ISO 5755:2022-10 (E)

Sintered metal material - Specifications

Contents

Page

Foreword iv

1 Scope 1

2 Normativereferences 1

3 Termsanddefinitions 1

4 Sampling 3

5 Testmethodsfornormativeproperties 3
5.1 General 3
5.2 Chemical analysis 3
5.3 Open porosity 3
5.4 Mechanical properties 3
5.4.1 General 3
5.4.2 Tensile properties 4
5.4.3 Radial crushing strength 4

6 Testmethodsforinformativeproperties 5
6.1 General 5
6.2 Density 5
6.3 Tensile strength 5
6.4 Tensile yield strength 5
6.5 Elongation 5
6.6 Young's modulus 5
6.7 Poisson's ratio 5
6.8 Impact energy 6
6.9 Compressive yield strength 6
6.10 Transverse rupture strength 6
6.11 Fatigue strength 6
6.11.1 General 6
6.11.2 Rotating bending fatigue strength 6
6.11.3 Plane-bending fatigue strength 6
6.11.4 Axial fatigue strength 7
6.12 Apparent hardness 7
6.13 Coefficient of linear expansion 7

7 Specifications 7

8 Designations 7

Annex A (normative)Designationsystem 35

Annex B (informative)Microstructures 38

Annex C (informative)Equivalenceofstandardsofpowdermetallurgymaterials 53

Bibliography 68