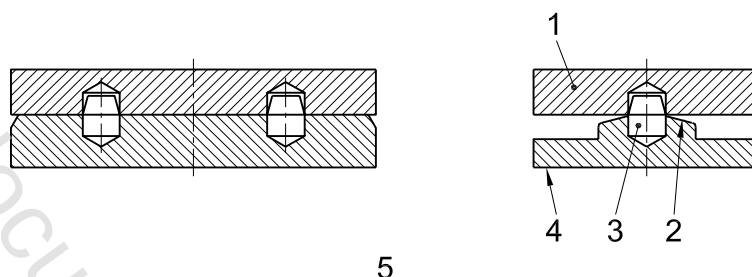
### 3.1 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

### 3.1.1

#### line rocker

bearing which is formed by a partial cylindrical surface rolling on a flat plate. It permits rotation about an axis parallel to the axis of the curved surface (see Figure 1). If necessary the rocker and rocker plate can be inverted



#### Key

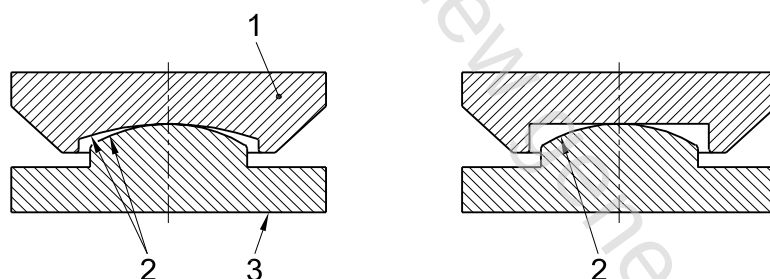
- 1 Rocker plate
- 2 Cylindrical surface
- 3 Line rocker bearing
- 4 Line rocker
- 5 Line rocker bearing

Figure 1 — Typical line rocker bearing

### 3.1.2

#### point rocker

bearing which is formed by a convex spherical surface rolling on a flat or concave spherical surface of larger radius (see Figure 2)



#### Key

- 1 Rocker plate
- 2 Spherical surfaces
- 3 Point rocker

Figure 2 — Typical point rocker bearing

### 3.1.3

#### rocker

component with a curved convex surface formed on one face. The curved surface can be a portion of a cylinder or sphere (see Figures 1 and 2)

### 3.1.4

#### rocker plate

component which operates in contact with the rocker. It can be flat or a concave portion of a sphere (see Figures 1 and 2)