भारतीय मानक **IS 7595 (Part 2) : 2024**

Indian Standard

ऑटर बोर्ड — सामान्य अपेक्षाएँ

भाग 2 आयताकार क्षैतिज रूप से घुमावदार ऑटर बोर्ड

(पहला पुनरीक्षण)

Otter Boards — General Requirements

Part 2 Rectangular Horizontally Curved Otter Boards

(First Revision)

ICS 47.040; 65.150

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Inland Harbour Crafts and Fishing Vessels Sectional Committee, TED 18

FOREWORD

This Indian Standard (Part 2) (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Inland Harbour Crafts and Fishing Vessels Sectional Committee had been approved by the Transport Engineering Division Council.

This standard was first published in 1976. This revision was undertaken to update the standard and to incorporate latest technological advancement/development that has taken place in various fields. The salient features of this revision are:

a) The standard has been drafted as per latest drafting guidelines;
b) Reference to Indian Standard has been updated; and
c) Material grades referred in standard have been updated.

Otter board is the most important functional device of an otter trawl net. The boards are used in pairs, and are attached to the trawl net in such a way as to remain obliquely to the direction of motion so that the water pressure against the board, forces them to shear outwards, thus spreading the mouth of the net horizontally.

The size and weight of the otter board should be in accordance with the size and power of the vessel as well as the type and size of the trawl gear used.

Otter boards of different shapes, namely, flat rectangular, rectangular horizontally curved, rectangular vertically curved, L-shaped, oval and V-form, are in use. But flat rectangular boards are the most common due to their case of construction.

This draft standard has been issued in several parts. Other parts in this series are:

Part 1 Rectangular horizontally otter boards
Part 3 Oval otter boards
Part 4 Application standard
Part 5 V-type otter boards
Part 6 Guidelines for selection

The composition of the Committee responsible for formulation of this standard is given in Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with,the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*).’ The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

OTTER BOARDS — GENERAL REQUIREMENTS

PART 2 RECTANGULAR HORIZONTALLY CURVED OTTER BOARDS

(First Revision)

1 SCOPE

This standard (Part 2) deals with the materials and general design requirements of rectangular, horizontally curved otter boards for otter trawl.

2 REFERENCES

The standards listed in Annex A contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of these standards.

3 TERMINOLOGY

For the purpose of this standard, the definitions given in IS 7595 (Part 1) shall apply.

4 MATERIALS

The material of various parts shall be so selected as to meet the properties and working conditions. Some of the recommended materials for different parts of otter board are given below:

5 CONSTRUCTION

5.1 The constructional details of otter boards complete with fittings are shown in Fig. 1. The wooden planks shall be fixed together with through bolts and lashing shall be strengthened with strap plates or similar protection pieces, such as back channels. The whole rig shall be strengthened with iron frames and be protected at the lower edge with a heavy hard wearing metal sole.

5.2 The connecting arrangement of independent piece with back strop shall be as shown in Fig. 2.

5.3 All metal parts shall be painted with a paint conforming to IS 6951 to protect from corrosion.

6 DIMENSIONS

6.1 The length and width of an otter board shall be preferably in a ratio of 2 : 1. Higher ratiomay also be adopted.

6.2 The rings on the outer side of the board for connecting the back strop shall be fitted approximately between one quarter and one-eighth of the length of board from the rear.

6.3 The length of the back strop, bridle warp cable shall be as agreed to between the manufacturer and the purchaser.

6.4 For the rectangular horizontally curved otter boards the shear angle between 20° and 25° may be considered as most suitable.

Sl No.	*Name of Part*	*Conforming to IS No.*
(1)	(2)	(3)
i)	Planks	IS 399
ii)	Bracket	IS 7283
iii)	Back strop	IS 2266 or IS/ISO 3077
iv)	G-link	IS 7283
v)	Kelly’s eye	IS 7283
vi)	Figure of 8-link	IS 7283
vii)	Sole (shoe)	IS 5986
viii)	Fittings	IS 5986
ix)	Chain bridle	IS/ISO 3077
x)	Towing rope	IS 1084 or IS 2266

