

भारतीय मानक
Indian Standard

IS 18852 (Part 4) : 2024
ISO 7755-4 : 2013

[Superseding IS 11943 (Part 4) : 1987]

कठोर धातु के बर्
भाग 4 गोलाकार बर् (स्टाइल डी)

Hardmetal Burrs
Part 4 Spherical Burrs (Style D)

ICS 25.100.20

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October 2024

Price Group 4

NATIONAL FOREWORD

This Indian Standard (Part 4) which is identical to ISO 7755-4 : 2013 'Hardmetal burrs — Part 4: Spherical burrs (style D)' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on recommendation of the Cutting Tools Sectional Committee and approval of the Production and General Engineering Division Council.

Hard metal burrs are cutting tools used in various machining and metalworking applications. Their functions encompass material removal, deburring of sharp edges, crafting intricate profiles, and providing the finishing touches to workpieces. These burrs are available in diverse shapes and sizes including cylindrical, spherical, conical varieties and each shape is uniquely tailored for specific cutting, shaping and grinding tasks.

This standard supersedes IS 11943 (Part 4) : 1987 'Specification for hard metal burrs: Part 4 Spherical burrs (Type D)'.

This standard is published in twelve parts. Other parts in this series are:

- Part 1 General Specifications
- Part 2 Cylindrical burrs (style A)
- Part 3 Cylindrical round- (ball-) nose burrs (style C)
- 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 degrees and 90 degrees cone burrs (styles J 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)

The text of ISO standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'; and
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to the following International Standard for which Indian Standard also exists. The corresponding Indian Standard which is to be substituted in its place is listed below along with its degree of equivalence for the edition indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 7755-1 Hardmetal burrs — Part 1: General specifications	IS 18852 (Part 1) : 2024/ ISO 7755-1 : 2013 Hardmetal burrs: Part 1 General specifications	Identical

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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Indian Standard

HARDMETAL BURRS

PART 4 SPHERICAL BURRS (STYLE D)

1 Scope

This part of ISO 7755 specifies the main dimensions of the cutting part for hardmetal burrs of spherical shape and designated by the symbol D.

Tolerances on the cutting diameter, direction of helix and cut, diameter and length of the cylindrical shank and designation of burrs are dealt with in ISO 7755-1.

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.

ISO 7755-1, *Hardmetal burrs — Part 1: General specifications*

3 Dimensions

See [Figure 1](#) and [Table 1](#). Tolerances on the cutting diameter, direction of helix and cut, diameter and length of the cylindrical shank and designation of burrs are specified in ISO 7755-1.

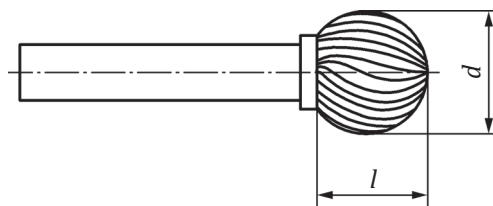


Figure 1 — Hardmetal burr, style D

Table 1 — Dimensions

Dimensions in millimetres

<i>d</i>	<i>l</i> ^a
2	1,8
3	2,7
4	3,6
6	5,4
8	7,2
10	9,0
12	10,8
16	14,4
^a The values for <i>l</i> are calculated on the basis of $l = 0,9 d$	

Annex A
(informative)

**Relationship between designations in this part of ISO 7755 and
the ISO 13399 series**

For the relationship between designations in this part of ISO 7755 and preferred symbols according to the ISO 13399 series, see [Table A.1](#).

Table A.1 — Relationship between designations in this part of ISO 7755 and the ISO 13399 series

Symbol in this part of ISO 7755 (ISO 7755-4)	Reference in this part of ISO 7755 (ISO 7755-4)	Property name in the ISO 13399 series	Symbol in the ISO 13399 series	Reference in the ISO 13399 series
<i>d</i>	Clause 3	Cutting diameter	DC	ISO/TS 13399-3 71D084653E57F
<i>l</i>	Clause 3	Cutting edge length	L	ISO/TS 13399-3 71DD6C95DA49B

Bibliography

- [1] ISO 13399 (all parts), *Cutting tool data representation and exchange*

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This Indian Standard has been developed from Doc No.:PGD 32 (23701).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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