SLOVENSKI STANDARD
SIST EN ISO 4566:2000

01-december-2000

Small craft with inboard engine - Propeller shaft ends and bosses with 1 : 10 taper (ISO 4566:1992)

Small craft with inboard engine - Propeller shaft ends and bosses with 1 : 10 taper (ISO 4566:1992)

Kleine Wasserfahrzeuge mit Innenbordmotoren - Propellerwellenenden und Propellernaben mit Kegel 1 : 10 (ISO 4566:1992)

Navires de plaisance a moteur intérieur - Extrémités d'arbres porte-hélices et moyeux d'hélices avec une conicité de 1 : 10 (ISO 4566:1992)

Ta slovenski standard je istoveten z: **EN ISO 4566:1995**

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47.080 Ļolni Small craft

SIST EN ISO 4566:2000 **en**

EUROPEAN STANDARD

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ICS 47.080

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English version

Small craft with inboard engine - Propeller shaft ends and bosses with 1 : 10 taper (ISO 4566:1992)

Navires de plaisance à moteur intérieur - Extrémités d'arbres porte-hélices et moyeux d'hélices avec une conicité de 1 : 10 (ISO 4566:1992)

Kleine Wasserfahrzeuge mit Innenbordmotoren - Propellerwellenenden und Propellernaben mit Kegel 1 : 10 (ISO 4566:1992)

This European Standard was approved by CEN on 1994-10-25. 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

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

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

Foreword

The text of the International Standard from ISO/TC 188 "Small craft" of the International Organization for Standardization (ISO) has been taken over as a European Standard by CEN/CS.

This European Standard supersedes EN 24566:1989.

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 1995, and conflicting national standards shall be withdrawn at the latest by October 1995.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Endorsement notice

The text of the International Standard ISO 4566:1992 has been approved by CEN as a European Standard without any modification.

INTERNATIONAL STANDARD

ISO 4566

Second edition
1992-12-15

Small craft with inboard engine — Propeller shaft ends and bosses with 1:10 taper

Navires de plaisance à moteur intérieur — Extrémités d'arbres porte-hélices et moyeux d'hélices avec une conicité de 1:10

Reference number
ISO 4566:1992(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 4566 was prepared by Technical Committee ISO/TC 188, *Small craft*.

This second edition cancels and replaces the first edition (ISO 4566:1985). In table 1, the nominal diameter, D_{nom}, of 22 mm and its associated values are additional, and corrections have been made in the "key" column for nominal diameter, D_{nom}, of 25 mm. Minor editorial corrections have also been made.

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Small craft with inboard engine — Propeller shaft ends and bosses with 1:10 taper

1 Scope

This International Standard specifies the dimensions for interchangeability of propeller bosses (hubs) and propeller shaft ends in the shaft diameter range of 20 mm to 160 mm with a taper of 1:10[1], intended for installation on inboard-engined small craft.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/R 773:1969, *Rectangular or square parallel keys and their corresponding keyways (Dimensions in millimetres).*

ISO 1947:1973, *System of cone tolerances for conical workpieces from C = 1:3 to 1:500 and lengths from 6 to 630 mm.*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 nominal diameter: Diameter of the large end of the shaft end taper, which is the same as the diameter of the cylindrical shaft, ignoring tolerances.

3.2 taper: Conical portion of the shaft end designed to accommodate a key to transmit the full propeller shaft torque to the propeller, while allowing for disassembly.

4 Dimensions

The dimensions shall be those shown in figure 1 and table 1. The "reference dimensions" indicated in the table shall be considered nominal dimensions for guidance only.

Configurations shown in figure 1 not specified by dimensions in table 1 are not essential to interchangeability and are therefore left to the discretion of the manufacturer.

Nominal diameters without brackets shall be preferred; those in brackets are a second choice.

Thread diameters without brackets shall similarly be preferred; those in brackets are alternatives.

5 Construction details

Details indicated in figure 1 are not intended to restrict design; nor are they to scale. Types and methods of construction or machining of the key, the keyway and their corner radii, the thread undercut and the thread end, or of other optional details (i.e. safety pin hole, centring point, etc.) are left open for individual methods to comply with the configuration of the coupling and/or particular needs.

The length of the thread l_2 shall be equal to thread diameter d_2. The part of the thread engaged by the propeller nut shall be not less than 80 % of the thread length l_2.

