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**INTERNATIONAL STANDARD**



**3786**

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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## **Shipbuilding — Inland navigation towing hooks — Scale of tractive efforts**

*Construction navale — Crocs de remorque pour navigation intérieure — Échelle des efforts de traction*

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## FOREWORD

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Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3786 was drawn up by Technical Committee ISO/TC 8, *Shipbuilding*, and circulated to the Member Bodies in December 1974.

It has been approved by the Member Bodies of the following countries :

Austria	India	Romania
Belgium	Japan	Spain
Bulgaria	Korea, Dem. P. Rep. of	Turkey
Canada	Mexico	United Kingdom
Czechoslovakia	Netherlands	U.S.S.R.
France	Poland	

No Member Body expressed disapproval of the document.

# Shipbuilding – Inland navigation towing hooks – Scale of tractive efforts

## 0 INTRODUCTION

The scale of nominal tractive efforts of towing hooks has been elaborated to create the basis for standardization of towing arrangement details.

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard establishes a scale of tractive efforts applicable to towing hooks used on tugs of all types and purposes, intended for towage on inland waterways.

## 2 DEFINITION

**nominal tractive effort** : Traction developed by a harbour tug in mooring regime or by a line tug when towing at the speed of 5 knots (9 km/h).

## 3 SCALE OF TRACTIVE EFFORTS

The values of tractive effort are given in the table, in both kilonewtons (kN) and tonnes-force (tf).

Nominal tractive effort	
kN	tf
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

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