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**Ships and marine technology —  
Ship's mooring and towing fittings —  
Panama chocks**

*Navires et technologie maritime — Corps-morts et ferrures de  
remorquage de navires — Écubiers de Panama*



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# Contents

	Page
Foreword .....	iv
Introduction .....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	1
4 Classification .....	1
4.1 Type .....	1
4.2 Nominal sizes .....	2
5 Dimensions .....	2
6 Materials .....	2
7 Construction .....	2
8 Manufacturing and inspection .....	2
9 Marking .....	2
Annex A (normative) Basis for strength assessment of Panama chocks .....	7
Bibliography .....	12

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 4, *Outfitting and deck machinery*.

This second edition cancels and replaces the first edition (ISO 13728:2012), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the Scope has been reworded; a NOTE concerning the Panama chock for the Panamax Plus and Neopanamax vessels has been added;
- the definition of SWL ([3.1](#)) has been reworded;
- technical information on FEM has been added in [A.3.2](#).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

The Panama chock is a type of ship's mooring and towing fitting installed on the shipside to lead the mooring or towing rope from the ship's inboard to outboard.



# Ships and marine technology — Ship's mooring and towing fittings — Panama chocks

## 1 Scope

This document specifies the types, nominal sizes, dimensions and materials, as well as construction, manufacturing and marking requirements, for Panama chocks installed to lead the mooring and towing rope of a ship. It is intended for ships passing through the Panama Canal, which are normally assisted through the locks by locomotives using steel towing wires and/or by tug boats. These chocks meet normal mooring requirements and Panama Canal requirements; they are suitable for mooring vessels inside the Panama Canal locks.

NOTE The Panama chocks (SWL of 90 tons) for the Panamax Plus and Neopanamax vessels can be replaced by closed chocks (see ISO 13729).

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IMO Circular MSC/Circ.1175, *Guidance on shipboard towing and mooring equipment*

*Panama Canal Requirements — OP Notice to shipping No. N-1-2019 — Vessel requirements*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

**safe working load**

**SWL**

safe load limit (maximum permissible load) of the fittings used for mooring and towing

## 4 Classification

### 4.1 Type

The Panama chock shall be classified by its installation site as belonging to one of the following types:

- a) Type A: deck-mounted Panama chock;
- b) Type B: bulwark-mounted Panama chock.