
**Leaf chains, clevises and sheaves —
Dimensions, measuring forces, tensile
strengths and dynamic strengths**

*Chaînes de levage à mailles jointives, chapes et galets de renvoi —
Dimensions, forces de mesurage, forces de résistances à la traction et
forces de résistances dynamique*



This document is a preview generated by EBS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Chains	1
3.1 Nomenclature	1
3.2 Chain designation	3
3.3 Dimensions	4
3.4 Performance Requirements	10
3.4.1 General	10
3.4.2 Minimum tensile strength	10
3.4.3 Application of tensile force	10
3.4.4 Dynamic testing	10
3.5 Pre-loading	10
3.6 Length validation	10
3.7 Cranked links	11
3.8 Marking	11
4 Clevises	11
4.1 Types	11
4.2 Dimensions	12
4.3 Minimum tensile strength	15
4.4 Length adjustment	15
5 Sheaves	15
Annex A (informative) Method of calculating chain minimum dynamic strength	17
Annex B (informative) Method of determining maximum test force F_{\max} when conducting dynamic strength conformance test	19
Bibliography	20

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).

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).

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 100, *Chains and chain sprockets for power transmission and conveyors*.

This fifth edition cancels and replaces the fourth edition (ISO 4347:2004), which has been technically revised. This edition specifies the minimum dynamic strength of the chains.

Introduction

This International Standard includes two series of chains: one derived from the ISO 606 A/ASME B29.8 series, designated by the symbol “LH” or “BL”; the other derived from the ISO 606 B series, designated by the symbol “LL”.

In [Table 1](#) and [Table 2](#), requirements for minimum dynamic strengths are specified. See informative [Annex A](#) for calculation details.

Leaf chains, clevises and sheaves — Dimensions, measuring forces, tensile strengths and dynamic strengths

1 Scope

This International Standard specifies the characteristics of chains used for general lifting purposes, together with the rim profiles of sheaves and the chain attachment ends of clevises. It gives dimensions, limits for interchangeability, length measurement, preloading, minimum tensile strengths and minimum dynamic strengths.

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 606, *Short-pitch transmission precision roller and bush chains, attachments and associated chain sprockets*

ISO 15654¹⁾, *Fatigue test methods for transmission precision roller chains and leaf chains*

ASME²⁾ B29.8, *Leaf chains, clevises and sheaves*

3 Chains

3.1 Nomenclature

The nomenclature of chains is shown in [Figure 1](#) (which does not necessarily define the actual form of the chain plates) and as given in [Table 1](#) and [Table 2](#).

1) To be published (Revision of ISO 15654:2004).

2) American Society of Mechanical Engineers.