

STN P	Kovové materiály Skúšanie ťahom Časť 5: Špecifikácia na skúšanie miniaturizovaných skúšobných telies (ISO/TS 6892-5: 2025)	STN P CEN ISO/TS 6892-5 42 0310
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Metallic materials - Tensile testing - Part 5: Specification for testing miniaturised test pieces (ISO/TS 6892-5:2025)

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/25

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English Version

**Metallic materials - Tensile testing - Part 5: Specification
for testing miniaturised test pieces (ISO/TS 6892-5:2025)**

Matériaux métalliques - Essais de traction - Partie 5:
Spécifications pour l'utilisation d'éprouvettes d'essai
miniaturisées (ISO/TS 6892-5:2025)

Metallische Werkstoffe - Zugversuch - Teil 5:
Festlegungen für die Prüfung von miniaturisierten
Prüfkörpern (ISO/TS 6892-5:2025)

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CEN ISO/TS 6892-5:2025 (E)

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European foreword

This document (CEN ISO/TS 6892-5:2025) 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.

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Endorsement notice

The text of ISO/TS 6892-5:2025 has been approved by CEN as CEN ISO/TS 6892-5:2025 without any modification.



Technical Specification

ISO/TS 6892-5

Metallic materials — Tensile testing —

Part 5: Specification for testing miniaturised test pieces

Matériaux métalliques — Essais de traction —

*Partie 5: Spécifications pour l'utilisation d'éprouvettes d'essai
miniaturisées*

**First edition
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ISO/TS 6892-5:2025(en)



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ISO/TS 6892-5:2025(en)**Foreword**

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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*, 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).

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

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ISO/TS 6892-5:2025(en)**Introduction**

The knowledge of the local strength properties and local flow curves of formed component areas becomes increasingly important for different applications. However, their determination by tensile testing is often restricted because of the possible test piece geometry, the availability of suitable testing equipment and the comparability with the results of the standard tensile tests. By using adjusted test piece geometries, suitable test piece preparation, adapted clamping and extensometer systems and finally an adjusted test procedure tensile test can be performed which gives reproducible and comparable test results.

In this document suggestions are given to perform tensile tests on miniaturised test pieces. It describes the state of the art of testing using adjusted standard testing equipment.

It is pointed out that the experimental effort (test piece preparation, adjustment and alignment of the testing equipment and also the fine motor skills) is higher than for testing of typical standard test piece geometries.

Metallic materials — Tensile testing —

Part 5: Specification for testing miniaturised test pieces

1 Scope

This document provides specifications for testing miniaturised metallic test pieces where not enough material is available for test pieces according to ISO 6892-1.

The guidelines in this document are not intended to replace the requirements of the standard method described in ISO 6892-1.

This document refers to conventionally manufactured materials.

NOTE 1 Additional information regarding testing of additively manufactured materials are given in ISO/ASTM 52909[5].

NOTE 2 Further information on the performance of miniaturised test pieces in tensile testing and the comparability of respective results is available in References [8] to [14].

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

ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system*

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

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