Doc: TED 18 (17087) F

**IS 8820 (Part 1): XXXX**

**भारतीय मानक**

**टोइंग हुक**

**भाग 1: कर्षण बल परिमाण**

 ( ***प्रथम पुंनरीक्षण*** )

*Indian Standard*

**TOWING HOOKS**

**PART 1: SCALE OF TRACTIVE EFFORTS**

( *First Revision* )

ICS 47.060

© BIS 2024



भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली 110002

MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG

NEW DELHI 110002

[www.bis.gov.in](http://www.bis.org.in) [www.standardsbis.in](http://www.standardsbis.in)

**May2024 Price Group**

Inland Harbour Crafts and Fishing Vessels Sectional Committee, TED 18

FOREWORD

This Indian Standard (Part 1) (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 1978. This revision was undertaken to update the standard by incorporating towing hooks with higher towing capacity. The salient features of this first revision are:

1. The standard has been drafted as per latest drafting guidelines; and

b) Table 1 has been updated by incorporating towing hooks with higher towing capacity.

The nominal tractive efforts of towing hooks creates the basis for standardization of towing hooks and towing arrangement details. The other part of this standard is as follows:

Part 2 General requirements

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

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*

TOWING HOOKS

**PART 1 SCALE OF TRACTIVE EFFORTS**

*( First Revision )*

**1 SCOPE**

This standard (Part 1) specifies the scale of tractive efforts applicable to towing hooks used on tugs of all types and purposes.

**2 REFERENCES**

Standard contains no cross referenced Indian Standard.

**3** **TERMINOLOGY**

For the purpose of this standard, the following definition shall apply:

**3.1 Nominal Tractive Effort** — Traction developed by a harbour tug while mooring or by a line tug when towing at the speed of 5 knots (9 km/h).

**4 SCALE OF TRACTIVE EFFORTS**

**4.1** The values of tractive effort shall be as given in Table 1.

**Table 1 Nominal Tractive Effort**

(*Foreword and* *Clause* 4.1)

|  |  |  |
| --- | --- | --- |
| **Sl No.** | **kN** | **Tonne** |
|  |  |  |
|  | 6.3 | 0.63 |
|  | 10 | 1.0 |
|  | 16 | 1.6 |
|  | 25 | 2.5 |
|  | 40 | 4.0 |
|  | 63 | 6.3 |
|  | 100 | 10.0 |
|  | 160 | 16.0 |
|  | 220 | 22.0 |
|  | 320 | 32.0 |
|  | 400 | 40.0 |
|  | 450 | 45.0 |
|  | 500 | 50.0 |
|  | 550 | 55.0 |
|  | 600 | 60.0 |
|  | 650 | 65.0 |
|  | 700 | 70.0 |
|  | 800 | 80.0 |
|  | 1 000 | 100.0 |

