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Third edition
2020-08

Metallic materials — Sheet and strip — Determination of tensile strain hardening exponent

*Matériaux métalliques — Tôles et bandes — Détermination du
coefficient d'érouissage en traction*



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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 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, *ECISS – European Committee for Iron and Steel Standardization*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 10275:2007), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

- [Clause 2](#) has been updated;
- new [Clause 3](#) "Terms and definitions" has been added as per the latest Directives, Part 2;
- the symbol for true plastic strain has been changed from ϵ to ϵ_p ;

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.

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Introduction

In the previous edition of this document, for the calculation of the true strain, the elastic strain did not need to be subtracted from the total strain if it was lower than 10 % of the total strain.

In this document, the elastic strain is subtracted from the total strain for calculation of the true strain, which is now referred to as "true plastic strain".