

Conveyor chains, attachments and sprockets

ICS 53.040.20

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

National foreword

This British Standard reproduces verbatim ISO 1977:2000 and implements it as the UK national standard. It supersedes BS 4116-1:1992, BS 4116-2:1992 and BS 4116-3:1992, which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/1, Steel roller chains, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii to v, a blank page, pages 1 to 15 and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

This British Standard, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 February 2001

© BSI 02-2001

ISBN 0 580 36919 6

Amendments issued since publication

Amd. No.	Date	Comments

INTERNATIONAL STANDARD

**ISO
1977**

First edition
2000-11-01

Conveyor chains, attachments and sprockets

Chaînes de manutention, plaques-attaches et roues dentées



Reference number
ISO 1977:2000(E)

AVA Documents
Document Sharing Hub

Contents

Page

Foreword.....	iv
Introduction	v
1 Scope	1
2 Normative reference	1
3 Chains	1
3.1 Nomenclature	1
3.2 Dimensions.....	1
3.3 Tensile testing	6
3.4 Length accuracy	6
3.5 Cranked links	6
3.6 Designation	6
3.7 Marking	6
4 Attachments	7
4.1 K attachments	7
4.2 Deep plates.....	7
5 Sprockets.....	10
5.1 Diametral dimensions	10
5.2 Sprocket tooth gap form	12
5.3 Rim profile	13
5.4 Radial run-out.....	14
5.5 Axial run-out.....	14
5.6 Bore tolerances.....	14
5.7 Marking	14
Annex A (normative) Pitch-circle diameters	15

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 1977 was prepared by Technical Committee ISO/TC 100, *Chains and chain wheels for power transmission and conveyors*.

This first edition of ISO 1977 cancels and replaces ISO 1977-1:1976, ISO 1977-2:1974, and ISO 1977-3:1974, which have been technically revised.

Annex A forms an integral part of this International Standard.

Introduction

ISO 1977 combines into a single document ISO 1977-1, ISO 1977-2 and ISO 1977-3, which covered metric-series chains and attachments, and chain wheels, while at the same time revising their technical content.

The principle technical changes are: a reduction in the flanged roller dimensions and the width between outer plates in the MC series of chains, an increase in the width between inner plates in M-series, MC56, MC112 and MC224 chains, and the addition of the small roller diameter to the MC series. New information on the calculation of sprocket tip diameters and tooth heights above root diameters is also given.

