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## **Industrial trucks — Fork arm extensions and telescopic fork arms — Technical characteristics and strength requirements**

*Chariots de manutention — Extensions de bras de fourche et bras de  
fourche télescopiques — Caractéristiques techniques et prescriptions  
de résistance*



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## Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Symbols</b> .....	<b>1</b>
<b>5 Requirements for rated capacity and rated load centre distance</b> .....	<b>2</b>
5.1 Fork arm.....	2
5.2 Fork arm extension.....	2
5.3 Telescopic fork arm.....	3
<b>6 Requirements for fork arm extensions</b> .....	<b>3</b>
6.1 Length.....	3
6.2 Accidental disengagement.....	3
6.3 Yield strength and Safety factor.....	3
6.4 Test / design load.....	3
6.5 Open-section fork arm extension retaining system.....	4
6.6 Lateral clearance.....	4
<b>7 Requirements for telescopic fork arms</b> .....	<b>5</b>
7.1 Strength.....	5
7.2 Test load in fully retracted mode.....	5
7.3 Test load in fully extended mode.....	6
<b>8 Verification and Testing</b> .....	<b>6</b>
8.1 General.....	6
8.2 Buckling in fork arm extensions.....	6
8.3 Procedure.....	7
8.4 Results.....	7
<b>9 Information for use</b> .....	<b>7</b>
9.1 Fork arm extensions.....	7
9.2 Telescopic fork arms.....	7
<b>10 Marking</b> .....	<b>8</b>
10.1 Fork arm extensions.....	8
10.2 Telescopic fork arms.....	8
<b>Bibliography</b> .....	<b>9</b>

## 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](http://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](http://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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 110, *Industrial trucks*, Subcommittee SC 2, *Safety of powered industrial trucks*.

This second edition cancels and replaces the first edition (ISO 13284:2003), which has been technically revised.

The main changes are as follows:

- SI units have been adopted throughout;
- safety factor has been aligned with ISO 2330:2002
- the requirements for information for use have been revised; including a clarification of tip loading.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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## Introduction

This document was developed in response to worldwide demand for specifications for fork arm extensions and telescopic fork arms.

Fork arm extensions are used as an economic means of extending the effective blade length of fork arms on industrial trucks. They are available with either a closed rectangular cross-section or an open inverted-channel cross-section.

Where possible, preference should be given to using a longer fork rather than an extension. If extensions are to be used, preference should be given to the closed cross-section rather than an open type of extension.

Telescopic fork arms replace standard fork arms and provide the truck operator with the means of adjusting the fork arm blade length. They are available either as simple variable-length fork arms for handling loads of varying dimensions or, alternatively, for reaching out or retracting palletized loads in double-deep stacking and de-stacking operations.