

December 2023

For Comments only

भारतीय मानक का मसौदा
कटर सॅक्शन ड्रेज संघटक – विशिष्टि
भाग 2 सॅक्शन पाइप
[IS 10854 (Part 2) का प्रथम पुनरीक्षण]

DRAFT *INDIAN STANDARD*
CUTTER SUCTION DREDGE COMPONENTS — SPECIFICATION
PART 2 SUCTION PIPE
[First Revision of IS 10854 (Part 2)]

(ICS no 47.060)

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Last date for receipt
of comments is 01 02 2024

Inland Harbour Crafts and Fishing Vessels Sectional Committee, TED 18

FOREWORD

This draft Indian Standard (Part 2) (First Revision) will be adopted by the Bureau of Indian Standards after the draft recommended by the Inland Harbour Crafts and Fishing Vessels Sectional Committee is approved by the Transport Engineering Division Council.

This Indian standard was first published in 1984. This first revision of the standard is being undertaken to update the standard and to incorporate latest technological advancement/ statutory requirements that have been specified. The salient features of this first revision are:

- a) Reference of latest Indian Standard has been given
- b) The Indian Standard has been drafted as per latest grafting guidelines.

This standard is to be published in several parts. Other parts in this series are:

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- Part 1 : Cutter
- Part 3 : Ladder
- Part 4 : Spuds
- Part 5 : Cast Spud Point
- Part 6 : Cast Spud Cylinder

The composition of the Committee responsible for the formulation of this standard is given at Annex A (Will be added later).

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.

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1 SCOPE

This standards specifies the requirements of the suction pipe as a component in the cutter suction dredgers.

2 REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions 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 editions of the standards indicated below:

<i>IS No</i>	<i>Title</i>
IS 2062 : 2011	Hot rolled medium and high tensile structural steel —Specification (Seventh Revision)
IS 2500 (Part 1) : 2000	Sampling inspection procedures : Part 1 : Attribute sampling plans indexed by acceptable quality limit (AQL) for lot-by-lot inspection (Third Revision)

3 REQUIREMENT

3.1 Design

The diameter of the suction pipe shall be derived taking into consideration the following:

- i) Pump's output, and
- ii) The minimum velocity allowable in the pipe.

3.1.1 The suction mouth opening shall fit into the cutter below its center. This shall normally be of elliptical shape. The suction mouth area shall be chosen depending upon dredge material. The average area of the suction mouth shall usually be 1.25 times of the area of the suction pipe.

3.2 Material

The connected sections of the pipe shall be of mild steel conforming to IS 2062.

4 CONSTRUCTION

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The suction pipe shall be assembled in flange-connected sections of 3 to 6 m long. The thickness of the pipe shall be not less than 14 mm.

5 MARKING

The suction pipe shall be marked with indelible printing or embossed with the following information:

- a) Name, initials or recognized trade-mark of the manufacturer; and
- b) Designation of suction pipe.

6 BIS CERTIFICATION MARKING

6.1 The Suction pipe may also be marked with the Standard Mark.

6.1.1 The product conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standard Act, 2016* and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.

7 SAMPLING

Unless otherwise agreed upon between a supplier and purchaser, the inspection sampling shall be as per IS 2500 (Part 1).