**ANNEX A**

(*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. DasShri Arnab Ghash (*Alternate*) |
| Ashok Leyland Ltd, Mumbai |  | Shri C. G. Belsare Shri Sumit Vyas (*Alternate*) |
| Central Institute of Fisheries Nautical and Engineering Training, Kochi |  | Shri Sunil B. Rangari |
| Chowgule and Co Pvt Ltd, Loutolim |  | Shri P. ChakrabartyShri Khrisler Mascarenhas (*Alternate*) |
| Cochin University of Science and Technology, Department of Ship Technology, Cochin |  | Shri (Dr) K. SivaprasadShri Anishkumar M. N. (*Alternate*)   |
| Cyriac Elias Voluntary Association (CEVA), Kochi |  | Fr Varghese KokkadanDr Antony Gregory (*Alternate*) |
| Delhi Earth Station Space Applications Centre, Department of Space, New Delhi |  | Ms Shahana K. |
| Directorate General of Quality Assurance, New Delhi |  | Shri Moninder Pal Singh Shri S. M. Bhosale (*Alternate*) |
| Directorate General of Shipping, Mumbai |  | Shri J. Senthil Kumar Shri Gopikrishna C. (*Alternate*) |
| Directorate of Naval Architecture, Naval Headquarters, New Delhi |  | Shri Sujit BaxiShri Pankaj Grover (*Alternate*)  |
| Directorate of Naval Design, Naval Headquarters, New Delhi |  | Shri K. S. N. Kumar |
| Dredging Corporation of India Limited, Vizag |  | Prof G. Y. V. VictorCapt S. Divakar (*Alternate*)  |
| Fine Finish Organics Private Limited, Mumbai |  | Shri G. S. PrabhuMs Karishma Prabhu (*Alternate*)  |
| Fishery Survey of India, Mumbai |  | Shri Shailendra Kumar Jaiswal |
| Goa Glass Fibre Limited, Goa |  | Shri Nitin Pandurang SonamShri Emani Venkata Rama Krishna (*Alternate* I)Shri Saji Sahadevan E. (*Alternate* II) |
| Goa Shipyard Limited, Goa |  |  Shri Santosh Kumar SinghShri Dominic Cardoso (*Alternate*) |
| ICAR - Central Institute of Fisheries Technology,Kochi |  | Dr Leela EdwinShri M. V. Baiju (*Alternate*) |
| Indian Diesel Engine Manufacturers Association, New Delhi |  | Shri Arvind RanganathanShri Karthik Sarma (*Alternate*) |
| Indian Institute of Technology Kharagpur, Kharagpur |  | Shri Vishwanath Nagarajan Prof O. P. Sha (*Alternate*) |
| Indian Institute of Technology Madras, Chennai |  | Shri Rajiv SharmaProf S. K. Bhattacharya (*Alternate)* |
| Indian Maritime University, Vizag |  | Shri Sheeja JanardhananShri G. V. V. Pavan Kumar (*Alternate)* |
| Indian Register of Shipping, Mumbai |  | Shri S. Renganathan |
| Inland Waterways Authority of Indian, Noida |  | Shri S. V. K. Reddy |
| Institute of Marine Engineers India, Mumbai |  | Shri Sivaram Narayana SwamiShri Anand Mohan Mani (*Alternate*) |
| Kerala Shipping and Inland Navigation Corporation Ltd, Kochi |  | Shri K. K. Abdul GaffoorShri K. R. Anoop Kumar  |
| Kolkata Port Trust, Kolkata |  | Capt A. K. Bagchi |
| Lloyd’s Register Asia, Mumbai |  | Shri C. R. DashShri Srikanth Saripaka (*Alternate*) |
| Mazagon Dock Ltd, Mumbai |  | Shri Biju George Shri Manoj R. Pai (*Alternate*) |
| Ministry of Ports, Shipping and Waterways, New Delhi |  | Shri Anil PruthiShri Ramji Singh (*Alternate*) |
| Raksha Polycoats Pvt Ltd, Pune |  | Shri Abhijit SarkarShri Abhijit Andurkar (*Alternate*) |
| Saertex India Pvt Ltd, Pune |  | Ms Deepa S.Shri Milind Pande (*Alternate*) |
| Shipyards Association of India, New Delhi |  | Shri P. R. Govil |
| Shoft Shipyard Private Limited, Thane |  | Shri Binod Kumar SahShri P. Ganesh Kumar (*Alternate*) |
| Timblo Drydocks Pvt Ltd, Margao |  | Cdr Subhash MutrejaCdr Raju Ganapathy (*Alternate*) |
| Titagarh Wagons Limited, Kolkata |  | Shri Vineet Shrivastava |
| Vedam Design and Technical Consultancy Pvt Ltd, Mumbai |  | Shri Paritosh Barui |
| In Personal Capacity, Chhattisgarh |  | Shri S. M. Rai |
| BIS Directorate General |  | Shri P. V. Srikanth, Scientist ‘D’/ Joint Director and Head (Transport Engineering) [Representing Director General (*Ex-officio*)]  |
| *Member Secretary*Shri Sharad KumarScientist D/Joint Director (Transport Engineering), BIS |