



SLOVENSKI STANDARD
kSIST FprEN ISO 11592-1:2015
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**Mala plovila - Določitev največje moči pogona z uporabo hitrosti manevriranja - 1.
del: Plovila do 8 m dolžine trupa (ISO/FDIS 11592-1:2015)**

Small craft - Determination of maximum propulsion power rating using manoeuvring speed - Part 1: Craft with a length of hull less than 8 m (ISO/FDIS 11592-1:2015)

Kleine Wasserfahrzeuge - Bestimmung der maximalen Vortriebsleistung - Teil 1: Fahrzeuge mit einer Rumpflänge von unter 8 m (ISO/FDIS 11592-1:2015)

Petits navires - Détermination de la puissance maximale de propulsion en utilisant la vitesse de manoeuvre - Partie 1: Navires d'une longueur de coque de moins de 8 m (ISO/FDIS 11592-1:2015)

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**Small craft — Determination of
maximum propulsion power rating
using manoeuvring speed —**

**Part 1:
Craft with a length of hull less than 8 m**

*Petits navires — Détermination de la puissance maximale de
propulsion en utilisant la vitesse de manoeuvre —*

Partie 1: Navires d'une longueur de coque de moins de 8 m

Please see the administrative notes on page iii

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ISO/CEN PARALLEL PROCESSING

This final draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement. The final draft was established on the basis of comments received during a parallel enquiry on the draft.

This final draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel two-month approval vote in ISO and formal vote in CEN.

Positive votes shall not be accompanied by comments.

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 188, *Small craft*, Subcommittee SC 2, *Engines and propulsion systems*.

This first edition of ISO 11592-1 cancels and replaces ISO 11592:2001, of which it constitutes a minor revision by updating of Title, Foreword, Scope, Normative references, Terms and definitions and Bibliography.

ISO 11592 consists of the following parts, under the general title *Small craft — Determination of maximum propulsion power rating*:

- *Part 1: Craft with a length of hull less than 8 m*
- *Part 2: Craft with a length of hull between 8 m and 24 m*

Small craft — Determination of maximum propulsion power rating using manoeuvring speed —

Part 1: Craft with a length of hull less than 8 m

1 Scope

This part of ISO 11592 specifies the requirements for determination of the maximum propulsion power rating and manoeuvring speed for engine-driven small craft with a length of hull (L_H) of less than 8 m (L_H according to ISO 8666).

This part of ISO 11592 is not applicable to the following:

- personal water craft as defined by ISO 13590;^[6]
- canoes and kayaks;
- inflatable boats, as defined by ISO 6185-1, ISO 6185-2, ISO 6185-3, and ISO 6185-4, except that ISO 6185-3 requires rigid inflatable boats (RIBS) capable of a maximum speed of 30 kn or more to be tested in accordance to this part of ISO 11592;
- racing boats: craft designed and constructed solely for competitive racing.

This part of ISO 11592 does not specify craft constructional strength requirements related to maximum rated power and does not guarantee security from instability under all conditions of seaway, wind, wakes and waves.

2 Normative references

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

ISO 8666, *Small craft — Principal data*

ISO 10240, *Small craft — Owner's manual*

ISO 11192, *Small craft — Graphical symbols*

3 Terms and definitions

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

3.1

engine power

engine manufacturer's declared power rated as specified in ISO 8665

3.2

craft speed

speed of the craft through water

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4 Determination and marking of the maximum propulsion power rating

4.1 Outboard powered craft

4.1.1 The engine power for performance evaluation for outboard powered craft shall be determined by the craft manufacturer in accordance with the method given in [Clauses 6](#) and [7](#), and

- if $v_{\max} > 7\sqrt{L_H}$ kn, where L_H is the length of hull as defined in ISO 8666 and v_{\max} is the maximum speed of the craft, when evaluated in accordance with [Clause 6](#), verified by the manoeuvring test procedure in [Clause 7](#), or
- if $v_{\max} \leq 7\sqrt{L_H}$ kn, the engine power, at the option of the craft manufacturer, shall be the maximum propulsion power rating of the craft.

NOTE Guidelines for determining the maximum power for initial craft performance evaluation are provided in [Annex C](#).

4.1.2 Outboard powered craft supplied by the manufacturer for tiller or optional remote steering shall be tested for both steering configurations if $v_{\max} > 7\sqrt{L_H}$ kn.

4.2 Other types of craft

4.2.1 The maximum propulsion power rating for inboard, inboard-outboard and inboard water jet powered craft shall be established when tested in accordance with [Clauses 5](#) and [6](#) and, if $v_{\max} > 7\sqrt{L_H}$ kn, verified by the manoeuvring test procedure given in [Clause 7](#).

4.2.2 Displacement (non-planing) multihull craft, such as pontoon boats with rounded bottom surfaces, individual hull length to beam ratio of ten or more and outer hull centreline to centreline beam of not less than $L_H/3$, shall

- have maximum propulsion power rating established when tested in accordance with [Clauses 5](#) and [6](#),
- if $v_{\max} > 7\sqrt{L_H}$ kn, meet the manoeuvring test requirements of [Clause 7](#),
- if not in accordance with the manoeuvring test requirements, may be rated for the maximum power tested if they remain stable without loss of directional control or difficulty of the operator remaining at the helm when the helm is turned to the limit stop or two revolutions (720°) from the straight ahead position, whichever occurs first, in both directions, and
- be capable of stopping or turning from a distance of $6L_H$ from the avoidance line, following throttle reduction from v_{\max} , without crossing the avoidance line.

4.2.3 Any manufacturer modification to a boat model that changes the centre of gravity of the craft vertically by more than 10 % of its height above the keel, e.g. for monohulls the bottom at the centreline, horizontally by more than 10 % of L_H or reduces the weight from the original model tested by more than 10 % of that specified in [5.3](#), shall be tested and rated as a separate boat type.

4.2.4 If installation of single or multiple engines of equal total engine power is possible as designed and manufactured, both single and multiple engine installations shall be tested if $v_{\max} > 7\sqrt{L_H}$ kn in accordance with [Clauses 5](#) and [6](#).