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ISO 6892-2

Metallic materials — Tensile testing —

Part 2: Method of test at elevated temperature

*Matériaux métalliques — Essai de traction —
Partie 2: Méthode d'essai à température élevée*

**Third edition
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Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	2
5 Principle	2
6 Test piece	3
7 Determination of original cross-sectional area (S_0)	3
8 Marking the original gauge length (L_0)	3
9 Apparatus	3
10 Test conditions	4
10.1 Setting the force zero point	4
10.2 Gripping of the test piece, fixing of the extensometer and heating of the test piece, not necessarily in the following sequence	5
10.2.1 Method of gripping	5
10.2.2 Fixing of the extensometer and establishing the gauge length	5
10.2.3 Heating of the test piece	6
10.3 Testing rate based on strain rate control (Method A)	6
10.3.1 General	6
10.3.2 Strain rate for the determination of the upper yield strength (R_{eH}) or proof strength properties (R_p and, if required, R_{pL})	6
10.3.3 Strain rate for the determination of the lower yield strength (R_{eL}) and percentage yield point extension (A_e), if required	6
10.3.4 Strain rate for the determination of the tensile strength (R_m), percentage elongation after fracture (A), percentage reduction area (Z), and, if required, percentage total extension at the maximum force (A_{gt}), percentage plastic extension at maximum force (A_g)	7
10.4 Method of testing with expanded strain rate ranges (Method B)	7
10.4.1 General	7
10.4.2 Rate for the determination of yield strength or proof strength properties	7
10.4.3 Rate for the determination of tensile strength	7
10.5 Choice of the method and rates	8
10.6 Documentation of the chosen testing conditions	8
11 Determination or calculation of the properties	8
12 Test report	8
13 Measurement uncertainty	9
14 Figures	9
15 Annexes	10
Annex A (informative) Additional information regarding test piece geometries used for testing at elevated temperature	11
Annex B (informative) Measurement uncertainty	17
Bibliography	20

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This document was prepared by Technical Committee ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 1, *Uniaxial 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 6892-2:2018), which has been technically revised.

The main changes are as follows:

- revision of [9.3](#);
- wording in [10.3](#);
- wording in [10.4](#);
- revision of [Clause 12](#);
- wording in [Annex A](#);
- update of references, especially to ISO 6892-1, specific clauses, figures and annexes;
- editorial modifications.

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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 ($\pm 20\%$) and the second, Method B, is based on conventional strain rate ranges and tolerances (strain rates from former editions). 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.