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Standards

Irish Standard
I.S. EN ISO 2307:2010

Fibre ropes - Determination of certain physical and mechanical properties (ISO 2307:2010)

I.S. EN ISO 2307:2010

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NORME EUROPÉENNE

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English Version

Fibre ropes - Determination of certain physical and mechanical properties (ISO 2307:2010)

Cordages en fibres - Détermination de certaines caractéristiques physiques et mécaniques (ISO 2307:2010)

Faserseile - Bestimmung einiger physikalischer und mechanischer Eigenschaften (ISO 2307:2010)

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Foreword

This document (EN ISO 2307:2010) has been prepared by Technical Committee ISO/TC 38 "Textiles" in collaboration with Technical Committee CEN/TC 248 "Textiles and textile products" the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2011, and conflicting national standards shall be withdrawn at the latest by February 2011.

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**INTERNATIONAL
STANDARD**

**ISO
2307**

Fourth edition
2010-08-15

**Fibre ropes — Determination of certain
physical and mechanical properties**

*Cordages en fibres — Détermination de certaines caractéristiques
physiques et mécaniques*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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ISO 2307 was prepared by Technical Committee ISO/TC 38, *Textiles*.

This fourth edition cancels and replaces the third edition (ISO 2307:2005), which has been technically revised.

Fibre ropes — Determination of certain physical and mechanical properties

1 Scope

This International Standard specifies, for ropes of different kinds, a method of determining each of the following characteristics:

- linear density;
- lay length;
- braid pitch;
- elongation;
- breaking force.

The linear density, lay length and braided pitch are measured with the rope under a specified tension called the reference tension, as specified in Annex A.

The elongation corresponds to the measured increase in length of the rope when the tension to which it is subjected is increased from an initial value (reference tension) to a value equal to 50 % of the minimum specified breaking strength of the rope.

The breaking force is the maximum force registered (or reached) during a breaking test on the test piece, carried out on a tensile testing machine with constant rate of traverse of the moving element. The breaking force values given in the tables of rope specifications are only valid when this type of testing machine is used.

When it is not possible to test the whole section of rope, the method described in Annex B can be used, subject to agreement between the parties involved.

This International Standard also provides a method for measuring water repellency, lubrication and finish content, and heat setting treatment, when requested by the customer.

2 Normative references

The following referenced documents are indispensable for the application 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 139, *Textiles — Standard atmospheres for conditioning and testing*

ISO 1968, *Fibre ropes and cordage — Vocabulary*

ISO 9554:2010, *Fibre ropes — General specifications*

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