

INTERNATIONAL STANDARD



1395

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

Short pitch transmission precision bush chains and chain wheels

Chaînes de transmission de précision à douilles, à pas court, et roues dentées correspondantes

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Documents

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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.

Prior to 1972, the results of the work of the technical committees were published as ISO Recommendations; these documents are in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 100, *Chains and chain wheels for power transmission and conveyors*, has reviewed ISO Recommendation R 1395-1970 and found it technically suitable for transformation. International Standard ISO 1395 therefore replaces ISO Recommendation R 1395-1970, to which it is technically identical.

ISO Recommendation R 1395 had been approved by the member bodies of the following countries :

Austria	Greece	Sweden
Belgium	India	Switzerland
Brazil	Israel	Thailand
Czechoslovakia	Italy	Turkey
Chile	Japan	United Kingdom
Finland	Korea, Rep. of	Yugoslavia
France	Romania	
Germany	South Africa, Rep. of	

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

U.S.A.*
U.R.S.S.

* Subsequently, this member body approved the Recommendation.

No member body disapproved the transformation of the Recommendation into an International Standard.

Short pitch transmission precision bush chains and chain wheels

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the characteristics of short pitch precision bush chains of simple and multiplex construction suitable for the mechanical transmission of power and allied applications, together with the tooth gap forms and rim profiles of their associated chain wheels. It covers dimensions, tolerances, measuring loads and minimum breaking loads.

It applies to chains of two pitches only, namely 0.25 in (6,35 mm and 0.375 in (9,525 mm).

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

2 REFERENCE

ISO/R 286, *ISO system of limits and fits — Part 1 : General, tolerances and deviations.*

3 CHAINS

3.1 Nomenclature

Figures 1, 2 and 3 do not define the actual form of the chain plates. Dimensional definitions are contained in tables 1 and 1M.

3.2 Designation

Transmission precision bush chains are designated by the ISO chain numbers given in tables 1 and 1M, first column,

the first two digits expressing the pitch in sixteenths of an inch. The chain numbers in tables 1 and 1M are supplemented by a hyphenated suffix, 1 for simple chain, 2 for duplex chain, 3 for triplex chain, etc. (for example 04C-1, 04C-2, 04C-3, etc.).

3.3 Dimensions

Chains shall conform to the dimensions given in tables 1 and 1M. The 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 actual tolerances to be used in manufacture.

3.4 Breaking loads

The test length shall have a minimum of five free pitches. The ends shall be attached to the testing machine shackles by a pin through the plate holes or through the bushes or by the bush common to an inner and outer link. The shackles shall be so designed as to allow universal movement; the actual method to be used is left to the discretion of the manufacturer.

Tests in which failures occur adjacent to the shackles shall be disregarded.

The minimum tensile breaking loads shall be those given in tables 1 and 1M.

3.5 Proof loading

All chains shall be proof loaded to one-third of the minimum tensile breaking load given in tables 1 and 1M.

