SLOVENSKI STANDARD
oSIST prEN 10369-3:2019

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Prednapeta jekla - Zaščitena in obložena vlakna za prednapenjanje - 3. del: Sprijeta vlakna

Prestressing steels - Protected and sheathed strands for prestressing - Part 3: Adherent strands

Spannstähle - Geschützte und gehüllte Litzen für Vorspannen - Teil 3: Haftende Litzen

Aciers de précontrainte - Torons de précontrainte protégés et gainés - Partie 3 : Torons adhérents

Ta slovenski standard je istoveten z: **prEN 10369-3**

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Prestressing steels - Protected and sheathed strands for prestressing - Part 3: Adherent strands

Aciers de précontrainte - Torons de précontrainte protégés et gainés - Partie 3 : Torons adhérents

Spannstähle - Geschützte und gehüllte Litzen für Vorspannen - Teil 3: Haftende Litzen

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

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Contents

Page

European foreword

This document (prEN 10369-3:2019) 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*

1 Scope

This document specifies the specific requirements for adherent protected and sheathed strands (type A).

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

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.

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 572-2)*

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 the standard prEN 10369-1 apply.

4 Classification and designation

4.1 Classification

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

4.2 Designation

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

NOTE If not designated, the colour is black.

EXAMPLE

Protected and sheathed strand [EN 10337-Y1860S7+ZA-15,7-F3-D2]+W+A – T_n2 white designates an adherent (type A) waxed and sheathed strand for prestressing with a thickness class T_n2, made from a strand coated with a zinc-aluminium alloy of nominal diameter 15,7 mm, strength class 1 860 MPa, fatigue class F3 and class D2 of deflected tensile properties, in accordance with EN 10337, of white colour.

5 Manufacturing process

The steel name of the strands used for adherent protected and sheathed strands (type A) shall be manufactured in accordance with prEN 10369-1:2019, 7.1.1.

6 Requirements for materials used for adherent protected and sheathed strands

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

7 Requirements for adherent protected and sheathed strands

7.1 Overall diameter

The overall diameter of adherent protected and sheathed strands shall be between $d + 2\ t_n$ and $d + 2{,}75\ t_n$, where t_n is the thickness of the sheath, see 7.4.1.

7.2 Straightness

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

7.3 Mass of wax

The protection product normally used for the adherent protected and sheathed strands is a wax. However, when agreed between the parties, grease may be used as protection product. In this case, the applied mass of grease should also be agreed between the parties.

The applied mass of wax, per metre of strand, shall be greater than or equal to 5 g/m.

7.4 Sheath

7.4.1 Thickness

The thickness of the sheath shall be greater than or equal to the value, t_n, given in Table 1 for the relevant thickness class.

Table 1 — Thickness of the sheath depending on the thickness class

Thickness class	Thickness of the sheath, t_n mm
T_n2	1,5
T_n3	2,0

For specific applications, other specified thicknesses may be specified.

7.4.2 Other properties

7.4.2.1 Requirements common to all protected and sheathed strands

The adherent protected and sheathed high strength steel strands shall be in accordance with the requirements of 7.2.5.2 (properties of surface conditions), 7.2.5.4 to 7.2.5.7 (respectively stress cracking resistance, resistance to aggressive elements, resistance to ionising radiation, behaviour after heat exposure) and 7.2.9 (impact resistance) of prEN 10369-1:2019.

7.4.2.2 Mechanical properties

The mechanical properties of the sheath shall meet the specifications given in Table 2.