6 Tolerances

6.1 Shaft end taper small diameter, d_1

The tolerances shall be as given in table 1. The tolerance deviations are calculated from the nominal diameter.

1) ISO 8845 (to be published) will cover propeller shaft ends and bosses machined to a taper of 1:16.

6.2 Boss taper large diameter, D

The tolerances shall be as given in table 1.

6.3 Cone angle

The tolerances shall be cone diameter tolerances as in ISO 1947 with tolerance ranges equal to the diameter tolerance ranges specified in 6.1 and 6.2 for diameters d_1 and D respectively.

6.4 Keyways and keys

The tolerances shall be those given for normal keys in ISO/R 773.

6.5 Boss length, l_1

The tolerance shall be ± 0,5 mm.

7 Threads

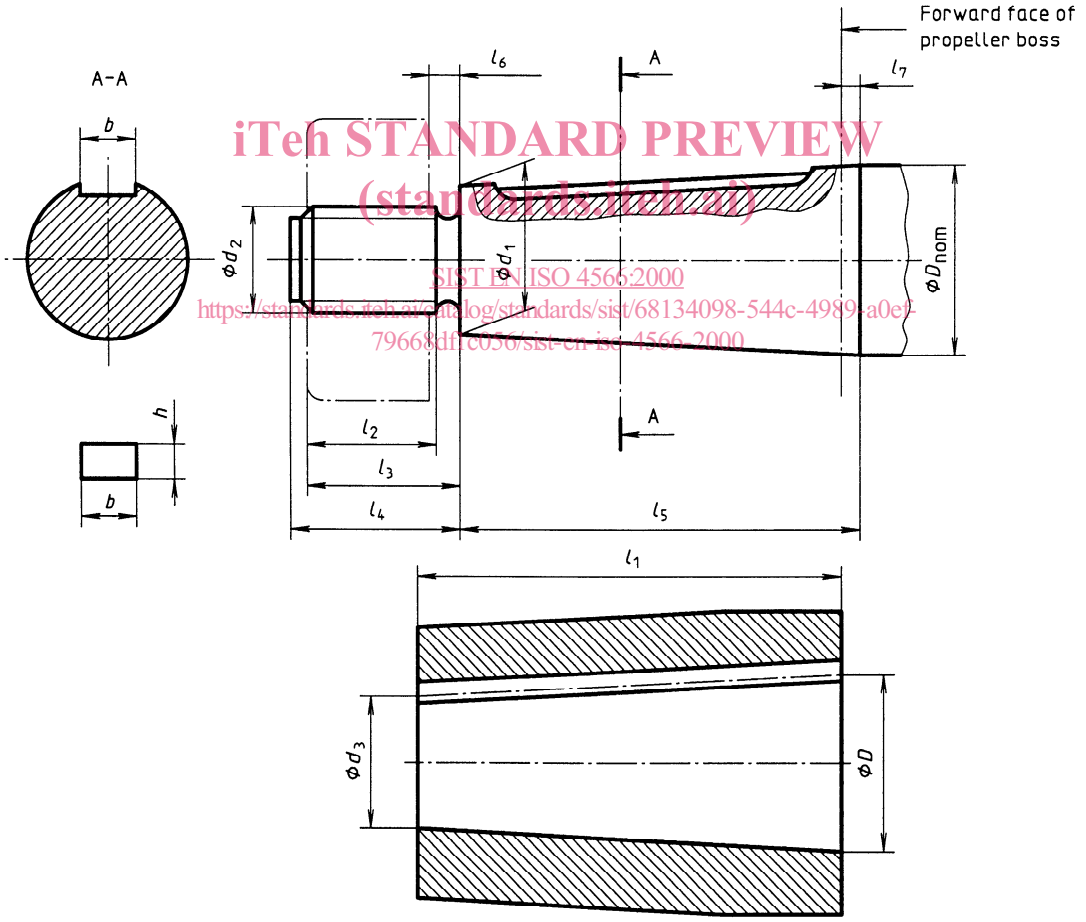
Propeller nuts and shaft ends shall use M-Fine threads.

8 Designation

Both propeller shafts and bosses constructed in accordance with these requirements shall be designated by a reference to this International Standard, and the nominal diameter.

EXAMPLE

Propeller boss ISO 4566 - 35



NOTE — l_2 (thread length) = $\varnothing d_2$
Part of thread engaged by nut = 0,8 l_2
See clause 5.

Figure 1