Second edition
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Heavy-duty cranked-link transmission chains

Chaînes de transmission à maillons coudés de haute résistance

Reference number
ISO 3512:1992(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 3512 was prepared by Technical Committee ISO/TC 100, *Chains and chain wheels for power transmission and conveyors*.

This second edition cancels and replaces the first edition (ISO 3512:1976), which has been technically revised.

Annex A forms an integral part of this International Standard. Annex B is for information only.

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1 Scope

This International Standard specifies dimensions, tolerances, measuring forces and minimum tensile strengths, together with the tooth gap forms and rim profiles of the associated chain wheels, for cranked-link or offset sidebar roller chains suitable for the mechanical transmission of power and allied applications under onerous conditions.

The dimensions of chains specified ensure complete interchangeability of any given size and provide interchangeability of individual links of the chain for repair purposes.

NOTE 1 Since these chains have been derived from an "inch" series of chains, their original dimensions are given in annex B.

2 Chains

2.1 Nomenclature of assemblies and components

The nomenclature of chain assemblies and their component parts are illustrated in figures 1 and 2; the figures do not define the actual form of the chain plates. The symbols for chains are given in table 1 and are shown in figure 3.

2.2 Designation

Heavy-duty cranked-link roller chains shall be designated by the standard ISO chain number given in table 1: the first two digits express the nominal pitch in eighths of an inch, while the second (last) two digits express the basic bearing pin diameter in sixteenths of an inch.

2.3 Dimensions

Chains shall conform to the dimensions shown in figure 3 and given in table 1. Maximum and minimum dimensions are specified to ensure interchangeability of links as produced by different makers of chain. They represent limits for interchangeability, but are not the manufacturing tolerances.

Pitch, p, is a theoretical reference dimension used in calculating strand lengths and chain wheel dimensions; it is not intended for inspection of individual links.

2.4 Tensile testing

2.4.1 The minimum tensile strength is that value which shall be exceeded when a tensile force is applied to a sample which is tested to destruction as defined in 2.4.2. This minimum tensile strength is not a working force. It is intended primarily as a comparative figure between chains of various constructions. For application information, the manufacturers or their published data should be consulted.