

## საქართველოს ეროვნული სტანდარტი

გასაბერი ნაწილი. ნაწილი 1: ნაწილი, კრავის 4,5 კმტ მაქსიმალური  
სიმძლავრით. (ისო 6185-1:2001)

საქართველოს სტანდარტების, ტექნიკური რეგლამენტების  
და მეტროლოგიის ეროვნული სააგენტო  
თბილისი

## საინფორმაციო მონაცემები

**1 შემუშავებულია** საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტებისა და ტექნიკური რეგლამენტების დეპარტამენტის მიერ

**2 დამტკიცებულია და შემოღებულია** სამოქმედოდ საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს 2010 წლის 17 აგვისტოს №90 “ს” განკარგულებით

**3** მიღებულია გარეკანის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის და სტანდარტიზაციის საერთაშორისო ორგანიზაციის სტანდარტი ენ ისო 6185-1 : 2001 “გასაბერი ნაგები. ნაწილი 1: ნაგები, ძრავის 4,5 კვტ მაქსიმალური სიმძლავრით. (ისო 6185-1:2001)”

## 4 პირველად

**5 რეგისტრირებულია** საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2010 წლის 18 აგვისტო №268-1.3-4842

წინამდებარე სტანდარტის სრული ან ნაწილობრივი აღწარმოება, ტირაჟირება და გავრცელება საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე არ დაიშვება

English version

Inflatable boats - Part 1: Boats with a maximum motor power  
rating of 4,5 kW (ISO 6185-1:2001)

Bateaux pneumatiques - Partie 1: Bateaux équipés d'un  
moteur d'une puissance maximale de 4,5 kW (ISO 6185-  
1:2001)

Aufblasbare Boote - Teil 1: Boote mit einer  
Motorhöchstleistung von 4,5 kW (ISO 6185-1:2001)

This European Standard was approved by CEN on 10 November 2001.

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 Management Centre 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

CORRECTED 2002-04-03

## Foreword

This document (ISO 6185-1:2001) has been prepared by Technical Committee ISO/TC 188 "Small craft" in collaboration with CMC.

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 May 2002, and conflicting national standards shall be withdrawn at the latest by May 2002.

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 ZB, which is an integral part of this document.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 6185-1:2001 has been approved by CEN as a European Standard without any modifications.

NOTE Normative references to International Standards are listed in annex ZA (normative).

## Annex ZA (normative)

### Normative references to international publications with their relevant European publications

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).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

| <u>Publication</u> | <u>Year</u> | <u>Title</u>                                                                                                                            | <u>EN</u>      | <u>Year</u> |
|--------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------|
| ISO 8665           | 1994        | Small craft - Marine propulsion engines and systems - Power measurements and declarations                                               | EN ISO 8665    | 1995        |
| ISO 9775           | 1990        | Small craft - Remote steering systems for single outboard motors of 15 kW to 40 kW power                                                | EN 29775       | 1993        |
| ISO 11591          | 2000        | Small craft, engine-driven - Field of vision from helm position                                                                         | EN ISO 11591   | 2000        |
| ISO 12215-1        | 2000        | Small craft - Hull construction and scantlings - Part 1: Materials: Thermosetting resins, glass-fibre reinforcement, reference laminate | EN ISO 12215-1 | 2000        |

**Annex ZB (informative)****Clauses of this European Standard addressing essential requirements or other provisions of EU Directives**

This European Standard 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 94/25/EC.

**WARNING:** Other requirements and other EU Directive may be applicable to the product(s) falling within the scope of this standard.

The following clauses of this standard, as detailed in Table ZB.1, are likely to support requirements of Directive 94/25/EC.

Compliance with the clauses of this standard provides one means of conforming with the specific essential requirements of the Directive concerned and associated EFTA regulations.

