

## SLOVENSKI STANDARD SIST EN 524-4:1999

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Steel strip sheaths for prestressing tendons - Test methods - Part 4: Determination of lateral load resistance

## iTeh STANDARD PREVIEW (standards.iteh.ai)

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ICS:

77.140.75 Jeklene cevi in cevni profili Steel pipes and tubes for

za posebne namene specific use

91.080.40 Betonske konstrukcije Concrete structures

SIST EN 524-4:1999 en

**SIST EN 524-4:1999** 

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 524-4:1999 https://standards.iteh.ai/catalog/standards/sist/23760729-6afc-4df6-9ecc-ec078e2cfaf2/sist-en-524-4-1999 **EUROPEAN STANDARD** 

EN 524-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 1997

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 4: Determination of lateral load resistance

Gaines en feuillard d'acier pour câbles de ARD PRE Hüllrohre aus Bandstahl für Spannglieder - précontrainte - Méthodes d'essai - Partie 4: Détermination de la résistance aux charges Querbelastbarkeit (standards.iteh.ai)

SIST EN 524-4:1999 https://standards.iteh.ai/catalog/standards/sist/23760729-6afc-4df6-9ecc-ec078e2cfaf2/sist-en-524-4-1999

This European Standard was approved by CEN on 1997-01-27. 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.

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.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

### CEN

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

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

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#### 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 "Sheahts 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 3 Part 5 To-and-fro bending test
- Determination of tensile load resistance
- Part 6 Determination of leaktightness (Determination of water loss)

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

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/standards.iteh.ai/catalog/standards/sist/23/60729-6afc-4df6-9ecc-

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 specifies the procedure for determining the lateral load resistance 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

#### 3 Apparatus and accuracy

The following test equipment is required:

- a testing machine or a suitable test frame with a hydraulic or mechanical drive;
- a load measuring device with an accuracy of 2 % of the lateral load specified in table 1 in EN 523:1997;
- a deformation measuring instrument e. g. vernier calliper or micrometer gauge with an accuracy of 0,1 mm.

#### 4 Procedure

A 1100 mm long specimen is placed on a firm, 500 mm long base as shown in figure 1 and subjected to loading by means of a plunger provided with a cylindrical end with a diameter of 12 mm. Each test specimen has to be loaded twice in two different places, one on the seam and the other outside the seam. The places of loading on and outside the seam shall be situated in the middle part of the specimen and shall have a distance of 150 mm minimum from one another.

The time of load application shall lie between 30 s and one minute. After unloading, the smallest irreversible internal diameter of the sheath shall be determined at each loading point.

NOTE: This test may also be conducted using a stiffener if necessary.

Where stiffeners are used (see figure 1) the size shall not exceed half the circumference of the specimen and shall have the same profile as the specimen.

The length of the stiffener shall not exceed 1,5 times the nominal internal diameter of the sheath or 100 mm whichever is the greater.

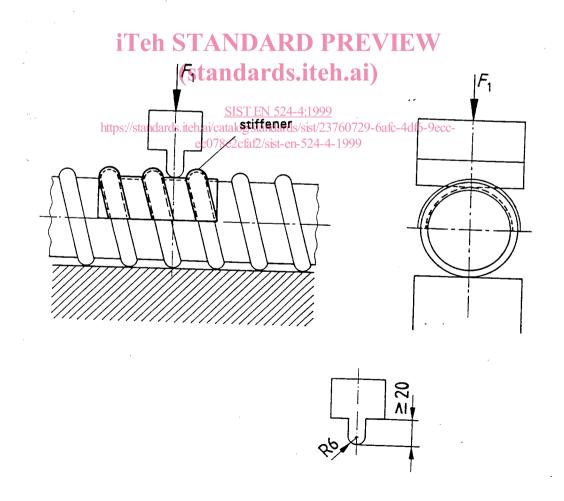


Figure 1: Test set-up for checking the lateral load resistance; Example with stiffener