



BSI Standards Publication

Steel wire ropes — Pre-fabricated parallel wire strands for suspension bridge main cable — Specifications

National foreword

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The UK participation in its preparation was entrusted to Technical Committee MHE/2, Wire ropes.

A list of organizations represented on this committee can be obtained on request to its secretary.

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© The British Standards Institution 2019
Published by BSI Standards Limited 2019

ISBN 978 0 580 96850 1

ICS 93.040; 77.140.65

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 January 2019.

Amendments/corrigenda issued since publication

Date	Text affected
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INTERNATIONAL STANDARD

ISO
19427

First edition
2019-01-04

Steel wire ropes — Pre-fabricated parallel wire strands for suspension bridge main cable — Specifications

*Câbles en acier — Câbles à fils parallèles préfabriqués pour câble
porteur de pont suspendu — Spécifications*



Reference number
ISO 19427:2019(E)
Documents
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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.

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This document was prepared by Technical Committee ISO/TC 105, *Steel wire ropes*.

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.

Steel wire ropes — Pre-fabricated parallel wire strands for suspension bridge main cable — Specifications

1 Scope

This document specifies the production methods, specifications, requirements, test methods, inspection rules, marks, packing, transportation and storage for pre-fabricated parallel wire strand (PPWS), which are made of hot-dip galvanized or zinc-aluminium coated high tensile steel wires described in [ISO 19203](#).

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 148-1](#), *Metallic materials — Charpy pendulum impact test — Part 1: Test method*

[ISO 4986](#), *Steel casting — Magnetic particle inspection*

[ISO 4992-2](#), *Steel castings — Ultrasonic examination — Part 2: Steel castings for highly stressed components*

[ISO 6892-1](#), *Metallic materials — Tensile testing — Part 1: Method of test at room temperature*

[ISO 10474:2013](#), *Steel and steel products — Inspection documents*

ISO 17558:2006, *Steel wire ropes — Socketing procedures — Molten metal and resin socketing*

[ISO 19203](#), *Steel wire rod and wire products — Hot-dip galvanized and zinc-aluminium coated steel wires for bridge cables — Specifications*

[EN 1774](#), *Zinc and zinc alloys — Alloys for foundry purposes — Ingot and liquid*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

pre-fabricated parallel wire strand PPWS

strand factory pre-fabricated by assembling a group of wires laid parallel in a hexagonal (regular or irregular) shape, bound together at intervals by binding tape, and fitted with *sockets* ([3.3](#)) at each end

Note 1 to entry: The section and the structure of PPWS is shown in [Figure 1](#).