INTERNATIONAL STANDARD

ISO 7755-1

Second edition 2013-08-15

Hardmetal burrs —

Part 1: **General specifications**

Fraises-limes en métaux-durs — Partie 1: Spécifications générales

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Published in Switzerland

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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. www.iso.org/directives

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. www.iso.org/patents

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

The committee responsible for this document is ISO/TC 29, *Small tools*, Subcommittee SC 9, *Tools with cutting edges made of hard cutting materials*.

This second edition cancels and replaces the first edition (ISO 7755-1:1984), of which it constitutes a minor revision. The tolerances given in parentheses and shown in the first edition have been deleted from <u>Table 1</u>; also, the shank diameters 3,15 mm and 6,3 mm, which had been accepted during the transitional period, have been deleted.

ISO 7755 consists of the following parts, under the general title *Hardmetal burrs*:

- Part 1: General specifications
- Part 2: Cylindrical burrs (style A)
- Part 3: Cylindrical round- (ball-) nose burrs (style C)
- Part 4: Spherical burrs (style D)
- Part 5: Oval burrs (style E)
- Part 6: Arch round- (ball-) nose burrs (style F)
- Part 7: Arch pointed-nose burrs (style G)
- Part 8: Flame burrs (style H)
- Part 9: 60° and 90° cone burrs (styles I and K)
- Part 10: Conical round- (ball-) nose burrs (style L)
- Part 11: Conical pointed-nose burrs (style M)
- Part 12: Inverted cone burrs (style N)

Hardmetal burrs —

Part 1:

General specifications

1 Scope

This part of ISO 7755 specifies the common characteristics of hardmetal burrs of various styles, in solid design or with brazed shank.

The main dimensions of the cutting part of hardmetal burrs are dealt with individually in ISO 7755-2, ISO 7755-3, ISO 7755-4, ISO 7755-5, ISO 7755-6, ISO 7755-7, ISO 7755-8, ISO 7755-9, ISO 7755-10, ISO 7755-11 and ISO 7755-12.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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ISO 7755-2, Hardmetal burrs — Part 2: Cylindrical burrs (style A)
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ISO 7755-3, Hardmetal burrs — Part 3: Cylindrical round- (ball-) nose burrs (style C)

ISO 7755-4, Hardmetal burrs — Part 4: Spherical burrs (style D)

ISO 7755-5, Hardmetal burrs — Part 5: Oval burrs (style E)

ISO 7755-6, Hardmetal burrs — Part 6: Arch round- (ball-) nose burrs (style F) 561/180-7755-1-2013

ISO 7755-7, Hardmetal burrs — Part 7: Arch pointed-nose burrs (style G)

ISO 7755-8, Hardmetal burrs — Part 8: Flame burrs (style H)

ISO 7755-9, Hardmetal burrs — Part 9: 60 degrees and 90 degrees cone burrs (styles J and K)

ISO 7755-10, Hardmetal burrs — Part 10: Conical round- (ball-) nose burrs (style L)

ISO 7755-11, Hardmetal burrs — Part 11: Conical pointed-nose burrs (style M)

ISO 7755-12, Hardmetal burrs — Part 12: Inverted cone burrs (style N)

3 Dimensions

3.1 Cutting diameter

<u>Table 1</u> gives the series of cutting diameters and their related tolerances. The main dimensions of the cutting part of hardmetal burrs are specified individually in ISO 7755-2, ISO 7755-3, ISO 7755-4, ISO 7755-5, ISO 7755-6, ISO 7755-7, ISO 7755-8, ISO 7755-9, ISO 7755-10, ISO 7755-11 and ISO 7755-12.

Table 1 — Cutting diameters and related tolerances

Dimensions in millimetres

Cutting diameter	Tolerance
2	± 0,1
3	
4	
6	± 0,2
8	
10	
12	102
16	± 0,3

3.2 Cylindrical shank

Shank diameter shall be 3 mm and 6 mm, with tolerance h9. Shank length shall be in accordance with $\underline{\text{Table 2}}$. The shank length is defined as the length of the burr minus the length of the cutting part as given in ISO 7755-2, ISO 7755-3, ISO 7755-4, ISO 7755-5, ISO 7755-6, ISO 7755-7, ISO 7755-8, ISO 7755-9, ISO 7755-10, ISO 7755-11 and ISO 7755-12.

NOTE These length ranges permit manufacture both of burrs with constant overall length and variable shank length, and of burrs with constant shank length and variable overall length. In the latter case, national standards are intended to indicate the agreed shank length.

The agreed shank length shall be within the limits given in <u>Table 2</u>.

Table 2 — Shank diameter and length

Dimensions in millimetres

	Shank diameter ISO	1755-1:2013 Shank length	
ps://sta	ndards.iteh.ai/catalo3//standards/iso/2f0f1	/30-0ba5-4a8b 20 to 35 / b65cddc561/is	so-7755-1-20
	6	25 to 50	

3.3 Relationship between cutting diameter and shank diameter

<u>Table 3</u> gives the possible combinations of cutting diameters and shank diameters.

Table 3 — Cutting diameters and shank diameters

Dimensions in millimetres

Cutting diameter	Shank diameter		
Cutting diameter	3	6	
2	×		
3	×	×	
4	×	×	
6	×	×	
8		×	
10		×	
12		×	
16		×	