

**Metallpulbrid. Näivtiheduse määramine. Osa 1:
Kokkupressimismeetod**

Metallic powders - Determination of apparent density - Part
1: Funnel method

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 3923-1:2010 sisaldab Euroopa standardi EN ISO 3923-1:2010 ingliskeelset teksti.

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English Version

**Metallic powders - Determination of apparent density - Part 1:
Funnel method (ISO 3923-1:2008)**

Poudres métalliques - Détermination de la masse
volumique apparente - Partie 1: Méthode de l'entonnoir
(ISO 3923-1:2008)

Metallpulver - Ermittlung der Füllichte - Teil 1:
Trichterverfahren (ISO 3923-1:2008)

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Foreword

The text of ISO 3923-1:2008 has been prepared by Technical Committee ISO/TC 119 "Powder metallurgy" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 3923-1:2010.

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of an identical text or by endorsement, at the latest by October 2010, and conflicting national standards shall be withdrawn at the latest by October 2010.

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Endorsement notice

The text of ISO 3923-1:2008 has been approved by CEN as a EN ISO 3923-1:2010 without any modification.

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Principle	1
4 Symbols and designation	1
5 Apparatus	2
6 Sample	4
7 Procedure	4
8 Expression of results	5
9 Precision	5
9.1 Repeatability.....	5
9.2 Reproducibility	5
10 Test report	5

Metallic powders — Determination of apparent density —

Part 1: Funnel method

1 Scope

This part of ISO 3923 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 may, 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.

2 Normative references

The following referenced documents are indispensable for the application 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 3923-2, *Metallic powders — Determination of apparent density — Part 2: Scott volumeter method*

3 Principle

Measurement of the mass of a certain quantity of powder, which in a loose condition exactly fills a cup of known volume.

The loose condition is obtained by using, when filling the cup, a funnel placed at a determined distance above the cup.

The ratio between the mass and the volume represents the apparent density.

4 Symbols and designation

The symbols and designations used in this International Standard are defined in Table 1.

Table 1

Symbol	Designation	Unit
ρ_a	Apparent density of metallic powders (General term)	g/cm ³
ρ_{ac}	Apparent density obtained by the funnel method	g/cm ³
m	Mass of the powder	g
V	Volume of the cup	cm ³