**Table ZB.1: Correspondence between this European Standard and EU Directives**

| Clauses/sub-clauses of this European Standard             | Corresponding annexes/ paragraphs of Directive 94/25/EC | Comments                   |
|-----------------------------------------------------------|---------------------------------------------------------|----------------------------|
| 4, 5.1, 5.2, 5.3, 5.4, 5.5, 5.11, 6.5, 6.6, 7.2, A.7, B.2 | 3.1 Structure                                           |                            |
| 5.7, 5.8                                                  | 5.4 Steering system                                     |                            |
| 5.10, 7.3                                                 | 3.9 Towing                                              |                            |
| 6.1, 6.4, A.3                                             | 3.6 Maximum load                                        |                            |
| 6.2, 6.9.2, 7.2, 7.4, A.7, B.4                            | 4 Handling characteristics                              |                            |
| 6.3                                                       | 3.2 Stability                                           | For Category D and C only. |
| 6.7, 6.9, 6.10                                            | 3.3 Buoyancy and flotation                              |                            |
| 6.8, A.6                                                  | 2.3 Means of reboarding                                 |                            |
| 6.11                                                      | 2.4 Visibility for steering                             |                            |
| 7.5, 5.6                                                  | 3.5 Flooding                                            |                            |
| 9                                                         | 2.5 Owner's manual                                      |                            |

---

---

**Inflatable boats —**

**Part 1:**

**Boats with a maximum motor power rating  
of 4,5 kW**

*Bateaux pneumatiques —*

*Partie 1: Bateaux équipés d'un moteur d'une puissance maximale de  
4,5 kW*



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.ch](mailto:copyright@iso.ch)  
Web [www.iso.ch](http://www.iso.ch)

Printed in Switzerland

# Contents

Page

|                                                                                                                                          |    |
|------------------------------------------------------------------------------------------------------------------------------------------|----|
| Foreword.....                                                                                                                            | v  |
| Introduction .....                                                                                                                       | vi |
| 1 Scope .....                                                                                                                            | 1  |
| 2 Normative references .....                                                                                                             | 1  |
| 3 Terms and definitions .....                                                                                                            | 2  |
| 4 Materials .....                                                                                                                        | 3  |
| 4.1 General.....                                                                                                                         | 3  |
| 4.2 Reinforced materials (excluding glass-fibre-reinforced plastics components) and/or<br>unsupported materials making up the hull ..... | 3  |
| 4.2.1 Requirements .....                                                                                                                 | 3  |
| 4.2.2 Test methods.....                                                                                                                  | 4  |
| 4.3 Wood .....                                                                                                                           | 4  |
| 4.3.1 General.....                                                                                                                       | 4  |
| 4.3.2 Plywood .....                                                                                                                      | 5  |
| 4.3.3 Constructional timbers .....                                                                                                       | 5  |
| 4.4 Metal and synthetic material parts.....                                                                                              | 5  |
| 4.5 Glass-fibre-reinforced plastics.....                                                                                                 | 5  |
| 5 Functional components .....                                                                                                            | 5  |
| 5.1 Conditioning.....                                                                                                                    | 5  |
| 5.2 Hull fittings .....                                                                                                                  | 5  |
| 5.2.1 Requirement.....                                                                                                                   | 5  |
| 5.2.2 Test method.....                                                                                                                   | 5  |
| 5.3 Manual lifting and carrying devices.....                                                                                             | 5  |
| 5.3.1 Requirement.....                                                                                                                   | 5  |
| 5.3.2 Test method.....                                                                                                                   | 6  |
| 5.4 Valves.....                                                                                                                          | 6  |
| 5.4.1 Inflation .....                                                                                                                    | 6  |
| 5.4.2 Deflation.....                                                                                                                     | 6  |
| 5.5 Rowlocks and oars .....                                                                                                              | 6  |
| 5.5.1 Requirements .....                                                                                                                 | 6  |
| 5.5.2 Abrasion damage.....                                                                                                               | 7  |
| 5.5.3 Prevention from loosening .....                                                                                                    | 7  |
| 5.5.4 Strength of rowlocks .....                                                                                                         | 7  |
| 5.5.5 Use of the rowlocks and oars.....                                                                                                  | 7  |
| 5.6 Transom (where applicable) .....                                                                                                     | 7  |
| 5.6.1 Requirement.....                                                                                                                   | 7  |
| 5.6.2 Test method.....                                                                                                                   | 7  |
| 5.7 Hull drainage .....                                                                                                                  | 7  |
| 5.8 Rudder steering system (where offered as standard or optional equipment) .....                                                       | 8  |
| 5.8.1 Strength of the assembly .....                                                                                                     | 8  |
| 5.8.2 Rudder-blade.....                                                                                                                  | 8  |
| 5.9 Remote steering system (Type II only where offered as standard or optional equipment).....                                           | 8  |
| 5.10 Motor-securing line attachment (Type II only) .....                                                                                 | 8  |
| 5.11 Towing device (all types) .....                                                                                                     | 8  |
| 5.12 Seating and attachment systems (where offered as standard or optional equipment) .....                                              | 8  |
| 6 Safety requirements of the completed boat.....                                                                                         | 8  |
| 6.1 Maximum permissible number of persons .....                                                                                          | 8  |
| 6.2 Maximum motor power .....                                                                                                            | 9  |
| 6.3 Static stability of the boat .....                                                                                                   | 9  |

