INTERNATIONAL STANDARD

ISO 3078

Third edition
2016-11-15

Shipbuilding — Cargo winches

Construction navale — Treuils de charge

Reference number
ISO 3078:2016(E)

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

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).

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).

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

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 8, *Ships and marine technology,* Subcommittee SC 4, *Outfitting and deck machinery*.

This third edition cancels and replaces the second edition (ISO 3078:1987), which has been technically revised with the following changes:

a) definition of "maximum setting down speed" has been added which is one of the most important factor in performance;

b) requirement of length of rope reeling off of the drum has been added to guarantee the safety operation of ropes.

Shipbuilding — Cargo winches

1 Scope

This document specifies the general requirements of cargo winches on cargo derricks, particularly electric drive or hydraulic drive.

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.

ISO 2408, *Steel wire ropes for general purpose — Characteristics*

ISO 6482, *Shipbuilding — Deck machinery — Warping end profiles*

ISO 7825, *Shipbuilding — Deck machinery — General requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 3828 and the following apply.

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

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
cargo winch
winch used for hoisting and lowering cargo

[SOURCE: ISO 3828:2008, 4.2]

3.2
nominal size
size which corresponds to the nominal load, i.e. the maximum working load at the hook, in kilonewtons, which the winch is rated to lift in direct operations (with a single sheave at the derrick-head and a single sheave at the foot)

Note 1 to entry: Winches are graded according to their nominal size as given in Table 1.

Note 2 to entry: If the winch has reduction gear with several gear ratios, each step shall correspond to a nominal load in Table 1.

Note 3 to entry: The nominal sizes are derived from the preferred number series.

Note 4 to entry: The definition of the nominal size given above is not applicable to heavy derricks.

Note 5 to entry: See Figure 1.

3.3
nominal speed of hoisting
minimum speed at which the winch is capable of lifting the nominal load

Note 1 to entry: The minimum nominal speeds of hoisting are given in Table 1.