
**Sintered metal materials, excluding
hardmetals — Unnotched impact test
piece**

*Matériaux métalliques frittés, à l'exclusion des métaux-durs —
Éprouvette non entaillée pour essai de résilience*





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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

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Foreword

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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 www.iso.org/directives).

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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: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 119, *Powder metallurgy*, Subcommittee SC 3, *Sampling and testing methods for sintered metal materials (excluding hardmetals)*.

This second edition cancels and replaces the first edition (ISO 5754:1978), of which it constitutes a minor revision with the following changes:

- Former [Clause 2](#) inserted in [Clause 1](#);
- [Clause 2](#), Normative references, revised;
- [Clause 3](#), Terms and definitions, added.

Sintered metal materials, excluding hardmetals — Unnotched impact test piece

1 Scope

This document specifies the dimensions of an unnotched impact test piece of sintered metal materials. The test piece may be obtained directly by pressing and sintering or by machining a sintered part.

This document applies to all sintered metals and alloys, with the exception of hardmetals. However, for certain materials (for example, materials with low porosity or materials with high ductility), it may be more appropriate to use a notched test piece which, in this case, will give results with less scatter. (In this case, refer to ISO 148-1.)

NOTE For porous sintered materials, the results obtained from impact tests are not necessarily very accurate compared with results obtained from tests on solid metals.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 148-1, *Metallic materials — Charpy pendulum impact test — Part 1: Test method*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Dimensions of test piece

The dimensions of the test piece shall be those shown in [Figure 1](#).

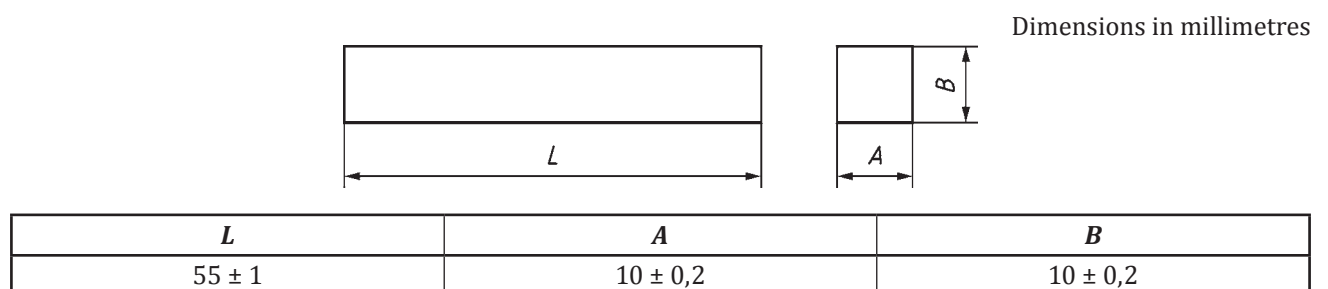


Figure 1 — Dimensions of the test piece

ISO 5754:2017(E)

The test piece shall be marked in such a way that the direction of pressing may be identified.

The impact test shall be carried out on a Charpy impact testing machine, in accordance with ISO 148-1.

Unless otherwise specified, the direction of impact shall be normal to the pressing direction.

