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Metallic powders - Determination of apparent density - Part 1: Funnel method (ISO 3923-1:2018)

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. 12/18

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English Version

Metallic powders - Determination of apparent density - Part 1: Funnel method (ISO 3923-1:2018)

Poudres métalliques - Détermination de la masse
volumique apparente - Partie 1: Méthode de
l'entonnoir (ISO 3923-1:2018)

Metallpulver - Ermittlung der Fülldichte - Teil 1:
Trichterverfahren (ISO 3923-1:2018)

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EN ISO 3923-1:2018 (E)

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European foreword

This document (EN ISO 3923-1:2018) 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of an identical text or by endorsement, at the latest by January 2019, and conflicting national standards shall be withdrawn at the latest by January 2019.

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Endorsement notice

The text of ISO 3923-1:2018 has been approved by CEN as EN ISO 3923-1:2018 without any modification.

INTERNATIONAL STANDARD

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Fourth edition
2018-05

Metallic powders — Determination of apparent density —

Part 1: Funnel method

*Poudres métalliques — Détermination de la masse volumique
apparente —*

Partie 1: Méthode de l'entonnoir



Reference number
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ISO 3923-1:2018(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 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 2, *Sampling and testing methods for powders (including powders for hard metals)*.

This fourth edition, which cancels and replaces the third edition (ISO 3923-1:2008), has been updated with the funnel used in the Gustavsson method. Also, the figures showing the funnels have been removed and instead references are made to the relevant test method standards.

A list of all the parts in the ISO 3923 series can be found on the ISO website.

Metallic powders — Determination of apparent density —

Part 1: Funnel method

1 Scope

This document specifies the funnel method for the determination of the apparent density of metallic powders under standardized conditions.

The method is intended for metallic powders that flow freely through a 2,5 mm diameter orifice. It can, however, be used for powders that flow with difficulty through a 2,5 mm diameter orifice but flow through a 5 mm diameter orifice.

Methods for the determination of the apparent density of powders that will not flow through a 5 mm diameter orifice are specified in ISO 3923-2^[1].

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 4490, *Metallic powders — Determination of flow rate by means of a calibrated funnel (Hall flowmeter)*

ISO 13517, *Metallic powders — Determination of flowrate by means of a calibrated funnel (Gustavsson flowmeter)*

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