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**DETERMINATION OF THE ELASTICITY OF
FABRICS - PART 1: STRIP TESTS**

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English version

Determination of the elasticity of fabrics - Part 1: Strip tests

Détermination de l'élasticité des étoffes - Partie 1: Essais
sur bande

Bestimmung der Elastizität von textilen Flächengebilden -
Teil 1: Streifenprüfungen

This European Standard was approved by CEN on 3 March 2005.

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This European Standard exists 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 14704-1:2005) 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of an identical text or by endorsement, at the latest by October 2005, and conflicting national standards shall be withdrawn at the latest by October 2005.

The reasons for the development of this document are because of technical advancements in yarn and fabric structures and properties, which increase product range and developments.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EN 14704-1:2005 (E)

1 Scope

This document describes the methods of test using strips of fabric in straight strip form or as loops, which can be used to measure elasticity and related properties of fabrics, excluding narrow fabrics.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN ISO 139, *Textiles - Standard atmospheres for conditioning and testing (ISO 139:2005)*.

EN ISO 7500-1, *Metallic materials – Verification of static uniaxial testing machines – Part 1: Tension/compression testing machines – Verification and calibration of the force-measuring system (ISO 7500-1:2004)*.

EN ISO 10012:2003, *Measurement management systems - Requirements for measurement processes and measuring equipment (ISO 10012:2003)*.

ISO 4915, *Textiles – Stitch types – Classification and terminology*.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

narrow fabric

woven or knitted construction intended for use as a trim, binding, edging, strapping or harness, and designed to be used in its full width

3.2

elasticity

property of a material by virtue of which it tends to recover its original size and shape immediately after the removal of the force causing deformation

3.3

constant-rate-of-extension (CRE) testing machine

tensile testing machine provided with one clamp, which is stationary, and another clamp, which moves with a constant speed throughout the test, the entire testing system being virtually free from deflection

3.4

strip test specimen

test specimen in which the full width is gripped in the jaws of the testing machine

3.5

loop test specimen

test specimen in which a seam is made to create a loop of the full width of the specimen and which is placed around a loop bar assembly positioned on the testing machine

NOTE This method of preparation is useful when any ageing or exposure testing is to be carried out on the specimens after measurement.

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