SLOVENSKI STANDARD
SIST EN ISO 6892-2:2018

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Kovinski materiali - Natezni preskus - 2. del: Metoda preskušanja pri povišani temperaturi (ISO 6892-2:2018)

Metallic materials - Tensile testing - Part 2: Method of test at elevated temperature (ISO 6892-2:2018)

Metallische Werkstoffe - Zugversuch - Teil 2: Prüfverfahren bei erhöhter Temperatur (ISO 6892-2:2018)

Matériaux métalliques - Essai de traction - Partie 2: Méthode d'essai à température élevée (ISO 6892-2:2018)

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Metallische Werkstoffe - Zugversuch - Teil 2: Prüfverfahren bei erhöhter Temperatur (ISO 6892-2:2018)

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European foreword

This document (EN ISO 6892-2:2018) has been prepared by Technical Committee ISO/TC 164 "Mechanical testing of metals" in collaboration with Technical Committee ECISS/TC 101 “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of an identical text or by endorsement, at the latest by November 2018, and conflicting national standards shall be withdrawn at the latest by November 2018.

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Endorsement notice

The text of ISO 6892-2:2018 has been approved by CEN as EN ISO 6892-2:2018 without any modification.

INTERNATIONAL STANDARD

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Second edition
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Metallic materials — Tensile testing —

Part 2: Method of test at elevated temperature

Matériaux métalliques — Essai de 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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This document was prepared by Technical Committee ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 1, *Uniaxial testing.*

This second edition cancels and replaces the first edition (ISO 6892-2:2011), of which it constitutes a minor revision.

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

— a note has been added after the first sentence of 10.2.1;

— some references to subclauses of ISO 6892-1 have been deleted.

A list of all parts in the ISO 6892 series can be found on the ISO website.

Introduction

In this document, two methods of testing speeds are described. The first, Method A, is based on strain rates (including crosshead separation rate) with narrow tolerances (±20 %) and the second, Method B, is based on conventional strain rate ranges and tolerances. Method A is intended to minimize the variation of the test rates during the moment when strain rate-sensitive parameters are determined and to minimize the measurement uncertainty of the test results.

The influence of the testing speed on the mechanical properties, determined by the tensile test, is normally greater at an elevated temperature than at room temperature.

Traditionally, mechanical properties determined by tensile tests at elevated temperatures have been determined at a slower strain or stressing rate than at room temperature. This document recommends the use of slow strain rates but, in addition, higher strain rates are permitted for particular applications, such as comparison with room temperature properties at the same strain rate.

During discussions concerning the speed of testing in the preparation of this document, it was decided to consider deleting the stress rate method in future revisions.