

## **Konstruksioonilaagrid. Osa 3: Elastomeersed laagrid**

Structural bearings - Part 3: Elastomeric bearings

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1337-3:2005 sisaldab Euroopa standardi EN 1337-3:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 30.05.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1337-3:2005 consists of the English text of the European standard EN 1337-3:2005.</p> <p>This document is endorsed on 30.05.2005 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 applies to elastomeric bearings with or without complementary bearing devices to extend their field of use such as flat sliding elements covered by EN 1337-2 or sliding surface described in 4.4.4, as used in bridge structures or any other structure with comparable support conditions.</p>	<p><b>Scope:</b></p> <p>This part of EN 1337 applies to elastomeric bearings with or without complementary bearing devices to extend their field of use such as flat sliding elements covered by EN 1337-2 or sliding surface described in 4.4.4, as used in bridge structures or any other structure with comparable support conditions.</p>
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English version

## Structural bearings - Part 3: Elastomeric bearings

Appareils d'appui structuraux - Partie 3: Appareils d'appui  
en élastomère

Lager im Bauwesen - Teil 3: Elastomerlager

This European Standard was approved by CEN on 4 June 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.

CEN members are the national standards bodies of 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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## Foreword

This document (EN 1337-3:2005) 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 September 2005, and conflicting national standards shall be withdrawn at the latest by December 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.

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

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 applies to elastomeric bearings with or without complementary bearing devices to extend their field of use such as flat sliding elements covered by EN 1337-2 or sliding surface described in 4.4.4, as used in bridge structures or any other structure with comparable support conditions.

This part of EN 1337 applies to elastomeric bearings with dimensions in plan up to (1200 x 1200) mm and does not cover elastomeric bearings made with other elastomers materials than those specified in 4.4.1. It applies to laminated bearings types A, B, C, laminated sliding bearings types E and D, plain pad and strip bearings type F.

This part deals with bearings for use in operating temperatures ranging from – 25 °C to + 50 °C and for short periods up to + 70 °C.

It is recognised that the air temperature in some regions of Northern Europe is lower than –25 °C.

In this case of very low operating temperature (down to – 40 °C), it is essential that bearing characteristics comply also with the shear modulus at very low temperature (see 4.3.1.3. and annex F)

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1337-1:2000, *Structural bearings - Part 1: General design rules.*

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

prEN 1337-8, *Structural bearings - Part 8: Guide bearings and restrain bearings.*

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

EN 1337-10; *Structural Bearings - Part 10: Inspection and maintenance.*

EN 1337-11; *Structural bearings - Part 11: Transport, storage and installation.*

EN 10025-1, *Hot rolled products of structural steels - Part 1: General technical delivery conditions.*

EN 10025-2, *Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels*

ISO 34-1, *Rubber, vulcanized or thermoplastic - Determination of tear strength - Part 1: Trouser, angle and crescent test pieces.*

ISO 37, *Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties.*

ISO 48, *Rubber, vulcanized or thermoplastic - Determination of hardness (hardness between 10 IRHD and 100 IRHD).*

ISO 188, *Rubber, vulcanized or thermoplastic - Accelerated ageing and heat resistance tests.*

ISO 815, *Rubber, vulcanized or thermoplastic - Determination of compression set at ambient, elevated or low temperatures.*

ISO 1431-1, *Rubber, vulcanized or thermoplastic - Resistance to ozone cracking - Part 1: Static strain testing.*