INTERNATIONAL STANDARD

ISO 18264

Second edition
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Textile slings — Lifting slings for general purpose lifting operations made from fibre ropes — High modulus polyethylene (HMPE)

Élingues textiles — Élingues de levage pour opérations de levage pour usage général en cordages en fibres — Polyéthylène à haut module (HMPE)

Reference number
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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).

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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.

This document was prepared by Technical Committee ISO/TC 38, *Textiles.*

This second edition cancels and replaces the first edition (ISO 18264:2016), which has been technically revised.

The main changes are as follows:

— the Scope has been made more concise;

— the Normative references have been updated; some references have been moved to the Bibliography;

— the Terms and definitions have been updated;

— the formulae in Table 4 have been corrected;

— figures and designations have been changed in accordance with ISO/IEC Directives Part 2:2021;

— subclauses 7.3.2 and 7.3.3 have been rewritten and simplified. References are given to ISO 2377and ISO 9554 instead of repeating the texts in those standards.

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.

Introduction

This document has been prepared to be a standard providing one means of complying with the essential safety requirements.

Textile slings — Lifting slings for general purpose lifting operations made from fibre ropes — High modulus polyethylene (HMPE)

1 Scope

This document specifies the requirements related to safety, including methods of rating and testing sling constructions made from fibre ropes. It is applicable to ropes made of high modulus polyethylene (HMPE) fibre having a minimum reference number of 12 and a maximum reference number of 72.

The fibre rope slings covered by this document are intended for general-purpose lifting operations only, i.e. when used for lifting objects, materials or goods which require no deviations from the requirements, design factors, or work load limits specified.

This document does not cover slings used for the lifting of persons, potentially dangerous materials such as molten metal and acids, glass sheets, fissile materials, nuclear reactors and special (non-routine and engineered) lifting operations. This document can be used as a reference for lifting slings made with HMPE fibres to be used in special lifting operations.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1968, *Fibre ropes and cordage — Vocabulary*

ISO 2262, *General purpose thimbles for use with steel wire ropes — Specification*

ISO 2307, *Fibre ropes — Determination of certain physical and mechanical properties*

ISO 2415, *Forged shackles for general lifting purposes — Dee shackles and bow shackles*

ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system*

ISO 7597, *Forged steel lifting hooks with latch, grade 8*

ISO 8539, *Forged steel lifting components for use with Grade 8 chain*

ISO 9554:2019, *Fibre ropes — General specifications*

ISO 10325, *Fibre ropes — High modulus polyethylene — 8-strand braided ropes, 12-strand braided ropes and covered ropes*

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 16798, *Links of Grade 8 for use with slings*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1968 and the following apply.