### BS ISO 7236:2014



## **BSI Standards Publication**

## Ships and marine technology

- Inland navigation vessels
- Mounting attachments for demountable signal masts for push-tows



BS ISO 7236:2014 BRITISH STANDARD

#### National foreword

This British Standard is the UK implementation of ISO 7236:2014.

The UK participation in its preparation was entrusted to Technical Committee SME/32/-/11, Ships and marine technology - Intermodal, inland navigation and short sea shipping.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Date Text affected

## INTERNATIONAL STANDARD

ISO 7236:2014 ISO 7236

Second edition 2014-11-15

## Ships and marine technology — Inland navigation vessels — Mounting attachments for demountable signal masts for push-tows

Navires et technologie maritime — Bateaux de navigation intérieure — Ferrures d'attache pour mâts de signalisation amovibles de convois poussés



BS ISO 7236:2014 **ISO 7236:2014(E)** 



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#### **Foreword**

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The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 7, *Inland navigation vessels*.

This second edition cancels and replaces the first edition (ISO 7236:1991), of which it constitutes a technical revision.

#### **Amendments**

The following amendments have been made to the first edition (1991-06-15).

- a) The definitions have been reworded and two definitions have been added.
- b) The figures have been updated.
- c) The designation has been added.
- d) The International Standard has been editorially revised.

#### Introduction

Since push barges do not generally have their own masts fitted with the lights required for push-tows, the masts are carried on the push vessel and fitted to the barges when the vessels are connected. Therefore, the mounting attachments are to be of a uniform type, have the same dimensions, and fit the lower part of the mast so that work can be carried out quickly, easily, and safely even in bad visibility conditions and in each weather situation. In addition, the mounting attachments ensure that the masts, and therefore the push-tow light, are correctly seated which is of fundamental importance for safety in shipping traffic.

# Ships and marine technology — Inland navigation vessels — Mounting attachments for demountable signal masts for push-tows

#### 1 Scope

This International Standard applies to mounting attachments for demountable masts with an integral mast lower part for the placing of lights on push barges. It specifies construction, dimensions, manufacture, arrangement, and means of attachment.

#### 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.

ISO 2768-1, General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications

EN 10025-2, Hot rolled products of structural steels — Part 2: Technical delivery conditions for non-alloy structural steels

#### 3 Terms and definitions

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

#### 3.1

#### mounting attachment

device comprising of a mast stand and mast clamp which are arranged on the barge in such a way that they can maintain a signal mast in the specified position

#### 3.2

#### mast stand

device fixed to the deck which accepts the lower part of the signal mast and secures it against rotation about the vertical mast axis

#### 3.3

#### mast clamp

device which secures the top of the lower portion of the signal mast

#### 3.4

#### mast lower part

lower part of the signal mast which is inserted into the mounting attachment

#### 4 Technical requirements

General tolerances: ISO 2768:— c.

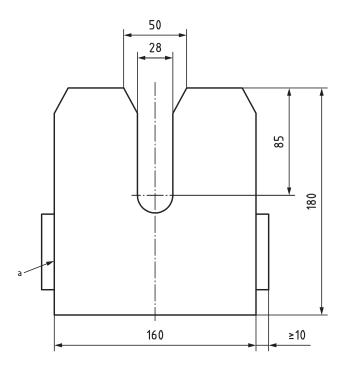
The requirements relate to construction, dimensions, design, arrangement, and means of attachment.

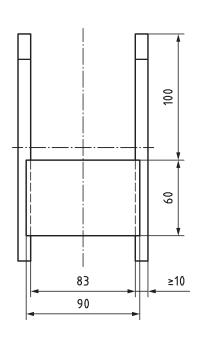
#### 4.1 Dimensions

The mounting attachment is not expected to conform to the design illustrated in this International Standard; compliance is only required in the case of the dimensions specified.

#### 4.2 Mast stand

Dimensions in millimetres





#### Key

Smooth edges

a Welded.

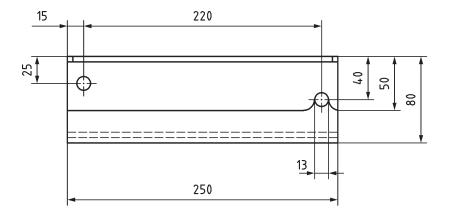
Figure 1 — Mast stand

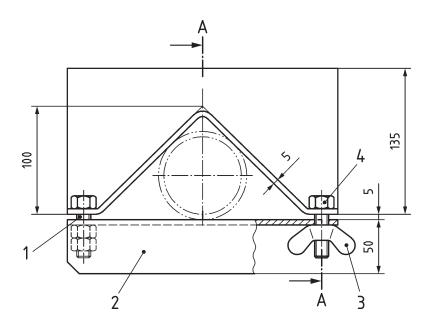
#### 4.3 Mast clamp

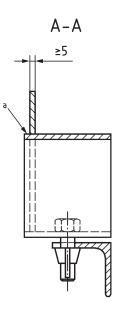
The clamp is shown to be attached using screws and nuts/wing nuts. Any equivalent means of attachment is permitted provided that the mast is held securely.

