BRITISH STANDARD

BS EN 1415 : 1997

Touch-and-close fasteners — Behaviour of slit selvedges

The European Standard EN 1415 : 1996 has the status of a British Standard

ICS 61.040

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1415

November 1996

ICS 61.040

Descriptors: Haberdashery, tapes, touch-and-close fasteners, tests, measurements, thread slip resistance

English version

Touch-and-close fasteners — Behaviour of slit selvedges

Fermetures auto-agrippantes — Tenue des lisières découpées

Haftverschlüsse — Verhalten von Schnittkanten

This European Standard was approved by CEN on 1996-09-14. 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.

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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

Ref. No. EN 1415 : 1996 E

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 248, Textiles and textile products, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by May 1997, and conflicting national standards shall be withdrawn at the latest by May 1997.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 specifies a method for measuring the resistance to slipping of the threads in a slit selvedge of a touch-and-close fastener tape.

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 20139	*Textiles — Standard atmospheres for conditioning and testing* (ISO 139 : 1973)
EN 10002-2	*Metallic materials — Tensile testing — Part 2: Verification of the force measuring system of the tensile testing machines*

3 Definition

For the purposes of this standard, the following definition applies.

3.1 slit selvedge of a tape

The cut edge obtained by physical or chemical means.

4 Principle

The force necessary to slide the warp threads out of the cut edge of the male or female tape of a touch-and-close fastener is measured in a direction perpendicular to the longitudinal axis of the tape.

5 Apparatus

5.1 *Tensile testing machine*, according to EN 10002-2.

5.2 *Clamping tool*, comprising a fixed part and a hinged part with pins (see figures 1 and 2).

5.3 *Rule*, accurate to 1 mm.

6 Test specimens

Cut four test specimens, each $42\ ^{0}_{-1}$ mm long, one after the other from the tape to be tested.

Mark the same selvedge on each of the four test specimens (see figure 3).

7 Conditioning

Condition the test specimens for at least 24 h in accordance with the standard atmosphere for testing specified in EN 20139. The test shall be carried out in this atmosphere.

8 Procedure

Submit each test specimen to just one test.

Open the clamp.

Place the test specimen flat so that the selvedge to be tested is located against the support with its ends between the guides (see figure 4).

Close the clamp and fix it in the top jaw of the tensile testing machine.

Adjust the distance between the bottom part of the clamp and the top part of the bottom jaw of the tensile testing machine to 5 mm.

NOTE. For tapes under 20 mm, the distance of 5 mm can be reduced.

Fix the opposite selvedge into the bottom jaw of the tensile testing machine (see figure 5).

Start up the tensile testing machine at a constant speed of (100 ± 10) mm/min.

Record the maximum force necessary for the clamp to slide the warp thread out of the side of the male or female tape of the touch-and-close fastener.

Repeat this procedure on three more test specimens so that the tests cover two selvedges marked with a cross and two unmarked selvedges.

9 Expression of results

For each test, divide the maximum force obtained by the length in centimetres of the test specimen selvedges, in order to obtain the force per length in newtons per centimetre.

Calculate the arithmetic mean of the two results obtained on the selvedges marked with a cross, and do the same for the two results obtained from the unmarked selvedges.

10 Test report

Report the following information:

- reference to this European Standard;
- identification of the touch-and-close fastener tapes;
- date of the test;
- the two arithmetic means obtained;
- any deviation from this European Standard and any incident likely to have affected the result.

