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For Comments only

भारतीय मानक का मसौदा
कटर सॅक्शन ड्रेज संघटक – विशिष्टि
भाग 4 स्पड
[IS 10854 (Part 4) का प्रथम पुनरीक्षण]

DRAFT *INDIAN STANDARD*

CUTTER SUCTION DREDGE COMPONENTS — SPECIFICATION
PART 4 SPUD
[First Revision of IS 10854 (Part 4)]

(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 4) (First Revision) will be adopted by the Bureau of Indian Standards after the draft finalized 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:

- Part 1 : Cutter
- Part 2 : Suction Pipe
- Part 3 : Ladder
- Part 5 : Cast Spud Point
- Part 6 : Cast Spud Cylinder

December 2023

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.

December 2023

1 SCOPE

This standard prescribes design and material requirements for spuds used on 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 REQUIREMENTS

3.1 Design

The size and strength of a spud shall be determined by the following;

- i) Displacement of the dredge
- ii) Digging depth
- iii) Cutter power

3.1.1 The maximum moment acting on the spud shall be determined at the point where it enters the bottom of the cut.

3.2 Material

Mild steel or built up plate with tensile strength not less than 400 N/mm² conforming to IS 2062.

4 MARKING

The spud 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 spud.

December 2023

5 BIS Certification Marking

5.1 The spud may also be marked with the Standard Mark.

5.1.1 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.

6 SAMPLING

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