International Standard



4778

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Chain slings of welded construction — Grades M (4), S (6) and T (8)

Élingues à chaînes assemblées par soudure — Classes M (4), S (6) et T (8)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (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 set up 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 4778 was developed by Technical Committee ISO/TC 111, Round steel link chains, chain wheels, lifting hooks and accessories, and was circulated to the member bodies in July 1978.

It has been approved by the member bodies of the following countries:

Australia Italy United Kingdom
Belgium Japan USA
Canada Korea, Rep. of USSR
India Sweden Yugoslavia

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

France Germany, F. R. Netherlands South Africa, Rep. of

Chain slings of welded construction — Grades M (4), S (6) and T (8)

Scope and field of application

This International Standard specifies the requirements, methods of rating and testing of single, two, three and four branch¹⁾ welded chain slings of grades M (4), S (6) and T (8) using chain conforming to ISO 1834, ISO 1835, ISO 3075 and ISO 3076 together with the appropriate range of components.

This International Standard does not apply to mechanically joined slings or welded slings having branches of unequal nominal reach.

2 References

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

ISO 1835, Short link chain for lifting purposes — Grade M (4) non-calibrated, for chain slings, etc.

ISO 2766, Single lifting hooks with shank — Capacity up to 25 tonnes — Grades M, P, S (T, V) — Hammer and drop forged hooks.

ISO 3075, Short link chain for lifting purposes — Grade S (6), non-calibrated, for chain slings, etc.

ISO 3076, Short link chain for lifting purposes — Grade T (8), non-calibrated, for chain slings, etc.

3 Definitions

- **3.1 chain sling**: An assembly consisting of chain or chains joined to upper and lower terminal fittings suitable according to the requirements of this International Standard for attaching loads to be lifted to the hook of a crane or other lifting machine (see figures 2 to 5).
- **3.2** master link: A parallel-sided link forming the upper terminal fitting of a chain sling by means of which it is attached to the hook of a crane or other lifting machine (see figures 2 to 5).

- **3.3 intermediate master link**: A link used to connect two or more branches to a master link (see figures 2 to 5).
- **3.4 joining link**: A link fitted to the end of a chain to connect it either directly or through an intermediate link to an upper or lower terminal fitting (see figures 2 to 5).
- **3.5** intermediate link: A link used to form a connection between the terminal fitting and the joining link fitted to the chain (see figures 2 to 5).
- **3.6 lower terminal**: A link, hook or other device fitted at the end of a branch remote from the master link or upper terminal.
- **3.7 proof force**: A force applied as a test to the whole sling, or a force applied as a test to a section of a sling (see clause 10).
- **3.8** working load limit: The maximum mass which a sling is designed to support in general service.
- **3.9** working load: The maximum mass which a sling should be used to support in a particular stated service.

4 Designations

The following designations should be used in specifying slings to this International Standard.

4.1 Nominal size

The nominal size of a chain sling is the nominal size of the short link chain used in its manufacture.

The nominal size of each individual master link, joining or intermediate link where it is of round section is the nominal diameter of the material from which it is made.

¹⁾ The term "branch" or "leg" may be used.