|                       |                                                                             |    |
|-----------------------|-----------------------------------------------------------------------------|----|
| 6.3.1                 | Requirement .....                                                           | 9  |
| 6.3.2                 | Test methods.....                                                           | 9  |
| 6.4                   | Maximum load capacity.....                                                  | 10 |
| 6.4.1                 | Requirement .....                                                           | 10 |
| 6.4.2                 | Test method.....                                                            | 11 |
| 6.5                   | Design working pressures .....                                              | 11 |
| 6.6                   | Strength of the hull .....                                                  | 11 |
| 6.6.1                 | Requirement .....                                                           | 11 |
| 6.6.2                 | Test method.....                                                            | 11 |
| 6.7                   | Safety ropes and grab handles.....                                          | 13 |
| 6.7.1                 | Requirement .....                                                           | 13 |
| 6.7.2                 | Test method.....                                                            | 13 |
| 6.8                   | Residual buoyancy .....                                                     | 14 |
| 6.8.1                 | Requirement .....                                                           | 14 |
| 6.8.2                 | Test method.....                                                            | 14 |
| 6.9                   | Manoeuvrability.....                                                        | 14 |
| 6.9.1                 | Requirement .....                                                           | 14 |
| 6.9.2                 | Test method.....                                                            | 14 |
| 6.10                  | Compartmentation .....                                                      | 14 |
| 6.11                  | Field of vision from the helm position.....                                 | 14 |
| 7                     | Performance requirements and test methods .....                             | 14 |
| 7.1                   | General.....                                                                | 14 |
| 7.2                   | In-water performance (Type II only) .....                                   | 15 |
| 7.2.1                 | Requirement .....                                                           | 15 |
| 7.2.2                 | Test methods.....                                                           | 15 |
| 7.3                   | Strength of the towing device (all types).....                              | 17 |
| 7.3.1                 | Requirement .....                                                           | 17 |
| 7.3.2                 | Test method.....                                                            | 17 |
| 7.4                   | Rowing test (where applicable, see 5.5) .....                               | 17 |
| 7.5                   | Watertightness test (not applicable to open floor, self-bailing craft)..... | 17 |
| 7.5.1                 | Requirement .....                                                           | 17 |
| 7.5.2                 | Test method.....                                                            | 17 |
| 8                     | Builder's plate(s).....                                                     | 18 |
| 9                     | Operator's instructions and warning notes .....                             | 19 |
| 10                    | Standard equipment .....                                                    | 19 |
| Annex A (normative)   | Inflatable canoes and kayaks (Type III) .....                               | 20 |
| Annex B (normative)   | Inflatable craft propelled by sail (Type IV).....                           | 23 |
| Annex C (informative) | General arrangement of typical Type I boat.....                             | 26 |
| Annex D (informative) | General arrangement of typical Type II boat.....                            | 27 |
| Annex E (informative) | General arrangement of a typical Type III boat .....                        | 28 |
| Bibliography          | .....                                                                       | 29 |

## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this part of ISO 6185 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 6185-1 was prepared by Technical Committee ISO/TC 188, *Small craft*.

ISO 6185-1, together with ISO 6185-2 and ISO 6185-3, cancel and replace ISO 6185:1982. They differ significantly from ISO 6185:1982 as they cover boats made from unsupported materials, whereas the latter only covered boats made from reinforced materials.

