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

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

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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

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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.

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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;

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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”.

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