INTERNATIONAL STANDARD

ISO 3377-2

IULTCS/IUP 8

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Leather — Physical and mechanical tests — Determination of tear load —

Part 2: Double edge tear

Cuir — Essais physiques et mécaniques — Détermination de la force de déchirement —

Partie 2: Déchirement des deux bords

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 3377-2 was prepared by the Physical Test Commission of the International Union of Leather Technologists and Chemists Societies (IUP Commission, IULTCS) in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 289, *Leather*, the secretariat of which is held by UNI, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement). It is based on IUP 8 originally published in *J. Soc. Leather Trades Chemists* **44**, p. 368, (1960) and declared an official method of the IULTCS in 1961. This updated version was published in *J. Soc. Leather Tech. Chem.* **84**, p. 327, (2000) and reconfirmed as an official method in March 2001. The same principle is used but the text has been updated and includes the number of test pieces to be taken.

Together with part 1 (see below), this part of ISO 3377 cancels and replaces ISO 3377:1975, which has been technically revised.

ISO 3377 consists of the following parts, under the general title *Leather — Physical and mechanical tests — Determination of tear load*:

— *Part 1: Single edge tear*

— *Part 2: Double edge tear*

Leather — Physical and mechanical tests — Determination of tear load —

Part 2:
Double edge tear

1 Scope

This part of ISO 3377 specifies a method for determining the tear strength of leather using a double edged tear. The method is sometimes described as the Baumann tear. It is applicable to all types of leather.

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.

ISO 2418 *Leather - Chemical, physical and mechanical and fastness tests - Sampling location*

ISO 2419 *Leather - Physical and mechanical tests - Sample preparation and conditioning*

ISO 2589 *Leather - Physical and mechanical tests - Determination of thickness*

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*

3 Principle

A rectangular test piece with a hole of specified shape is placed over the turned up ends of a pair of holders attached to the jaws of a tensile testing machine. The highest force exerted during tearing of the test piece is recorded.

4 Apparatus

4.1 Tensile testing machine, with:

— a force range appropriate to the specimen under test;

— a means of recording the force to an accuracy of at least 2% as specified by Class 2 of ISO 7500-1;

— a uniform speed of separation of the jaws of 100 mm/min ± 20 mm/min.

4.2 Test piece holders, such as shown in figure 1, each consisting of a strip of steel 10 mm ± 0,1 mm wide and 2 mm ± 0,1 mm thick, bent through a right angle at one end to form a rigid strip with a minimum length of 12 mm ± 0,1 mm. The holders either fit into or replace the jaws of the tensile testing machine (4.1).

4.3 Thickness gauge, as specified in ISO 2589.

4.4 Press knife, as specified in ISO 2419, capable of cutting a test piece as shown in figure 2 in one operation. All parts of the press knife shall lie in the same plane.