
**Ships and marine technology — Ship's
mooring and towing fittings — Welded
steel bollards for sea-going vessels**

*Navires et technologie maritime — Corps-morts et ferrures de
remorquage de navires — Bittes d'amarrage en acier soudées pour
navires de haute mer*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

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Introduction

A bollard is a type of ship's mooring and towing fitting installed on board to belay the mooring and towing rope.

Ships and marine technology — Ship's mooring and towing fittings — Welded steel bollards for sea-going vessels

1 Scope

This International Standard specifies the design, size and technical requirements for welded steel bollards suitable for installation on sea-going vessels to meet normal mooring and towing requirements.

2 Normative references

The following referenced documents are indispensable for the application 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*

3 Terms and definitions

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

3.1

safe working load

SWL

maximum load in kN on the rope that should normally be applied in service conditions

3.2

TOW

maximum load on the rope applied to a bollard subjected to tug boat pull by using an eye splice at the end of the towing rope to connect to the bollard

4 Classification

4.1 Type

Depending on the construction, welded steel bollards shall be classified as the following two types:

- Type A – with compact base plate;
- Type B – with wide base plate.

4.2 Nominal sizes

The nominal sizes, D_n , of bollards are denoted by reference to the outside diameter of the post, in millimetres, in terms of the nearest number drawn from a basic series of preferred numbers. For the bollards having the same post diameter, the nominal size is followed by an alphabetical character for the different SWL.

The nominal sizes are: 150, 200, 250A, 250B, 300A, 300B, 350A, 350B, 400A, 400B, 450A, 450B, 500A, 500B, 550A, 550B and 600.

5 Dimensions

Bollards have dimensions and particulars in accordance with Tables 1 and 2, and Figures 1 and 2.