SLOVENSKI STANDARD
SIST EN 524-3:1999

01-oktober-1999

Zaģļitne cevi za prednapete kable iz jeklenih trakov - Metode preskuģanja - 3. del: Preskus z upogibanjem sem in tja

Steel strip sheaths for prestressing tendons - Test methods - Part 3: To-and-fro bending test

Hüllrohre aus Bandstahl für Spannglieder - Prüfverfahren - Teil 3: Hin- und Herbiegeversuch

Gaines en feuillard d'acier pour câbles de précontrainte - Méthodes d'essai - Partie 3: Essai de flexion dans les deux sens

Ta slovenski standard je istoveten z: **EN 524-3:1997**

ICS:

77.140.75	Jeklene cevi in cevni profili za posebne namene	Steel pipes and tubes for specific use
91.080.40	Betonske konstrukcije	Concrete structures

SIST EN 524-3:1999 **en**

EUROPEAN STANDARD

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EN 524-3

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ICS 77.140.75; 91.080.40

Descriptors: prestressed concretes, tubes, sheating, prestressing steels, classifications, specification, verification, marking

English version

Steel strip sheaths for prestressing tendons - Test methods - Part 3: To-and-fro bending test

Gaines en feuillard d'acier pour câbles de précontrainte - Méthodes d'essai - Partie 3: Essai de flexion dans les deux sens

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

Contents

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 104 "Concrete (performance, production, placing and compliance criteria)", the secretariat of which is held by DIN.

This standard is a part of the series EN 524 "Sheaths for prestressing tendons - Test methods" which additionally comprises the following parts

- Part 1 Determination of shape and dimensions
- Part 2 Determination of flexural behaviour
- Part 4 Determination of lateral load resistance
- Part 5 Determination of tensile load resistance
- Part 6 Determination of leaktightness (Determination of water loss)

These European standards apply to EN 523 "Steel strip sheaths for prestressing tendons - Terminology, requirements, quality control".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 1997, and conflicting national standards shall be withdrawn at the latest by September 1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard lays down the procedure for determining the flexibility of sheaths for prestressing tendons which comply with EN 523.

2 Normative References

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 523:1997 Steel strip sheaths for prestressing tendons - Terminology, requirements, quality control

EN 524-5 Steel strip sheaths for prestressing tendons - Test methods - Part 5: Determination of tensile load resistance

3 Apparatus

The test set - up (see figure 1) consists of a base in the centre of which a specimen of l = 1100 mm can be fixed in an upright position in such a way that it well it will offer sufficient bending.

Two curved templates which allow horizontal shift of the templates in relation to the surface of the fixed sheath are placed perpendicular to the base.

The radius r of each bending template shall correspond to the values given in either line 3a, 3b or 3c of table 1 of EN 523:1997.

4 Procedure

The specimen shall be bent by hand to and fro twice around each curved section of the templates (see figure 1) over a length of 800 mm. For the sequence of bending see figure 2. The overall time in which the whole bending sequence is to be carried out shall not exceed 2 min but the specimen shall not strike the templates with an impact.

At the end of the bending procedure and with the test specimen in the final position, a steel plunger with the shape and the dimensions give in figure 3 shall be inserted and pass the specimen in whole length. Straightening of the specimen by means of the tensile load test in EN 524-5 is permitted.

Dimensions in millimetres

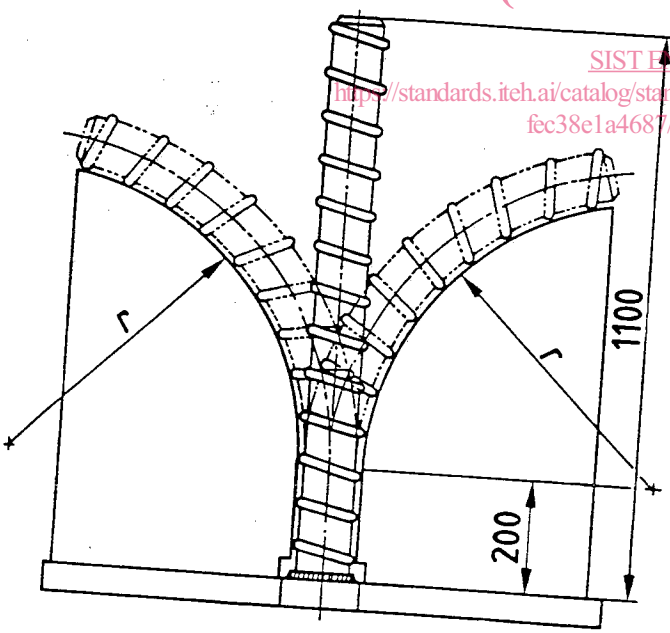


Figure 1: Test set-up for assessing flexibility (To-and-fro bending test)

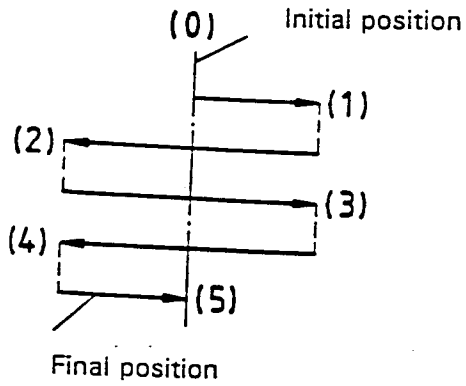
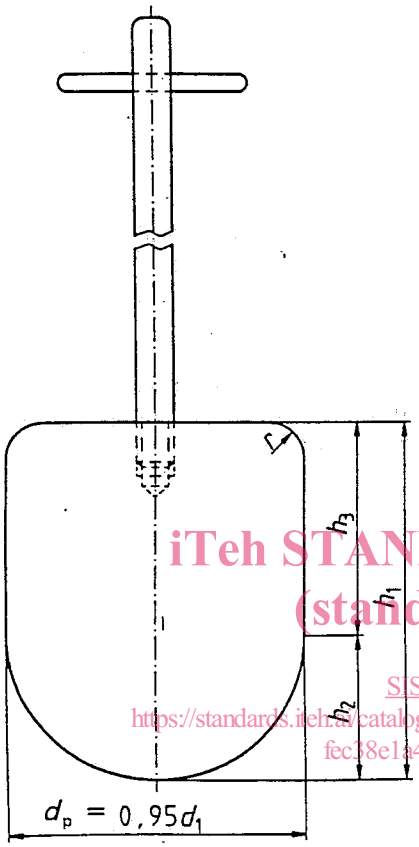


Figure 2: Sequence of bending



d_p = diameter of the plunger

d_1 = nominal internal diameter of the sheath

h_1 = 1,25 d_p

h_2 = 0,5 d_p

h_3 = 0,75 d_p

r = 5 mm

Figure 3: Shape and dimensions of the steel plunger