

ICS 59.080.50

CCS W 58



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 36948-2018

**Fibre ropes for offshore station keeping -- High modulus
polyethylene (HMPE)**

Issued on: December 28, 2018

Implemented on: April 1, 2019

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

4 materials

4.1 rope core material

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the translation method equivalent to ISO /T S14909.2012 "Ocean platform positioning mooring fiber rope high modulus polyethylene

(HMPE).

The documents of our country that have a consistent correspondence with the international documents referenced in this standard are as follows.

---GB/T 4743-2009 Determination of normal density of skein of textile package yarns (ISO 2060.1994, MOD)

--- GB/T 16825.1-2008 Inspection of static single-axis testing machines - Part 1. Tensile and/or

Inspection and calibration (ISO 7500-1.2004, IDT)

---GB/T 19975-2005 Test method for tensile properties of high-strength filaments (ISO 2062.1972, ASTM D885.2001,

NEQ)

This standard makes the following editorial changes.

--- Chapter 1 increase note "This standard of high modulus polyethylene (HMPE) fiber is China's ultra high molecular weight polyethylene

(UHMWPE) fiber";

--- Change the note in Chapter 3 "Terms and Definitions" of the International Standard to a footer.

This standard was proposed by the China National Textile and Apparel Council.

This standard is under the jurisdiction of the National Household Textile Standardization Technical Committee (SAC/TC302).

This standard was drafted. Ministry of Agriculture Rope Net Product Quality Supervision, Inspection and Testing Center, Shandong Lupu Technology Co., Ltd., Jiangsu Shen Yun

Rope Cable Co., Ltd., Zhejiang Hailun Rope Net Co., Ltd., Hunan Zhongtai Special Equipment Co., Ltd., Shanghai Textile Industry Technical Supervision Office,

Honeywell Integrated Technology (China) Co., Ltd., Hunan Xinhai Co., Ltd., Xuzhou Henghui Weaving Machinery Co., Ltd., Jiangsu Shenhe Branch

Technology Development Co., Ltd., Sinopec Yizheng Chemical Fiber Co., Ltd., Shanghai Sailfish Rope Net Co., Ltd.

1 Scope

This standard specifies the main characteristics and test methods for anchoring mooring high modulus polyethylene (HMPE) fiber ropes for offshore platforms.

Note. The high modulus polyethylene (HMPE) fiber of this standard is China's ultra high molecular weight polyethylene (UHMWPE) fiber.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO 1968 fiber rope and rope vocabulary (Fiberropesandcordage-Vocabulary)

ISO 2060 Textiles - Determination of yarn density (per unit length mass) - skein method [Textiles-Yarnfrom

packages-Determinationoflineardensity(massperunitlength)bytheskeinmethod]

ISO 2062 - Determination of breaking strength and elongation at break of single-spinning yarns - s.

Yarnsfrompackages-Determinationofsingle-endbreakingforceandelongationatbreakusingcon-

Stanrateofextension(CRE)tester)

ISO 7500-1 - Verification of static single-axial testing machines for metallic materials - Part 1

Calibration and calibration (Metalicmaterials-Verification of

staticuniaxialtestingmachines-Part 1. Tension/com-

pressiontestingmachines-Verificationandcalibrationoftheforce-measuringsystem)

ISO 18692.2007 offshore platform positioning mooring fiber rope polyester
(Fibreropesforoffshorestationkeeping-

Polyester)

Standard Test Method for ASTM D885 Artificial Organic Fiber Tire Cord, Tire Cord Fabric
and Industrial Filament Yarn

(StandardTestMethodsforTireCords, TireCordFabrics, andIndustrialFilamentYarnsMadefrom
ManufacturedOrganic-BaseFibers)

ASTM D1907 Standard Test Method for Testing Yarn Density (Yarn Count) by Skein Method
(StandardTestMethodfor

LinearDensityofYarn(YarnNumber)bytheSkeinMethod)

ASTM D2256 Standard Test Method for Tensile Properties of Yarns (StandardTest Methodfor
TensileProper-

tiesofYarnsbytheSingle-StrandMethod)

3 Terms and definitions

The terms and definitions defined by ISO 1968, ISO 18692 apply to this document 1).

1) The original international standard is. The post-treatment method for marine grade high
modulus polyethylene fiber and marine rope is not applicable to this standard.

4.1 rope core material

The fiber used for the cord core shall be a high-strength HMPE fiber with an average
breaking strength of not less than 2.5 N/tex, fiber technical requirements and