

# ISO 5755:2022-10 (E)

## Sintered metal material - Specifications

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>4</b>	<b>Sampling .....</b>	<b>3</b>
<b>5</b>	<b>Test methods for normative properties .....</b>	<b>3</b>
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
<b>6</b>	<b>Test methods for informative properties .....</b>	<b>5</b>
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
<b>7</b>	<b>Specifications .....</b>	<b>7</b>
<b>8</b>	<b>Designations .....</b>	<b>7</b>
<b>Annex A (normative)</b>	<b>Designation system .....</b>	<b>35</b>
<b>Annex B (informative)</b>	<b>Microstructures .....</b>	<b>38</b>
<b>Annex C (informative)</b>	<b>Equivalence of standards of powder metallurgy materials .....</b>	<b>53</b>
<b>Bibliography .....</b>		<b>68</b>