भारतीय मानक
Indian Standard

IS 5824 : 2023

ढलाई मे प्रयुक्त लांसेट — विशिष्टि

(पहला पुनरीक्षण)

Lancets for Use in Foundries — Specification

(First Revision)

ICS 77.180

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

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Foundry and Steel Castings Sectional Committee, MTD 14

FOREWARD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Foundry Steel Casting Sectional Committee had been approved by the Metallurgical Engineering Division Council.

This standard was first published in 1970. This revision has been brought out to bring the standard in the latest style and format of the Indian Standards. In addition, the following changes have been made:

a) Reference clause has been included;
b) In **4**, material 'T80' of IS 3749 : 1966 is substituted with 'C80U^{c}' of IS 3748;
c) In **6**, hardness testing standard IS 1586/ISO 6508-1 is referred;
d) In **8.1** and **8.2**, IS 919 is substituted with IS 919 (Part 1 and Part 2); and
e) Marking clause has been modified.

The composition of the Committee responsible for the formulation of this standard is given in Annex A.

For the purpose of deciding whether 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.

Indian Standard

LANCETS FOR USE IN FOUNDRIES — SPECIFICATION

(First Revision)

1 SCOPE

This standard specifies the requirement of lancets for use in foundries. Lancets are used for trimming of moulds and correction of dimensions of cores and moulds.

2 REFERENCES

The standards given below contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of these standards:

IS No.	*Title*
IS 919	Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes:
(Part 1) : 2014/ ISO 286- 1 : 2010	Basis of tolerance, deviation and fits (*third revision*)
(Part 2) : 2014/ ISO 286-2 : 2010	Tables of standard tolerance classes and limit deviation for holes and shafts (*second revision*)
IS 1337 : 1993	Electroplated coatings of hard chromium for engineering purposes — Specification (*third revision*)
IS 1387 : 1993	General requirements for the supply of metallurgical materials (*second revision*)
IS 1586 (Part 1) : 2018/ISO 6508-1 : 2016	Metallic materials — Rockwell hardness test: Part 1 Test method (*fifth revision*)
IS 3748 : 2022/ ISO 4957 : 2018	Tool steels — Specification (*third revision*)

3 DIMENSIONS

There are two types of lancets as given in Fig. 1 and Fig. 2. Dimensions of lancets shall be as specified in Table 1 and Table 2.

4 MATERIAL

The material shall be in accordance with non-alloy cold-work tool steels of C80U[c] of IS 3748.

5 COATING

The coating used on the lancet shall be hard chromium as specified in IS 1337.

6 HARDNESS

The hardness of material, when tested in accordance with IS 1586 (Part 1) shall not be less than HRC 58.

7 TOLERANCES

The tolerance shall have values of standard tolerance Grade as IT 14 of IS 919 (Part 1) and IS 919 (Part 2).

8 FREEDOM FROM DEFECTS

After heat treatment, surfaces should be reasonably free from cracks, burrs, scales, rust and other surface defects.

9 SUPPLY

General requirements relating to the supply of lancets for use in foundries shall be as laid down in IS 1387.

10 PACKING

10.1 Lancets should be **s**eparately wrapped in moisture-proof paper. Tools of same type and size shall be packed in cartons containing 12 tools each. Each box shall be glued and reinforced with strips. Cartons shall be placed in wooden boxes, the whole package weighing not more than 50 kg.

10.2 Each box shall bear the number of pieces and the information mentioned under marking.

11 MARKING

11.1 Lancets shall be marked with the following:

a) Trade-mark or name of manufacturer;
b) Grade designation;
c) Quantity;
d) Date of manufacture; and
e) Any other information, if required.

11.2 BIS Certification Marking

The products(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provision of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the product may be marked with the Standard Mark.

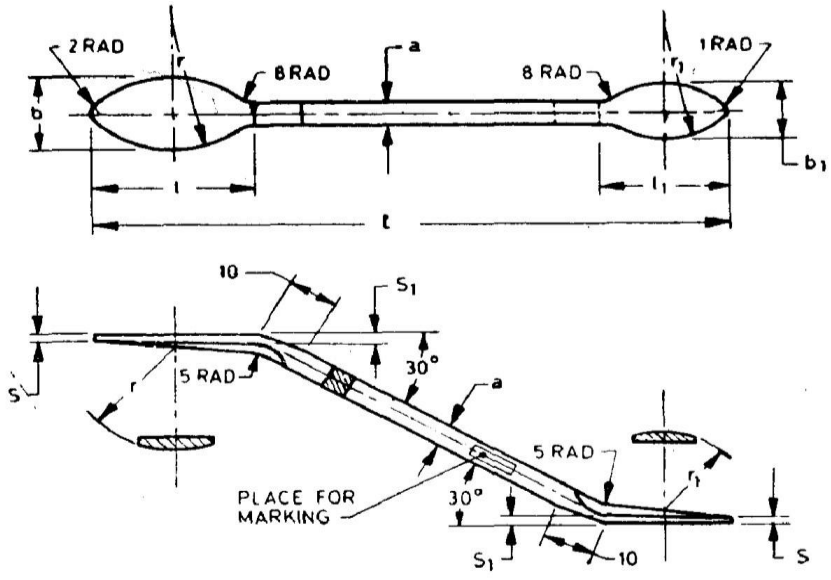

FIG. 1 DIMENSIONS OF LANCETS, TYPE A

Table 1 Dimensions of Lancets, Type A

(*Clause* 3)

All dimensions in millimetres, except where degree is mentioned.