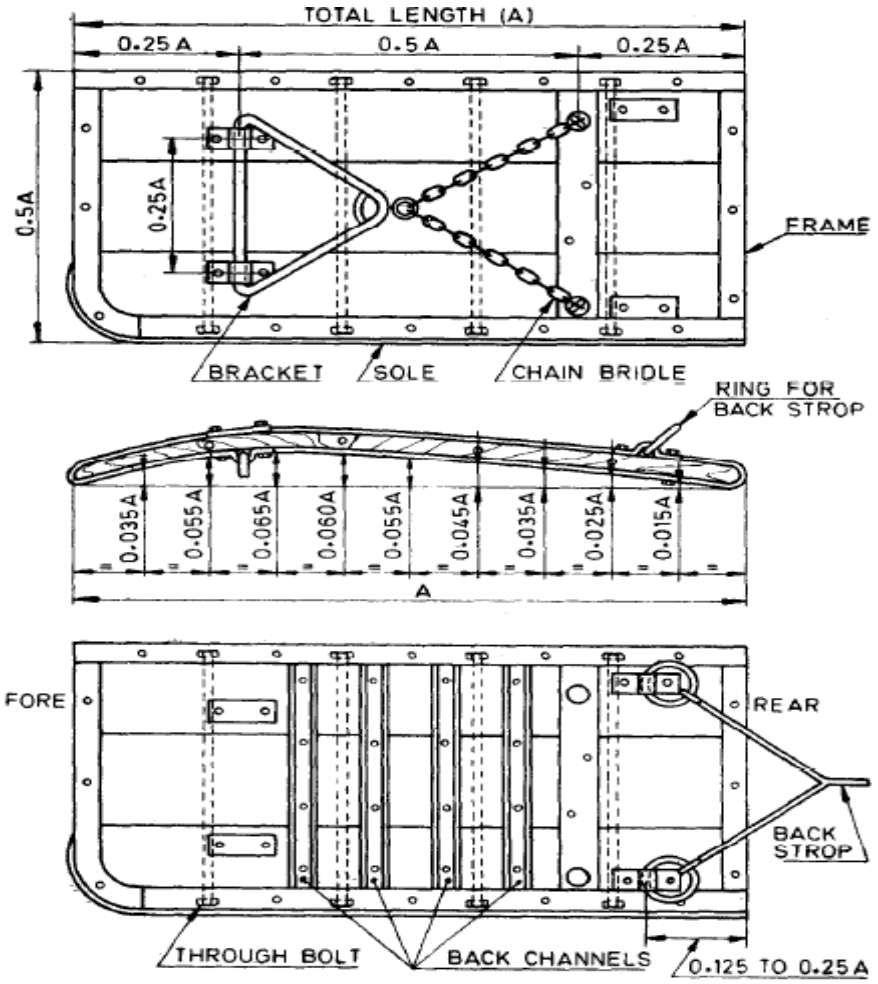

FIG. 1 CONSTRUCTIONAL DETAIL OF OTTER BOARDS

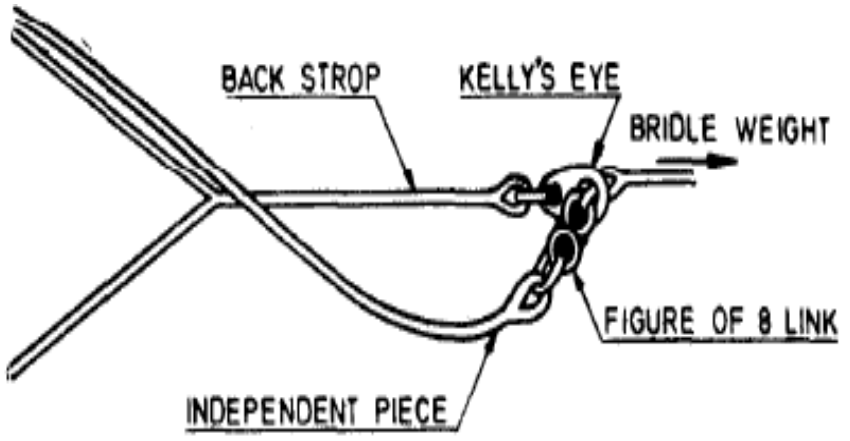

FIG. 2 CONNECTING ARRANGEMENT OF INDEPENDENT PIECE WITH BACK STROP

ANNEX A

(*Clause* 2)

LIST OF REFERRED STANDARDS

IS No.	*Title*
IS 399 : 1963	Classification of commercial timbers and their zonal distribution (*first revision*)
IS 1084 : 2005	Textiles — Manila ropes — Specification (*fifth revision*)
IS 2266 : 2019	Steel wire ropes for general engineering purposes — Specification (*fifth revision*)
IS/ISO 3077 : 2001	Short link chain for lifting purposes — Grade T (Types T, DAT and DT), fine-tolerance hoist chain
IS 5986 : 2017	Hot-rolled steel sheet, plate and strip for forming and flanging purposes — Specification (*fourth revision*)
IS 6948 : 1973	Specification for ready mixed paint, undercoat, synthetic for ships
IS 6951 : 1973	Specification for ready mixed paint, finishing, exterior, for ships
IS 7283 : 1992	Hot-rolled bars for the production of bright bars and machined parts for engineering applications — Specification (*first revision*)
IS 7595 (Part 1) : 1975	General requirements for otter boards: Part 1 Flat rectangular otter boards

ANNEX B

(*Foreword*)

COMMITTEE COMPOSITION

Inland Harbour Craft and Fishing Vessels Sectional Committee, TED 18

Organization	*Representative(s)*
Indian Register of Shipping, Mumbai	SHRI H. V. RAMESH **(*Chairperson*)**
American Bureau of Shipping, Mumbai	SHRI A. N. DAS SHRI ARNAB GHASH (*Alternate*)
Ashok Leyland Ltd, Mumbai	SHRI C. G. BELSARE SHRI SUMIT VYAS (*Alternate*)
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Fishery Survey of India, Mumbai	SHRI SHAILENDRA KUMAR JAISWAL
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Organization	*Representative(s)*
BIS Directorate General	SHRI P. V. SRIKANTH, SCIENTIST 'D'/JOINT DIRECTOR AND HEAD (TRANSPORT ENGINEERING) [REPRESENTING DIRECTOR GENERAL (*Ex-officio*)]

Member Secretary
SHRI SHARAD KUMAR
SCIENTIST 'D'/JOINT DIRECTOR
(TRANSPORT ENGINEERING), BIS

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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