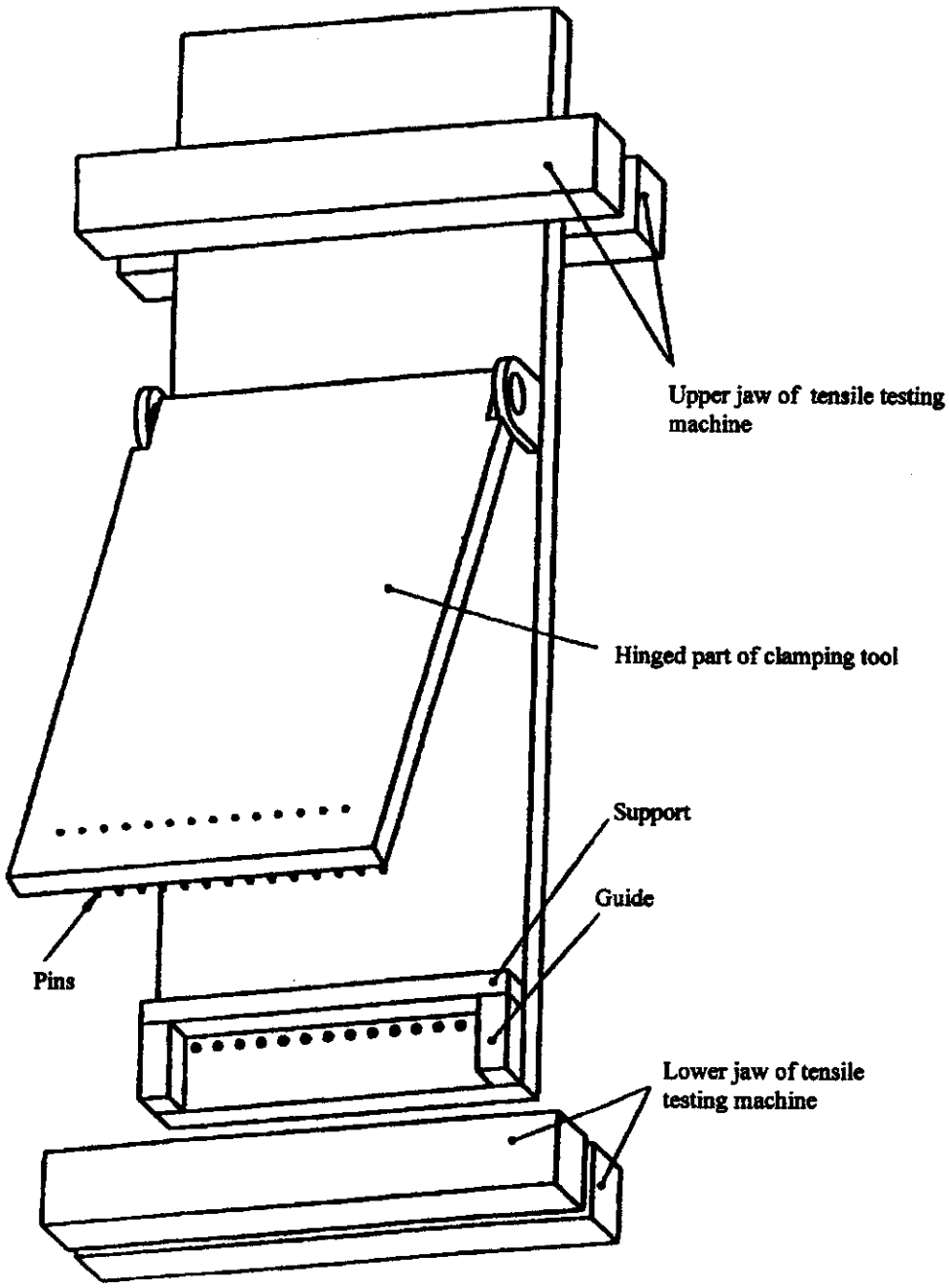

Figure 1. Clamping tool

Dimensions in millimetres

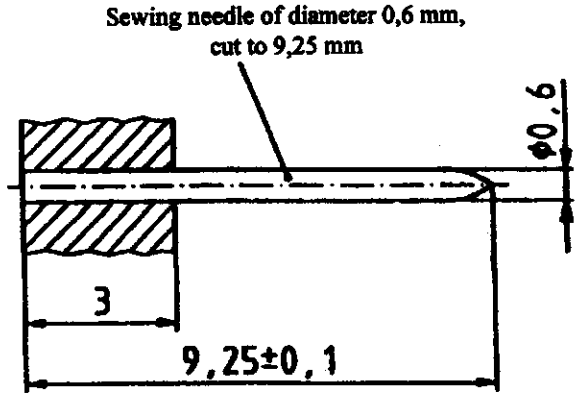

Figure 2. Detail of pins in clamp

Dimensions in millimetres

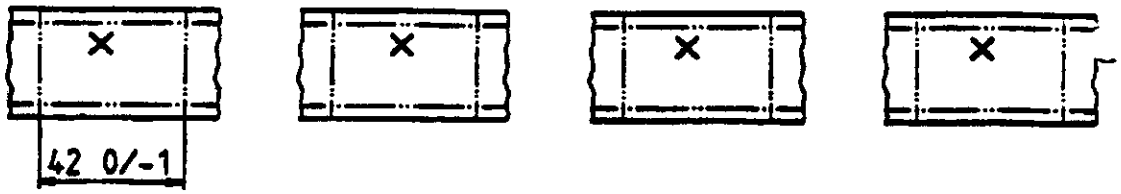

Figure 3. Marking of test specimens

