



BSI Standards Publication

## Fibre ropes for offshore stationkeeping — Aramid

**National foreword**

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**Fibre ropes for offshore  
stationkeeping — Aramid**

*Cordages en fibres pour le maintien en position des structures  
marines — Aramide*



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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

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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](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 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 38, *Textiles*.

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# Fibre ropes for offshore stationkeeping — Aramid

## 1 Scope

This Technical Specification specifies the main characteristics and test methods of new aramid fibre ropes used for offshore stationkeeping.

## 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 139, *Textiles — Standard atmospheres for conditioning and testing*

ISO 1968, *Fibre ropes and cordage — Vocabulary*

ISO 2060, *Textiles — Yarn from packages — Determination of linear density (mass per unit length) by the skein method*

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

ISO 18692, *Fibre ropes for offshore stationkeeping — Polyester*

ASTM D1907, *Test Method for Linear Density of Yarn (Yarn Number) by the Skein Method*

ASTM D1776, *Practice for Conditioning and Testing Textiles*

ASTM D6611, *Standard Test Method for wet and dry Yarn-on-Yarn Abrasion resistance*

ASTM D7269, *Test Methods for Tensile Testing of Aramid Yarns*

CI 1503, *Test method for yarn-on-yarn abrasion*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1968, ISO 18692, and the following apply.

### 3.1

#### **aramid**

long-chain synthetic polyamide in which at least 85% of the amide linkages are attached directly to two aromatic rings

[SOURCE: ISO 1968, 3.3.1, modified]

### 3.2

#### **axial compression fatigue**

failure mode for fibre rope such as *aramid* (3.1) under low tension or compression