FINAL DRAFT
International Standard

ISO/FDIS 13802

Plastics — Verification of pendulum impact-testing machines — Charpy, Izod and tensile impact-testing

Plastiques — Vérification des machines d'essai de choc pendulaire — Essais de choc Charpy, Izod et de choc-traction

ISO/TC **61**/SC **2**

Secretariat: **KATS**

Voting begins on:
2025-05-27

Voting terminates on:
2025-07-22

ISO/CEN PARALLEL PROCESSING

Reference number
ISO/FDIS 13802:2025(en)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical properties,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 13802:2015), which has been technically revised.

The main changes are as follows:

— removed term entries 3.6 (gravity length), 3.7 (gyration length), and 3.19 (half-height Charpy impact reference specimen) and renumbered Clause 3 accordingly;

— corrected the measurement unit and the requirement in 6.2.4;

— updated acceptance criteria in 6.6.3;

— updated the references in Note 2 of the Clause 7;

— corrected value D_1 in Table A.1 to align with the value indicated in Table 4;

— corrected value p_1 in Table B.1 to align with the value indicated in Table 4;

— corrected the Formulae (D.4) and (D.5) in Annex D.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

A pendulum impact-testing machine verified in accordance with this document, and assessed as satisfactory, is considered suitable for impact testing with unnotched and notched test specimens of different types.

The verification of some geometrical properties is difficult to perform on the assembled instrument. It is, therefore, assumed that the manufacturer is responsible for the verification of such properties and for providing reference planes on the instrument that enable proper verification in accordance with this document.