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Footwear — Test methods for outsoles — Tear strength

Chaussures — Méthodes d'essai applicables aux semelles d'usure — Résistance au déchirement

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 216, *Footwear*.

This second edition cancels and replaces the first edition (ISO 20872:2001), which has been technically revised.

Footwear — Test methods for outsoles — Tear strength

1 Scope

This document specifies a method for the determination of the tear strength of outsoles, irrespective of the material, using trouser test pieces.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system*

ISO 17709, *Footwear — Sampling location, preparation and duration of conditioning of samples and test pieces*

ISO 18454, *Footwear — Standard atmospheres for conditioning and testing of footwear and components for footwear*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
trouser tear strength
median force, required to propagate a cut in a specified trouser-shaped test piece by tearing, divided by the thickness of the test piece

3.2
median
<n is odd> $[(n+1)/2]^{th}$ value, if n measured values are arranged in increasing order of magnitude and numbered 1 to n

3.3
median
<n is even> arithmetic mean of the $(n/2)^{th}$ and the $(n/2+1)^{th}$ values, unless further specified

4 Apparatus and material

The following apparatus and material shall be used.

4.1 Dies, used for cutting trouser test pieces shall have the outline dimensions shown in Figures 1 and 2.