INTERNATIONAL STANDARD

ISO 527-1

First edition
1993-06-15

AMENDMENT 1
2005-09-01

Plastics — Determination of tensile properties —

Part 1: General principles

AMENDMENT 1: Details of extensometer

Plastiques — Détermination des propriétés en traction —

Partie 1: Principes généraux

AMENDEMENT 1: Détails de l'extensomètre

Reference number
ISO 527-1:1993/Amd.1:2005(E)

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

Amendment 1 to ISO 527-1:1993 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical properties*.

Plastics — Determination of tensile properties —

Part 1:
General principles

AMENDMENT 1: Details of extensometer

Page 2, Clause 2

Add the following normative reference:

ISO 9513:1999, *Metallic materials — Calibration of extensometers used in uniaxial testing.*

Page 3, Subclause 5.1.5

Replace the first paragraph by the following text:

Contact extensometers shall comply with ISO 9513:1999, class 1. The accuracy of this class shall be attained in the strain range over which measurements are being made. Non-contact extensometers may also be used provided they meet the same accuracy requirements.

For the determination of elastic modulus, the instrument shall be capable of measuring the change in the gauge length of the specimen with an accuracy of 1 % of the relevant value or better, corresponding to ± 1 µm for a gauge length of 50 mm.

The extensometer shall be capable of determining the change in the gauge length of the test specimen at any time during the test. It is desirable, but not essential, that the instrument should record this change automatically. The instrument shall be essentially free of inertia lag at the specified speed of testing.

Paragraphs 2 and 3 of Subclause 5.1.5 remain unchanged.

ICS 83.080.01

Price based on 1 page