STN	Kovové prášky okrem práškov pre spekané karbidy Stanovenie lisovateľnosti pri jednoosovom lisovaní (ISO 3927: 2017)	STN EN ISO 3927
		42 0802

Metallic powders, excluding powders for hardmetals - Determination of compressibility in uniaxial compression (ISO 3927:2017)

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. 03/18

Obsahuje: EN ISO 3927:2017, ISO 3927:2017

Oznámením tejto normy sa ruší STN EN ISO 3927 (42 0802) z augusta 2011

#### 126402

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 3927** 

September 2017

ICS 77.160

Supersedes EN ISO 3927:2011

### **English Version**

## Metallic powders, excluding powders for hardmetals - Determination of compressibility in uniaxial compression (ISO 3927:2017)

Poudres métalliques, à l'exclusion des poudres pour métaux-durs - Détermination de la compressibilité sous compression uniaxiale (ISO 3927:2017)

Metallpulver, mit Ausnahme von Hartmetallpulvern -Bestimmung der Verdichtbarkeit bei einachsigem Pressen (ISO 3927:2017)

This European Standard was approved by CEN on 26 September 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

### EN ISO 3927:2017 (E)

Contents	Page
European foreword	

### **European foreword**

This document (EN ISO 3927:2017) has been prepared by Technical Committee ISO/TC 119 "Powder metallurgy".

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 2018, and conflicting national standards shall be withdrawn at the latest by March 2018.

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.

This document supersedes EN ISO 3927:2011.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 3927:2017 has been approved by CEN as EN ISO 3927:2017 without any modification.

### INTERNATIONAL STANDARD

ISO 3927

Fifth edition 2017-09

# Metallic powders, excluding powders for hardmetals — Determination of compressibility in uniaxial compression

Poudres métalliques, à l'exclusion des poudres pour métaux-durs — Détermination de la compressibilité sous compression uniaxiale



ISO 3927:2017(E)



### **COPYRIGHT PROTECTED DOCUMENT**

 $\, @ \,$  ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

Con	tent	<b>S</b> Pa	ıge
Forev	vord		.iv
1	Scop	e	1
2	Norn	native references	1 1
3	Term	ns and definitions	
4		bols	
5	Princ	ciple	
6	Appa	aratus	2
7	Sampling		
8	Proc. 8.1 8.2 8.3 8.4 8.5	edure  Cleaning of the die and punches  Powder testing conditions  Lubrication  8.3.1 General  8.3.2 Die wall lubrication  8.3.3 Lubrication of powder  Compacting and ejection  Compacting pressures	5 6 6 6 6
9	Expr	ession of results	8
10	•		8
11	Test report		
Biblio	ograph	ny	9

ISO 3927:2017(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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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: <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>

This document was prepared by Technical Committee ISO/TC 119, *Powder metallurgy*, Subcommittee SC 2, *Sampling and testing methods for powders (including powders for hardmetals*).

This fifth edition cancels and replaces the fourth edition (ISO 3927:2011), of which it constitutes a minor revision to adjust punch tolerances in Figure 2 and clarify the use of scale and micrometer.

### Metallic powders, excluding powders for hardmetals — Determination of compressibility in uniaxial compression

### 1 Scope

This document specifies methods for measuring the extent to which a metallic powder is compacted when subjected to uniaxial compressive loading in a confining die under specified conditions.

The method is not applicable to powders for hardmetals.

#### 2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN