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**Round steel short link chains for  
lifting purposes — Fine tolerance  
hoist chains for hand operated chain  
hoists — Grade VH**

*Chaînes de levage en acier de section ronde à maillons courts —  
Chaînes de palans de tolérances fine pour palans à la main — Classe  
de qualité VH*



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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.

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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 111, *Round steel link chains, chain slings, components and accessories*, Subcommittee SC 1, *Chains and chain slings*.

This second edition cancels and replaces the first edition (ISO 16872:2008). Subclause 6.4.5 "Toughness" has been technically revised.



# Round steel short link chains for lifting purposes — Fine tolerance hoist chains for hand operated chain hoists — Grade VH

## 1 Scope

This International Standard specifies the requirements for fine-tolerance hoist chains of grade VH for use as load chains in hand operated chain hoists for lifting purposes. They are round steel short link chains, electrically welded, heat treated, and tested; they comply with the general conditions of acceptance of ISO 1834.

NOTE 1 The letter “V” expresses the grade in accordance with ISO 1834.

NOTE 2 The letter “H” expresses that these hoist chains are for hand operated hoists only.

NOTE 3 Resistance butt welding and flash welding are listed in ISO 4063.

The range of nominal sizes covered by this International Standard is from 3 mm to 13 mm. Fine-tolerance hoist chains, according to this International Standard, are for use in the temperature range  $-10\text{ }^{\circ}\text{C}$  to  $150\text{ }^{\circ}\text{C}$ .

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 148-1, *Metallic materials — Charpy pendulum impact test — Part 1: Test method*

ISO 497, *Guide to the choice of series of preferred numbers and of series containing more rounded values of preferred numbers*

ISO 643, *Steels — Micrographic determination of the apparent grain size*

ISO 1834, *Short link chain for lifting purposes — General conditions of acceptance*

ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

ISO 14556, *Steel — Charpy V-notch pendulum impact test — Instrumented test method*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1834 and the following apply.

### 3.1

#### **standard gauge length**

multiple pitch length based on 11 chain links