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Metallic materials - Sheet and strip - Determination of plastic strain ratio (ISO 10113:2020, Corrected version 2020-11)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Metallic materials - Sheet and strip - Determination of plastic strain ratio (ISO 10113:2020, Corrected version 2020-11)

Matériaux métalliques - Tôles et bandes -
Détermination du coefficient d'anisotropie plastique
(ISO 10113:2020, Version corrigée 2020-11)

Metallische Werkstoffe - Blech und Band - Bestimmung
der senkrechten Anisotropie (ISO 10113:2020,
korrigierte Fassung 2020-11)

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EN ISO 10113:2020 (E)

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European foreword

This document (EN ISO 10113:2020) has been prepared by Technical Committee ISO/TC 164 "Mechanical testing of metals" in collaboration with Technical Committee CEN/TC 459/SC 1 "Test methods for steel (other than chemical analysis)" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2020, and conflicting national standards shall be withdrawn at the latest by August 2020.

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Endorsement notice

The text of ISO 10113:2020, Corrected version 2020-11 has been approved by CEN as EN ISO 10113:2020 without any modification.

**INTERNATIONAL
STANDARD**

**ISO
10113**

Third edition
2020-01

Corrected version
2020-11

**Metallic materials — Sheet and strip
— Determination of plastic strain ratio**

*Matériaux métalliques — Tôles et bandes — Détermination du
coefficient d'anisotropie plastique*



Reference number
ISO 10113:2020(E)

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ISO 10113:2020(E)

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 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 164, *Mechanical testing of metals*, Subcommittee SC 2, *Ductility testing*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459/SC 1, *Test methods for steel (other than chemical analysis)*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 10113:2006), which has been technically revised. The main changes compared to the previous edition are as follows:

- a new structure;
- the addition of the semi-automatic method (see [8.3](#));
- a clear differentiation between the manual, the semi-automatic and the automatic methods (see [8.2](#), [8.3](#) and [8.4](#));
- the addition of the methods of investigating sources of errors in *r*-value determination (see [Annex A](#)).

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.

This corrected version of ISO 10113:2020 incorporates the following corrections:

- Correction of the description of the test in the fourth paragraph of 8.4.2.

Metallic materials — Sheet and strip — Determination of plastic strain ratio

1 Scope

This document specifies a method for determining the plastic strain ratio of flat products (sheet and strip) made of metallic materials.

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 6892-1:2019, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature*

ISO 9513, *Metallic materials — Calibration of extensometer systems used in uniaxial testing*

ISO 80000-1, *Quantities and units — Part 1: General*

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