ISO 6185 consists of the following parts, under the general title *Inflatable boats*:

- *Part 1: Boats with a maximum motor power rating of 4,5 kW*
- *Part 2: Boats with a maximum motor power rating of 4,5 kW to 15 kW inclusive*
- *Part 3: Boats with a maximum motor power rating of 15 kW and greater*

Annexes A and B form a normative part of this part of ISO 6185. Annexes C, D and E are for information only.

## Introduction

ISO 6185 is subdivided into three parts as shown in Figure 1.

It excludes

- single-chambered boats,
- boats of buoyancy less than 1 800 N,
- boats made from unsupported materials of more than 12 kN inflated buoyancy and powered by motors exceeding 4,5 kW, and
- boats greater than 8 m in overall length.

It is not applicable to

- aquatic toys, and
- inflatable liferafts.

Part 1:

- |          |                                                           |
|----------|-----------------------------------------------------------|
| Type I   | Boats propelled exclusively by manual means.              |
| Type II  | Powered boats not exceeding 4,5 kW.                       |
| Type III | Canoes and kayaks.                                        |
| Type IV  | Sail craft with a maximum sail area of 6 m <sup>2</sup> . |

Part 2:

- |         |                                                           |
|---------|-----------------------------------------------------------|
| Type V  | Powered boats of 4,5 kW to 15 kW inclusive.               |
| Type VI | Sail craft with sail area greater than 6 m <sup>2</sup> . |

Part 3:

- |           |                                              |
|-----------|----------------------------------------------|
| Type VII  | Powered boats of 15 kW and greater.          |
| Type VIII | Powered offshore boats of 75 kW and greater. |

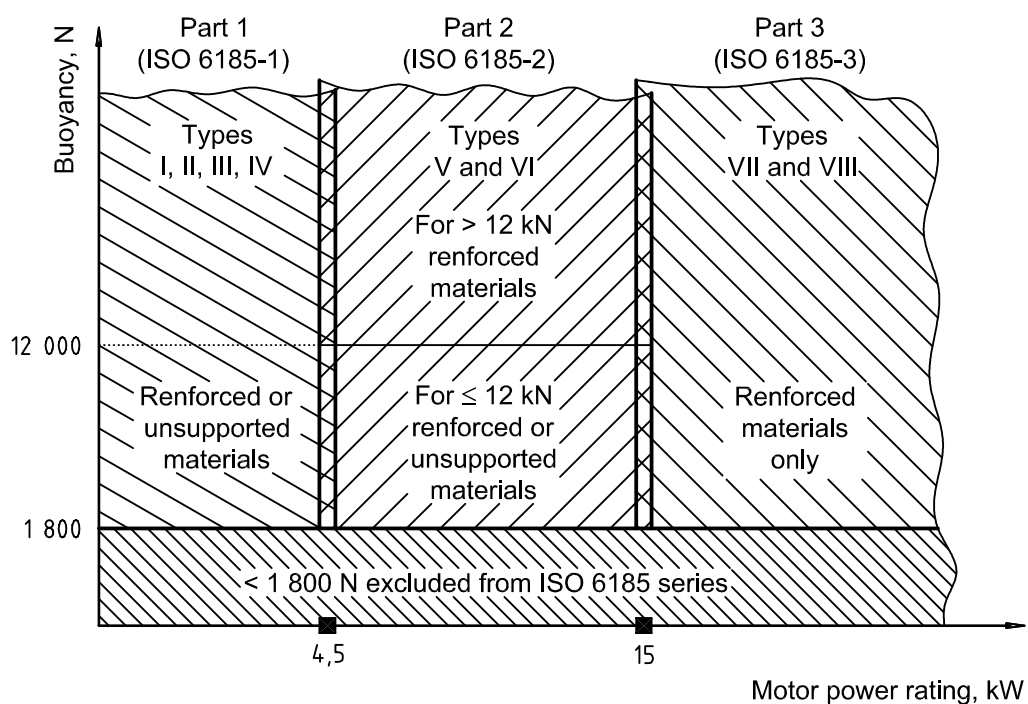


Figure 1 — Illustration of how the three parts of ISO 6185 are divided