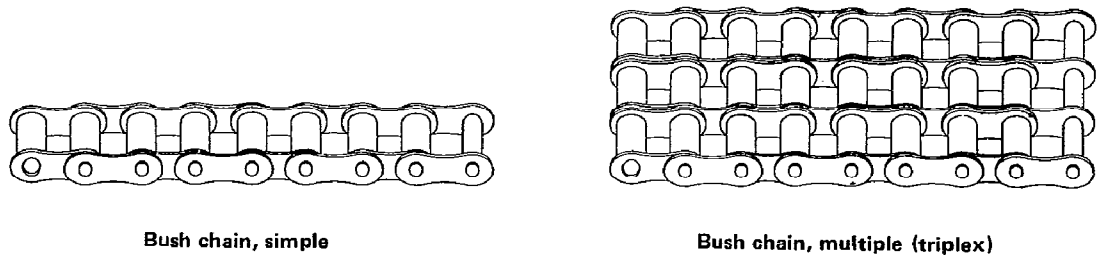


FIGURE 1 — Types of chains

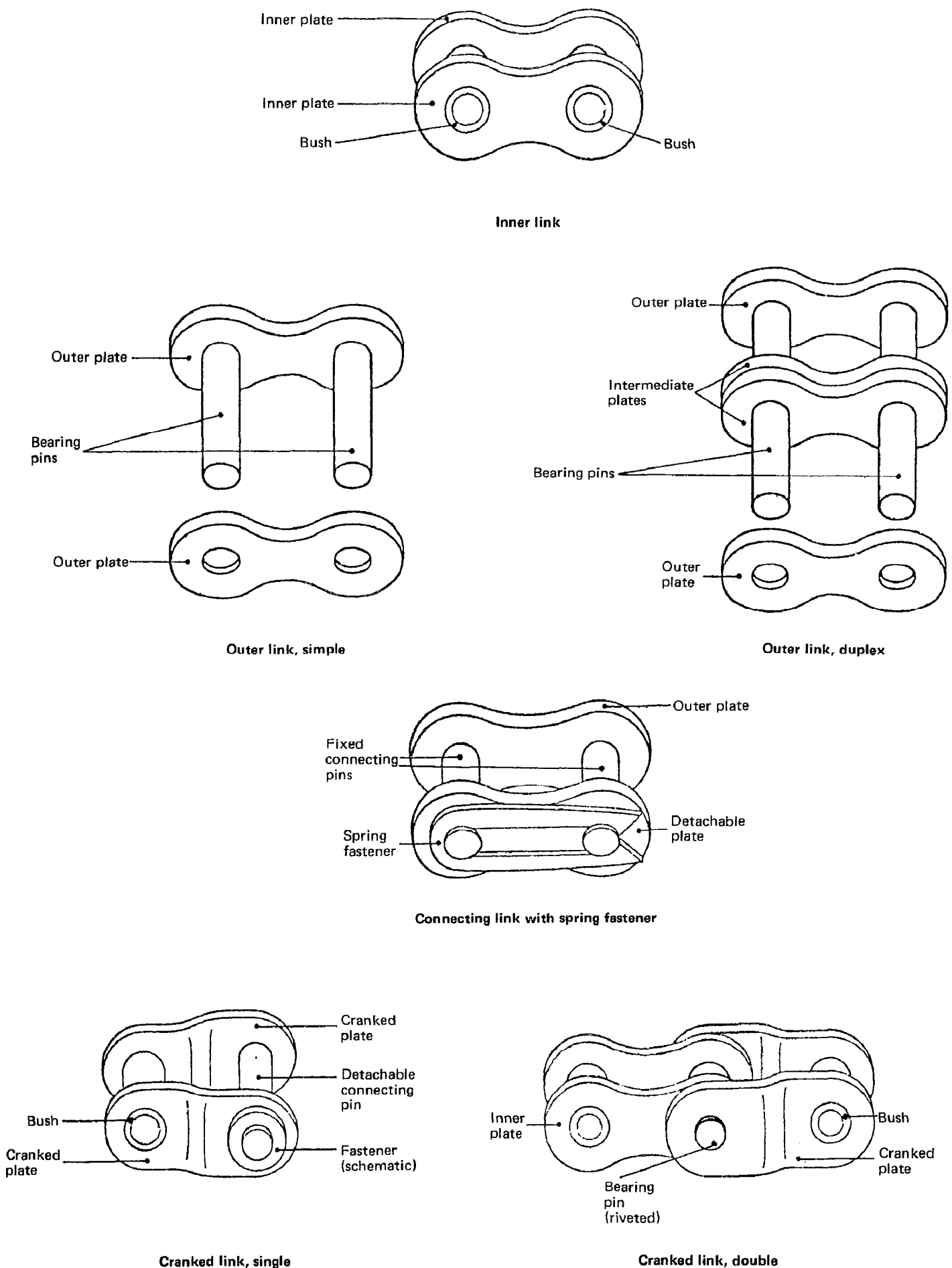


FIGURE 2 — Types of links