Sl No.	L	l	l1	b	b1	S	S1	r	r1	a
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
i)	125	32	25	16	12	0.6	1.6	22	17	5
ii)	160	50	40	25	20	1.0	2.0	65	52	6
iii)	200	60	50	32	25	1.6	2.5	74	63	7

Designation — Lancet of nominal length 125 mm and blade lengths of 32 mm and 25 mm shall be designated as: Lancet-125 IS 5824.

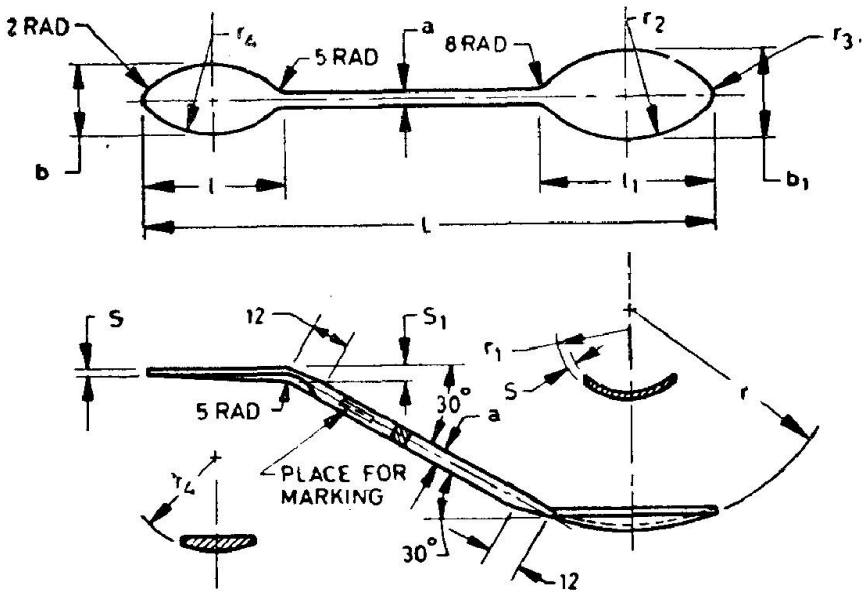

FIG. 2 DIMENSIONS OF LANCET WITH SCOOP, TYPE B

Table 2 Dimensions of Lancet with Scoop, Type B

(*Clause* 3)

All dimensions in millimetres, except where degree is mentioned.

Sl No.	L	l	l1	b	b1	S	S_1	r	r_1	r2	r3	r4	a
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
i)	160	40	50	20	25	1.0	2.0	65	18	36	5	27	6
ii)	200	50	60	25	32	1.6	2.5	80	25	39	6	33	6
iii)	250	60	80	32	40	1.6	3.5	100	29	57	8	37	7

Designation — Lancet with scoop of nominal length 160 mm. Lancet edge length 40 mm and scoop length 50 mm shall be designated as: Scoop Lancet-160 IS 5824.

ANNEX A

(*Foreword*)

COMMITTEE COMPOSITION

Foundry and Steel Castings Sectional Committee, MTD 14

Organization	*Representative(s)*
BHEL (CFFP), Haridwar	SHRI V. K. RAIZADA **(*Chairperson*)**
Bharat Heavy Electricals Ltd, HPEP, Hyderabad	SHRI ABHINAV AGRAWAL
BHEL, Haridwar	SHRI A. N. SUDHAKAR SHRI RANJITH LAKRA (*Alternate*)
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Ministry of Science &Technology, New Delhi	MS TAMANNA ARORA SHRI K. S. P. RAO (*Alternate*)

Organization	*Representative(s)*
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National Metallurgical Laboratory, Jamshedpur	DR D. N. PASWAN MS MINAL SHAH (*Alternate*)
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The Wesman Engineering Co Pvt Ltd, Kolkata	SHRI RANJAN GUHA SHRI ASHUTOSH MONDAL (*Alternate* I) SHRI PARTHA CHATTERJEE (*Alternate* II)
Versatile Equipments Pvt Ltd, Kolhapur	SHRI PUSHKRAJ JANWADKAR SHRI KIRAN PANDIT (*Alternate*)
BIS Directorate General	SHRISANJIV MAINI, SCIENTIST 'F'/SENIOR DIRECTOR AND HEAD (METALLURGICAL ENGINEERING) [REPRESENTING DIRECTOR GENERAL (*Ex-officio*)]

Member Secretary
SHRI KUNAL KUMAR
SCIENTIST 'D'/JOINT DIRECTOR
(METALLURGICAL ENGINEERING), BIS

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.

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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

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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:		*Telephones*
Central	: 601/A, Konnectus Tower -1, 6th Floor, DMRC Building, Bhavbhuti Marg, New Delhi 110002	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	: Plot No. E-9, Road No.-8, MIDC, Andheri (East), Mumbai 400093	2821 8093

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