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Sintered metal materials, excluding hardmetals - Tensile test pieces (ISO 2740:2023)

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. 02/24

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EUROPEAN STANDARD

EN ISO 2740

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN ISO 2740:2009

English Version

Sintered metal materials, excluding hardmetals - Tensile test pieces (ISO 2740:2023)

Matériaux en métal fritté, à l'exclusion des métaux-durs - Éprouvettes pour essai de traction (ISO 2740:2023)

Sintermetalle, ausgenommen Hartmetalle - Zugprobestäbe (ISO 2740:2023)

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COMITÉ EUROPÉEN DE NORMALISATION
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EN ISO 2740:2023 (E)

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European foreword

This document (EN ISO 2740:2023) has been prepared by Technical Committee ISO/TC 119 "Powder metallurgy" in collaboration with Technical Committee CEN/SS M11 "Powder metallurgy" the secretariat of which is held by CCMC.

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of an identical text or by endorsement, at the latest by March 2024, and conflicting national standards shall be withdrawn at the latest by March 2024.

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The text of ISO 2740:2023 has been approved by CEN as EN ISO 2740:2023 without any modification.

INTERNATIONAL STANDARD

ISO 2740

Sixth edition
2023-09

Sintered metal materials, excluding hardmetals — Tensile test pieces

*Matériaux en métal fritté, à l'exclusion des métaux-durs —
Éprouvettes pour essai de traction*



Reference number
ISO 2740:2023(E)

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ISO 2740:2023(E)

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 document 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 119, *Powder metallurgy*, Subcommittee SC 3, *Sampling and testing methods for sintered metal materials (excluding hardmetals)*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/SS M11, *Powder metallurgy*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This sixth edition cancels and replaces the fifth edition (ISO 2740:2009), which has been technically revised.

The main changes are as follows:

- [Figure 3](#), specifically the die in it, has been updated;
- [Figure 4](#) (former Figure 3), table below, Type A1: Value R_1 has been corrected to 12,5 mm;
- [Figure 4](#) (former Figure 3), table below, Type A2: Value R_1 has been corrected to 11,5 mm;
- references to the revised ISO 6892-1 has been updated;
- in [5.2](#), measurement unit given to optional die exit taper and 4th paragraph has been inserted;
- a new test piece geometry has been added as [Figure 3](#).

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.

Sintered metal materials, excluding hardmetals — Tensile test pieces

1 Scope

This document is applicable to all sintered metals and alloys, excluding hardmetals.

This document specifies:

- the die cavity dimensions used for making tensile test pieces by pressing and sintering, and by metal injection moulding (MIM) and sintering;
- the dimensions of tensile test pieces machined from sintered and powder forged materials.

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*

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