



SLOVENSKI STANDARD
oSIST prEN 10369-2:2019
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Prednapeta jekla - Zaščitena in obložena vlakna za prednapenjanje - 2. del: Drsne žice

Prestressing steels - Protected and sheathed strands for prestressing - Part 2: Sliding strands

Spannstähle - Geschützte und gehüllte Litzen für Vorspannen - Teil 2: Schiebbare Litzen

Aciers de précontrainte - Torons de précontrainte protégés et gainés - Partie 2 : Torons coulissants

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Ta slovenski standard je istoveten z: prEN 10369-2

ICS:

77.080.20 Jekla Steels

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EUROPEAN STANDARD
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English Version

Prestressing steels - Protected and sheathed strands for prestressing - Part 2: Sliding strands

Aciers de précontrainte - Torons de précontrainte
protégés et gainés - Partie 2 : Torons coulissants

Spannstähle - Geschützte und gehüllte Litzen für
Vorspannen - Teil 2: Schiebbarer Litzen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 459/SC 4.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 10369-2:2019) has been prepared by Technical Committee CEN/TC 459/SC 4 “Concrete reinforcing and prestressing steels”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

prEN 10369 consists of three parts under the general title “Prestressing steels — Protected and sheathed strands for prestressing”:

- *Part 1: General requirements*
- *Part 2: Sliding strands*
- *Part 3: Adherent strands*

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prEN 10369-2:2019 (E)

1 Scope

This document specifies the specific requirements for sliding protected and sheathed strands (type S).

The general requirements for protected and sheathed high strength steel strands are given in prEN 10369-1.

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.

prEN 10369-1:2019, *Prestressing steels — Protected and sheathed strands for prestressing — Part 1: General requirements*

EN ISO 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2)*

EN 10020, *Definition and classification of grades of steel*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in prEN 10369-1:2019 apply.

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

— IEC Electropedia: available at <http://www.electropedia.org/>

— ISO Online browsing platform: available at <http://www.iso.org/obp>
<https://standards.iteh.ai/catalog/standards/sist/35c16abf-877-4a1d-b40a-328771d19146/osist-pren-10369-2-2019>

4 Classification and designation

4.1 Classification

The steels of strands used for sliding protected and sheathed strands (type S) covered by this document are classified as special non-alloy steels according to EN 10020.

4.2 Designation

The designation of the strands used for sliding protected and sheathed strands (type S), defined by this standard shall conform to prEN 10369-1:2019, 5.2, the symbol to be applied for strands used for sliding protected and sheathed strands being S.

NOTE If not designated, the colour is black.

EXAMPLES

Protected and sheathed strand [EN 10138-3-Y1770S7-12,5-F1-C1]+G+S – T_{n1} designates a sliding (type S) greased and sheathed strand for prestressing with a thickness class T_{n1}, made from a strand of nominal diameter 12,5 mm, strength class 1 770 MPa, fatigue class F1 and corrosion class C1 in accordance with EN 10138-3, of black colour.

Protected and sheathed strand [EN 10337-Y1860S7+Z-15,2-F1-D1]+G+S – T_{n1} designates a sliding (type S) greased and sheathed strand for prestressing with a thickness class T_{n1}, made from a galvanized strand of nominal diameter 15,2 mm, strength class 1 860 MPa, fatigue class F1 and class D1 of deflected tensile properties, in accordance with EN 10337, of black colour.

5 Manufacturing process

The sliding protected and sheathed strands (type S) shall be manufactured in accordance with prEN 10369-1:2019, 7.1.1.

6 Requirements for materials used for sliding protected and sheathed strands

The materials used for sliding protected and sheathed strands shall be in accordance with the relevant requirements clause of prEN 10369-1:2019.

7 Requirements for sliding protected and sheathed strands

7.1 Overall diameter

The overall diameter of sliding protected and sheathed strands shall be in accordance with the requirements of Table 1.

Table 1 — Overall diameter of sliding protected and sheathed strands

Dimensions in millimetres

Nominal diameter, d , of the strand used for the sliding protected and sheathed strands	Overall diameter of the sliding protected and sheathed strands ^a	
	Min.	Max.
$d < 15,2$	$d + 2 t_n$	$d + 3,4 t_n$
$d \geq 15,2$	$d + 2 t_n$	$d + 3,7 t_n$

^a t_n : Nominal thickness of the sheath, see 7.4.1.

7.2 Straightness

The straightness of sliding protected and sheathed strands shall be in accordance with the requirements of prEN 10369-1:2019, 7.2.3.

7.3 Mass of the protection product

The applied grease mass, per metre of strand, shall be greater than or equal to:

- 20 g/m for protected and sheathed strands made of uncoated or zinc or zinc alloy coated prestressing strand of nominal diameter greater than or equal to 9,3 mm and lower than 12,5 mm;
- 35 g/m for protected and sheathed strands made of uncoated or zinc or zinc alloy coated prestressing strand of nominal diameter greater than or equal to 12,5 mm and lower than 15,2 mm;
- 40 g/m for protected and sheathed strands made of uncoated or zinc or zinc alloy coated prestressing strand of nominal diameter greater than or equal to 15,2 mm.

7.4 Sheath

7.4.1 Thickness

The thickness of the sheath shall be greater than or equal to the nominal value, t_n , given in Table 2 for the relevant thickness class.