

भारतीय मानक
Indian Standard

IS 18852 (Part 5) : 2024
ISO 7755-5 : 2013

[Superseding IS 11943 (Part 5) : 1987]

कठोर धातु के बर्

भाग 5 अंडाकार बर् (स्टाइल ई)

Hardmetal Burrs Part 5 Oval Burrs (Style E)

ICS 25.100.20

© BIS 2024

© ISO 2013



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI - 110002

www.bis.gov.in www.standardsbis.in

October 2024

Price Group 4

NATIONAL FOREWORD

This Indian Standard (Part 5) which is identical to ISO 7755-5 : 2013 'Hardmetal burrs — Part 5: Oval burrs (Style E)' 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 5) : 1987 'Specification for hard metal burrs: Part 5 Oval burrs (type E)'.

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 4 Spherical burrs (style D)
- 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.

Contents

Page

1 Scope 1

2 Normative references 1

3 Dimensions 1

**Annex A (informative) Relationship between designations in this part of ISO 7755 and the
ISO 13399 series 3**

Bibliography 4

Indian Standard

HARDMETAL BURRS

PART 5 OVAL BURRS (STYLE E)

1 Scope

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

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.

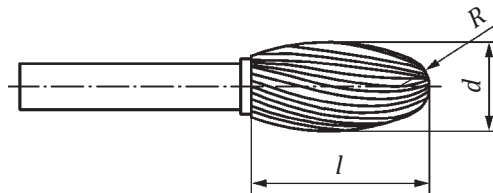


Figure 1 — Hardmetal burr, style E

Table 1 — Dimensions

Dimensions in millimetres

d	l	R \approx
3	7	1,2
6	10	2,5
8	13	3,7
10	16	4
12	20	5
16	25	6,5

NOTE The profile is composed of an end radius, R , and of a radius tangent to the end radius extending beyond the point of tangency with the larger diameter.

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 7755-5)	Reference in this part of ISO 7755 (ISO 7755-5)	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
<i>R</i>	Clause 3	Profile radius	PRFRAD	ISO/TS 13399-3 71E019EBAE1B1

Bibliography

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

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 2016* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Head (Publication & Sales), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the website-www.bis.gov.in or www.standardsbis.in.

This Indian Standard has been developed from Doc No.: PGD 32 (23702).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402

Website: www.bis.gov.in

Regional Offices:

Central : 601/A, Konnectus Tower -1, 6th Floor,
DMRC Building, Bhavbhuti Marg, New
Delhi 110002

Telephones

{ 2323 7617

Eastern : 8th Floor, Plot No 7/7 & 7/8, CP Block, Sector V,
Salt Lake, Kolkata, West Bengal 700091

{ 2367 0012
2320 9474

Northern : Plot No. 4-A, Sector 27-B, Madhya Marg,
Chandigarh 160019

{ 265 9930

Southern : C.I.T. Campus, IV Cross Road, Taramani, Chennai 600113

{ 2254 1442
2254 1216

Western : 5th Floor/MTNL CETTM, Technology Street, Hiranandani Gardens, Powai
Mumbai 400076

{ 25700030
25702715

Branches : AHMEDABAD, BENGALURU, BHOPAL, BHUBANESHWAR, CHANDIGARH, CHENNAI, COIMBATORE, DEHRADUN, DELHI, FARIDABAD, GHAZIABAD, GUWAHATI, HARYANA (CHANDIGARH), HUBLI, HYDERABAD, JAIPUR, JAMMU, JAMSHEDPUR, KOCHI, KOLKATA, LUCKNOW, MADURAI, MUMBAI, NAGPUR, NOIDA, PARWANOO, PATNA, PUNE, RAIPUR, RAJKOT, SURAT, VIJAYAWADA.