INTERNATIONAL STANDARD

ISO 16012

Second edition
2015-03-15

Plastics — Determination of linear dimensions of test specimens

Plastiques — Détermination des dimensions linéaires des éprouvettes

Reference number
ISO 16012:2015(E)

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Published in Switzerland

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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.

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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical properties*.

This second edition cancels and replaces the first edition (ISO 16012:2004), which has been technically revised. It also incorporates the Technical Corrigendum ISO 16012:2004/Cor.1:2005.

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Plastics — Determination of linear dimensions of test specimens

1 Scope

This International Standard specifies measuring equipment and procedures for the determination of the linear dimensions of rigid plastics test specimens. It is applicable to test specimens described in ISO 20753 but can also be used for other test specimens, and to thicknesses typically in the range 0,4 mm ≤ h ≤ 6,4 mm.

NOTE Determination of dimensions of test specimen made of semi-rigid materials (70 MPa ≤ E ≤ 700 MPa) can follow ISO 23529:2010[1].

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 291, *Plastics — Standard atmospheres for conditioning and testing*

ISO 463, *Geometrical Product Specifications (GPS) — Dimensional measuring equipment — Design and metrological characteristics of mechanical dial gauges*

ISO 3611, *Geometrical product specifications (GPS) — Dimensional measuring equipment: Micrometers for external measurements — Design and metrological characteristics*

ISO 3650, *Geometrical Product Specifications (GPS) — Length standards — Gauge blocks*

ISO 9493, *Geometrical product specifications (GPS) — Dimensional measuring equipment: Dial test indicators (lever type) — Design and metrological characteristics*

ISO 13102, *Geometrical product specifications (GPS) — Dimensional measuring equipment: Electronic digital-indicator gauge — Design and metrological characteristics*

ISO 13385-1, *Geometrical product specifications (GPS) — Dimensional measuring equipment — Part 1: Callipers; Design and metrological characteristics*

ISO 20753, *Plastics — Test specimens*

3 Terms and definitions

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

3.1
linear dimension
shortest distance measured with the equipment described in Clause 4, between any two points selected on the plastics specimen

3.2
thickness
shorter dimension of the (ideally) rectangular cross section perpendicular to the longitudinal direction of a bar test specimen

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