Dimensions in millimetres

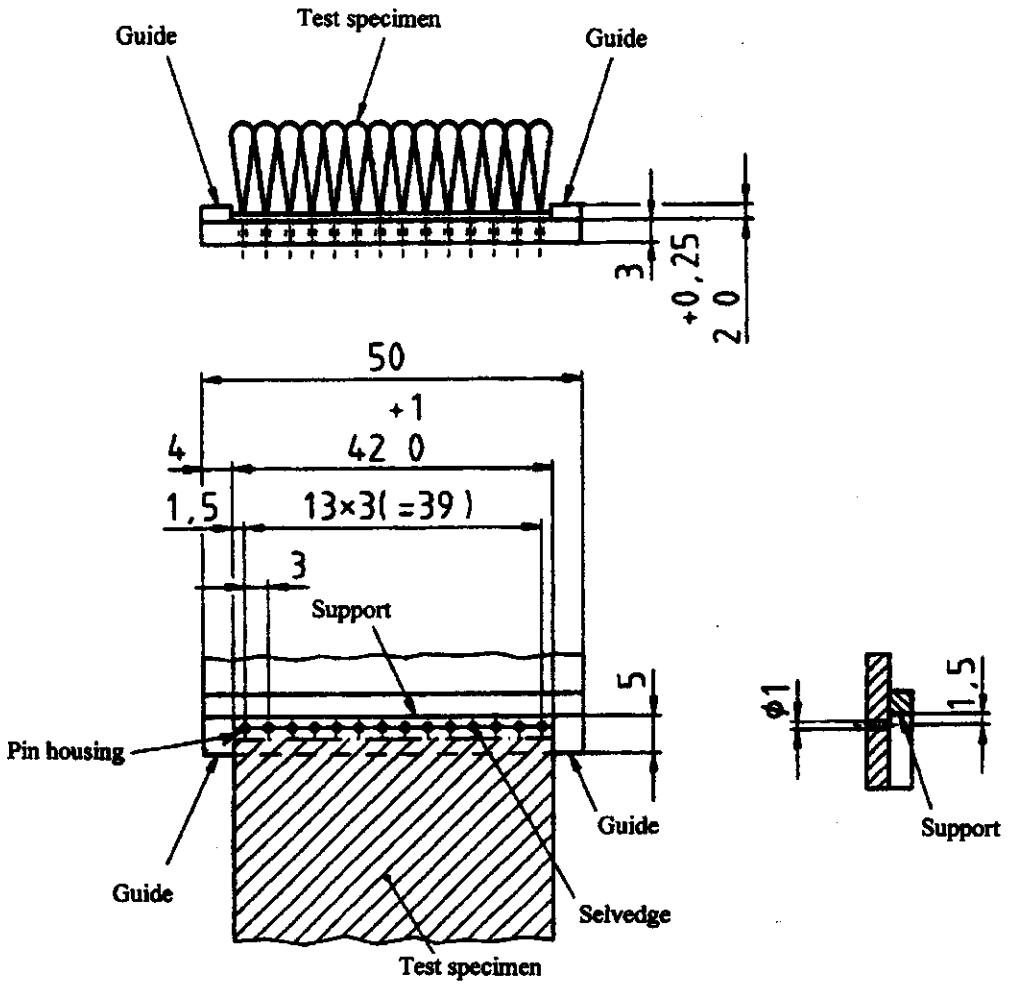

Figure 4. Positioning of test specimen in clamping tool

Dimensions in millimetres

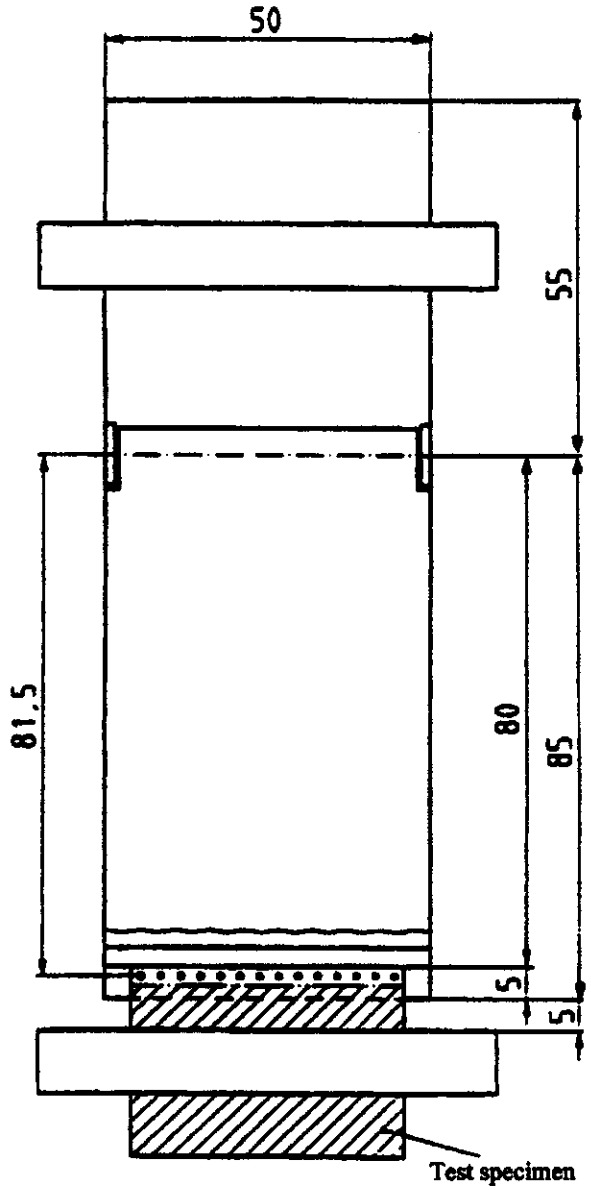

Figure 5. Positioning of clamping tool and test specimen in the tensile testing machine