Only captive screws, nuts, or wing nuts shall be used.

Dimensions in millimetres







#### Key

View shown without screws or nuts

- 1 screw M  $12 \times 40$  with 2 nuts
- $2 L50 \times 50 \times 5$
- 3 wingnut M 12
- 4 screw M 12 × 50 welded on
- a Welded.

Figure 2 — Mast clamp

#### 4.4 Mounting attachment

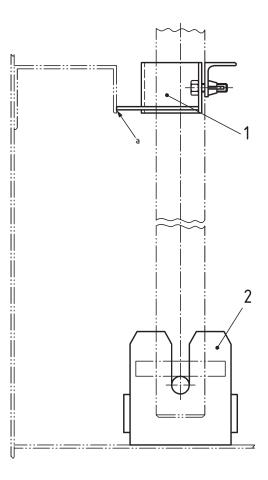
The mounting attachment consists of the mast stand and a mast clamp.

The mast stand shall be positioned so that the signal mast bearing pins are precisely aligned parallel to the longitudinal and transverse axes of the vessel. In addition, the mast stand and mast clamp shall be arranged in such a way that axis of the lower part of the signal mast is perpendicular to the design waterline plane.

The arrangement illustrated in Figure 3 is an example of this.

950 750 750

Dimensions in millimetres



#### Key

Mast clamp shown without screws or nuts

- 1 mast clamp
- 2 mast stand bearing plate
- a Welded.

Figure 3 — Mounting attachment

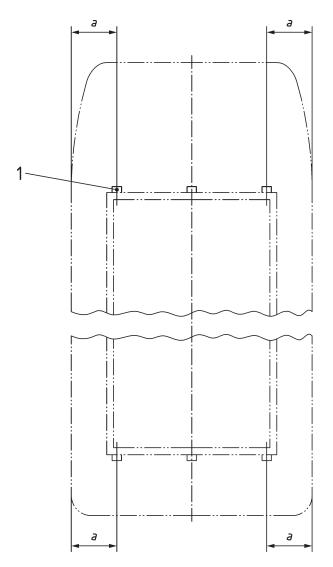
#### 4.5 Mounting attachment arrangement on the push barge

The mounting attachments shall be arranged on the push barge as shown in Figure 4.

The mounting attachments fitted to the vessel sides shall be arranged so that the masts can be mounted parallel to the longitudinal vertical plane of the vessel. For safety reasons, they shall not be positioned within the clear width of the walkway and shall be arranged to ensure an easy mounting of the mast.

The attachments fitted in the centre of the vessel can be rotated by 90° (e.g. in restricted conditions) so that the masts can be mounted parallel to the transverse vertical plane of the vessel.

Dimensions in millimetres



#### Key

- 1 mounting attachment.
- a ≤1 000

Figure 4 — Mounting attachment arrangement on the push barge

#### **4.6** Mast

Only the dimensions of the lower end of the mast (mast lower part) are specified in <u>Annex A</u>. The upper part of the mast, its height, the navigation light arrangement, and other characteristics are not covered by this International Standard. They are governed by the shipping regulations of the corresponding navigation zone.

#### 5 Material

Weldable steel is as specified in EN 10025-2.

The screws, nuts, or bolts used for the clamp shall be made of stainless steel or other non-corrodible materials.

#### 6 Testing

For the purposes of this International Standard, test the technical requirements as specified in this International Standard by visual examination and measurement.

#### 7 Designation

A mounting attachment for demountable signal masts comprising of mast stand (Figure 1) and mast clamp (Figure 2) shall have the following designation:

Mounting attachment ISO 7236

## Annex A (normative)

## Mast lower part

General tolerances: ISO 2768:— c.

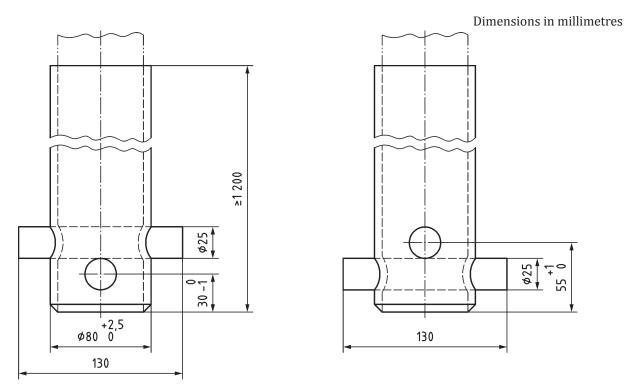


Figure A.1 — Mast lower part





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