

December 2023

For Comments only

---

भारतीय मानक का मसौदा  
कटर सॅक्शन ड्रेज संघटक – विशिष्टि  
भाग 3 लैडर  
[ IS 10854 (Part 3) का प्रथम पुनरीक्षण ]

DRAFT INDIAN STANDARD  
CUTTER SUCTION DREDGE COMPONENTS — SPECIFICATION  
PART 3 LADDER  
[First Revision of IS 10854 (Part 3)]

(ICS no 47.060)

---

**Not to be reproduced without permission  
of BIS or used as an Indian Standard**

**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 3) (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:

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

**December 2023**

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

- Part 1 : Cutter
- Part 2 : Suction Pipe
- 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.

December 2023

## 1 SCOPE

This standard prescribes the requirements of the ladder used as a component in 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

Ladder shall be designed to carry the suction pipe, lubricating lines and most usually the cutter motor and its reduction gear in addition to the cutter. On small dredges the ladder may be mounted directly on hull whereas provision of well shall be made in case of mounting the ladder on large dredger.

### 3.2 Dimensions

The length of the ladder shall be around 1.5 times the maximum dredging depth required.

### 3.3 Construction

The ladder shall be built with deep web beams, girders, stiffeners, bulkheads and large trunnion housings made of steel conforming to IS 2062.

**December 2023**

#### **4 MARKING**

The ladder 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 ladder.

#### **5 BIS CERTIFICATION MARKING**

**5.1** The ladder may also be marked with the Standard Mark.

**5.2** 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 ladder 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).