DIN EN 1337-5



ICS 91.010.30

See start of validity.

Structural bearings

Part 5: Pot bearings English version of DIN EN 1337-5

Lager im Bauwesen - Teil 5: Topflager

Start of validity

This standard is valid from 1 December 2005.

It should be noted that, in Germany, CE conformity marking of construction products will be permitted once this standard has been listed in the *Bundesanzeiger* (German Federal Law Gazette) (1 December 2005 or later).

National foreword

This standard has been prepared by CEN/TC 167 'Structural bearings' (Secretariat: Italy).

The responsible German body involved in its preparation was the *Normenausschuss Bauwesen* (Building and Civil Engineering Standards Committee), Technical Committee 00.91.00 *Lager im Bauwesen* (DIN 4141) (Sp CEN/TC 167 Structural Bearings).

Document comprises 53 pages.



EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1337-5

March 2005

ICS 91.010.30

English version

Structural bearings

Part 5: Pot bearings

Appareils d'appui structuraux – Partie 5: Lager im Bauwesen – Teil 5: Topflager Appareils d'appui à pot

This European Standard was approved by CEN on 2004-06-04.

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CEN

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Foreword

This document (EN 1337-5:2005) 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of an identical text or by endorsement, at the latest by December 2006, and conflicting national standards shall be withdrawn at the latest by December 2006.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.

The European Standard EN 1337 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This part of EN 1337 specifies the requirements for the design and manufacture of pot bearings which will be used for operating temperatures between – 40 °C and 50 °C.

This part of EN 1337 does not apply to pot bearings made with other materials than those specified in clause 5.

Bearings which are subjected to rotation α_d greater than 0,030 rad (see Figure 2) under the characteristic combination of actions or which incorporate elastomeric pads larger than 1500 mm in diameter are beyond the scope of this document.

Depending on the climatic region where the construction work is located the bearings can be designed to one of the following classes related to minimum operating temperatures (the minimum shade air temperatures): -25 °C or -40 °C.

When required to accommodate translational movements, pot bearings may be combined with sliding elements in accordance with EN 1337-2.

NOTE The minimum shade air temperature for a location should be obtained from meteorological data appropriate to a 120 year return period. Consideration should be given to adjustment of this temperature for height and local divergence such as frost pockets and sheltered low-lying areas if the data obtained applies to a general area rather than to a specific location.

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.

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 10025-1, 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 nonalloy structural steels

EN 10083-3, Quenched and tempered steels — Part 3: Technical delivery conditions for boron steels.

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 10204, Metallic products — Types of inspection documents.