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# International Standard



# 3076

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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## **Short link chain for lifting purposes — Grade T (8), non-calibrated, for chain slings, etc.**

*Chaînes de levage à maillons courts, classe T (8), non calibrées, pour élingues à chaînes, etc.*

**Second edition — 1984-08-01**

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**Descriptors** : lifting equipment, hoisting slings, chains, welded chains, specifications, dimensions, dimensional tolerances, tests, tension tests, mechanical properties.

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been authorized 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3076 was developed by Technical Committee ISO/TC 111, *Round steel link chains, lifting hooks and accessories*.

The first edition (ISO 3076-1980) had been approved by the member bodies of the following countries :

Australia	India	Spain
Austria	Ireland	Sweden
Bulgaria	Italy	United Kingdom
Canada	Korea, Rep. of	USA
Chile	Mexico	USSR
Czechoslovakia	Poland	Yugoslavia
Germany, F.R.	South Africa, Rep. of	

The member bodies of the following countries had expressed disapproval of the document on technical grounds :

Belgium  
France  
Japan  
Netherlands

This second edition, which cancels and replaces ISO 3076-1980, incorporates draft Amendment 1, which was circulated to the member bodies in May 1983 and has been approved by the member bodies of the following countries :

Australia	Egypt, Arab Rep. of	Sweden
Austria	Japan	United Kingdom
Belgium	Poland	USSR
Bulgaria	Romania	Yugoslavia
Canada	South Africa, Rep. of	

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Germany, F.R.  
India

# Short link chain for lifting purposes — Grade T (8), non-calibrated for chain slings, etc.

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the requirements for lifting chains, grade T (8), non-calibrated, for use on cranes, in chain slings and for general lifting purposes. These are electrically welded round steel short link chains, fully heat treated and tested and comply with the general conditions of acceptance of ISO 1834.

The range of sizes covered by this International Standard is from 5 mm to 45 mm. The annex gives a range of temporary additional sizes 6 mm to 35 mm.

## 2 REFERENCES

ISO/R 388, *ISO metric series for basic thicknesses of sheet and diameters of wire.*

ISO 643, *Steels — Micrographic determination of the ferritic or austenitic grain size.*

ISO 1035/1, *Hot-rolled steel bars — Part 1 : Dimensions of round bars.*

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

## 3 DEFINITIONS

For the purpose of this International Standard the definitions given in ISO 1834 apply.

## 4 GENERAL CONDITIONS OF ACCEPTANCE

The chain shall comply fully with the requirements of ISO 1834 as well as those of this International Standard.

## 5 DIMENSIONS

### 5.1 Size (see ISO 1834, clause 4, Definitions)

The size of chain shall be one of the sizes listed in table 1, column 1 corresponding to the nominal diameter ( $d_n$ ) of the steel wire (ISO/R 388) or bar (ISO 1035/1) from which the chain is made.

NOTE — Control over the size of the material (bar or wire) from which the chain is made is important but this International Standard concerns finished chain and shall assume that the inspector may not have the opportunity of retrospective measurement of the original material. The chain manufacturer will realize the need for the size of this material to be kept within accepted tolerances.

### 5.2 Material diameter (see ISO 1834 for definition of material diameter and method of measurement)

#### 5.2.1 Tolerance on material diameter

For sizes less than 18 mm the diameter  $d$  of the material in the finished link shall nowhere differ from the nominal diameter by more than  $\pm \frac{2}{6}$  %, except at the weld.

For sizes 18 mm and over, the diameter  $d$  of the material in the finished link shall nowhere differ from the nominal diameter by more than  $\pm 5$  %, except at the weld.

#### 5.2.2 Tolerances at the weld

The dimension of the steel at the weld shall nowhere be less than the diameter  $d$  of the steel adjacent to the weld, or exceed it by more than the following tolerances. (See figure 1 and table 1.)