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Hardmetals - Sampling and testing of powders using sintered test pieces (ISO 4884:2019)

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. 03/20

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EUROPEAN STANDARD

NORME EUROPÉENNE

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EN ISO 4884

October 2019

ICS 77.160

Supersedes EN 24884:1993

English Version

Hardmetals - Sampling and testing of powders using sintered test pieces (ISO 4884:2019)

Métaux-durs - Échantillonnage et essais des poudres au moyen d'éprouvettes frittées (ISO 4884:2019)

Hartmetalle - Probenahme und Prüfung von Pulvern unter Verwendung von gesinterten Probekörpern (ISO 4884:2019)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (EN ISO 4884:2019) has been prepared by Technical Committee ISO/TC 119 "Powder metallurgy" in collaboration with 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of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of ISO 4884:2019 has been approved by CEN as EN ISO 4884:2019 without any modification.

INTERNATIONAL STANDARD

ISO 4884

Second edition
2019-09

Hardmetals — Sampling and testing of powders using sintered test pieces

Métaux-durs — Échantillonnage et essais des poudres au moyen d'éprouvettes frittées

Reference number
ISO 4884:2019(E)

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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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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 119, *Powder metallurgy*, Subcommittee SC 4, *Sampling and testing methods for hardmetals*.

This second edition cancels and replaces the first edition (ISO 4884:1978), which has been technically revised. The main changes compared to the previous edition are as follows:

— Clause 2 has been revised;

— in Table 1, second row: the reference on ISO 3326 has been replaced;

— in Table 1, fifth row: the reference has been replaced by ISO 3738-1 and ISO 3738-2;

— in Table 1, sixth row: the reference to ISO 3878 has been replaced by ISO 6507-1, ISO 6507-2, ISO 6507-3 and ISO 6507-4;

— in Table 1, seventh row: the reference has been replaced by ISO 4499-1, ISO 4499-2 and ISO 4499-3;

— in Table 1, eighth row: the reference has been replaced by ISO 4499-4;

— in Table 1, nineth row: has been added;

— the Bibliography has been added.

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.

INTERNATIONAL STANDARD **ISO 4884:2019(E)**

Hardmetals — Sampling and testing of powders using sintered test pieces

1 Scope

This document specifies procedures for the sampling and testing of powder mixtures for the manufacture of hardmetals, using sintered test pieces. It also covers the preparation of test pieces.

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 3327, *Hardmetals — Determination of transverse rupture strength*

ISO 3369, *Impermeable sintered metal materials and hardmetals — Determination of density*

ISO 3738-1, *Hardmetals — Rockwell hardness test (scale A) — Part 1: Test method*

ISO 3738-2, *Hardmetals — Rockwell hardness test (scale A) — Part 2: Preparation and calibration of standard test blocks*

ISO 3954, *Powders for powder metallurgical purposes — Sampling*

ISO 4499-1, *Hardmetals — Metallographic determination of microstructure — Part 1: Photomicrographs and description*

ISO 4499-2, *Hardmetals — Metallographic determination of microstructure — Part 2: Measurement of WC grain size*

ISO 4499-3, *Hardmetals — Metallographic determination of microstructure — Part 3: Measurement of microstructural features in Ti (C, N) and WC/cubic carbide based hardmetals*

ISO 4499-4, *Hardmetals — Metallographic determination of microstructure — Part 4: Characterisation of porosity, carbon defects and eta-phase content*

ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ISO 6507-2, *Metallic materials — Vickers hardness test — Part 2: Verification and calibration of testing machines*

ISO 6507-3, *Metallic materials — Vickers hardness test — Part 3: Calibration of reference blocks*

ISO 6507-4, *Metallic materials — Vickers hardness test — Part 4: Tables of hardness values*

ISO 28079, *Hardmetals — Palmqvist toughness test*

