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Sintered-metal injection-moulded materials - Specifications (ISO 22068:2012)

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EN ISO 22068:2014 (E)

Contents	Pag
Foreword	

Foreword

The text of ISO 22068:2012 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 22068:2014.

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of an identical text or by endorsement, at the latest by September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

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Endorsement notice

The text of ISO 22068:2012 has been approved by CEN as EN ISO 22068:2014 without any modification.

INTERNATIONAL STANDARD

ISO 22068

First edition 2012-07-01

Sintered-metal injection-moulded materials — Specifications

Matériaux métalliques frittés pour moulage par injection — Spécifications



ISO 22068:2012(E)



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Contents

Page

Forewo	Foreword	
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4 4.1 4.2 4.3 4.4 4.5 4.6 4.7	Test methods for normative properties General Chemical composition Density Tensile strength Tensile yield strength Elongation Magnetic properties	2 2 2 3
5 5.1 5.2 5.2.1 5.2.2 5.2.3 5.2.4	Other test methods	3 3 3
6 6.1 6.2 6.3 6.4 6.5 6.6	Information and explanatory notes Minimum value concept	4 4 4 4
7 7.1 7.2 7.3 7.4	Designation of materials Designation system Description block Identity block Individual item block	5 5 5
8	Material specifications	6
Biblion	ıranhv	11

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 22068 was prepared by Technical Committee ISO/TC 119, *Powder metallurgy*, Subcommittee SC 5, *Specifications for powder metallurgical materials (excluding hardmetals)*.

Sintered-metal injection-moulded materials — Specifications

1 Scope

This International Standard specifies the requirements for the chemical composition and the mechanical and physical properties of sintered-metal injection-moulded materials.

It is intended to provide design and materials engineers with necessary information for specifying materials in components manufactured by means of the Metal Injection Moulding (MIM) process only.

It does not apply to structural parts manufactured by other powder metallurgy routes, such as press-and-sinter or powder-forging technologies.

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 2740, Sintered materials, excluding hardmetals — Tensile test pieces

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

ISO 4498, Sintered metal materials, excluding hardmetals — Determination of apparent hardness and microhardness

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

ISO 6508-1, Metallic materials — Rockwell hardness test — Part 1: Test method (scales, A, B, C, E, F, G, H, K, N, T)

ISO 6892-1, Metallic materials — Tensile testing — Part 1: Method of test at room temperature

ISO 9227, Corrosion tests in artificial atmospheres — Salt spray tests

IEC 60404-4, Magnetic materials — Part 4: Methods of measurement of d.c. magnetic properties of magnetically soft materials

ASTM D2638, Standard Test Method for Real Density of Calcined Petroleum Coke by Helium Pycnometer

ASTM D4892, Standard Test Method for Density of Solid Pitch (Helium Pycnometer Method)

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