

BUREAU OF INDIAN STANDARDS
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Draft Amendment No. 3
TO
IS 5522 : 2014 STAINLESS STEEL SHEETS AND STRIPS FOR
UTENSILS — SPECIFICATION

ICS No. 77.140.65, 77.140.85

Alloy Steels and Forging Sectional Committee,
MTD 16

Last date of comments:
14 February 2025

(First cover page, Hindi title) — Substitute ‘बर्तनों, रसोईघर के बर्तनों और पोर्टेबल स्टेनलेस- इस्पात कुप्पी/बोतलें के लिए स्टेनलेस इस्पात प्लेट, चद्दरें और पत्ति – विशिष्टि’ for ‘बर्तनों के लिए स्टेनलेस इस्पात चद्दरें और पत्तियाँ – विशिष्टि’

(First cover page and Page 1, English title) — Substitute ‘Stainless Steel Plate, Sheet and Strip for Utensils, Kitchen ware and portable stainless-steel flasks/bottles — Specification’ for ‘Stainless Steel Sheets and Strips for Utensils — Specification’

(Page 1, clause 1) — Substitute the existing clause:

‘This standard covers the requirements for stainless steel in the form of plates, sheets and strips for manufacture of utensils, kitchen ware and portable stainless-steel flasks/bottles.’

(Page 1, clause 2) — Substitute the ‘IS 8910 : 2022/ISO 404:2013 General technical delivery requirements for steel and steel products’ for ‘IS 1387 : 1993 General requirements for the supply of metallurgical materials (*Second Revision*)’.

(Page 1, clause 2) — Insert the following reference at appropriate place:

<i>‘IS No.</i>	<i>Title</i>
IS 14650 : 2023	Unalloyed and alloyed steel ingot and semi-finished products for re-rolling purposes — Specification (first revision)’

(Page 1, clause 4) —Substitute the existing clause:

4.1 General requirements related to the supply of material shall conform to IS 8910.

4.2 Steels covered by the standard shall be ordered and delivered on the basis of the following:

- Chemical composition only (Hot-rolled steels);
- Chemical composition and Mechanical Properties in the annealed condition;
- Chemical composition and Mechanical properties in any other condition as agreed to between the purchaser and the supplier.

4.3 Information to be given by the purchaser on the basis of order

While placing an order for the purchase of material covered by this standard, the purchaser should specify the following:

- a) Grade designation;
- b) Form (plate, sheet or strip);
- c) Nominal dimensions — Thickness, width and length (for cut length);
- d) Condition (hot rolled, cold rolled, annealed or any other treatment);
- e) Surface finish (*see 11*);
- f) Edge condition (*see 10.2*);
- g) Method of manufacture, if any specified.

4.4 Unless otherwise agreed to between the purchaser and the supplier, the material shall be supplied in annealed condition.’

(Page 1, clause 5.2) — Insert the following new clause after 5.2:

‘5.3 Steels used for manufacturing the product covered in the standard shall conform to the requirements of IS 14650.’

(Page 2, Table 3) — Insert the foot note as ‘for conditions other than those mentioned in Table 3, the mechanical properties shall be mutually agreed to between the purchaser and the seller’.

(Page 3, clause 9) — Substitute the following for the existing:

‘9 DIMENSIONS

Unless otherwise agreed to between the manufacturer and the purchase, dimensions of plate, sheet and strip shall be as follows:

Thickness	:	0.30 mm - 50 mm
Width	:	upto 2 000 mm
Length	:	As per mutual agreement between the purchaser and the manufacturer at the time of enquiry and order.’

(Page 3, clause 10.1) — Substitute the following for the existing:

‘Permissible variation in thickness for Hot rolled product shall be as per Table 5a and Cold rolled product shall be as per Table 5b.’

(Page 3, Table 5) — Substitute the following for the existing Table 5:

‘Table 5(a) Permissible Variations in Thickness for Hot Rolled Product

(Clause 10.1)

All dimensions in millimeters

SI No.	Thickness	Tolerance on Thickness for Width			
		< 1000	1000 to < 1250	1250 to < 1600	1600 to ≤ 2000

(1)	(2)	(3)	(4)	(5)	(6)
i.	1.00 to <1.50	±0.15	±0.15	±0.20	±0.25
ii.	1.50 to <2.00	±0.20	±0.20	±0.25	±0.30
iii.	2.00 to <2.50	±0.20	±0.25	±0.30	±0.35
iv.	2.50 to <3.00	±0.25	±0.30	±0.30	±0.40
v.	3.00 to <4.00	±0.30	±0.30	±0.35	±0.45
vi.	4.00 to <5.00	±0.40	±0.40	±0.45	±0.60
vii.	5.00 to <6.00	±0.50	±0.50	±0.55	±0.70
viii.	6.00 to <8.00	±0.60	±0.60	±0.60	±0.75
ix.	8.00 to <10.00	±0.65	±0.65	±0.65	±0.80
x.	10.00 to <16.00	±0.70	±0.70	±0.70	±0.85
xi.	16.00 to <25.00	±0.80	±0.80	±0.80	±0.95
xii.	25.00 to <40.00	±0.90	±0.90	±0.90	±1.10
xiii.	40.00 to <50.00	±1.00	±1.00	±1.00	±1.20

NOTES

- 1 Thickness measurements are taken at least 15 mm from the edge of the product in case of trimmed edges, atleast 25 mm from the edge of the product in case of mill edge.
- 2 For Width > 2000mm, tolerances on thickness shall be agreed to between the purchaser and the manufacturer/the seller.
- 3 For thickness \geq 50 mm, tolerances on thickness shall be agreed to between the purchaser and the manufacturer/the seller.
- 4 In case of wide strip of hot rolled coils, the specified values for tolerances shall not apply to mill edge of the coil for total length (l). Which is calculated using the formula $l(m) = 90/\text{nominal thickness in mm}$, with maximum total length (both ends) of 20 m per coil.’

(Page 3, clause 10.1) — Insert the new table 5b for permissible variations in thickness for Cold rolled product

‘Table 5(b) Permissible Variations in Thickness for Cold Rolled Product

(Clause 10.1)

All dimensions in millimeters

SI No.	Thickness	Tolerance on Thickness for Width			
		< 1000	1000 to < 1250	1250 to < 1600	1600 to ≤ 2000
(1)	(2)	(3)	(4)	(5)	(6)
i)	0.30 to <0.40	±0.05	±0.05	±0.05	—
ii)	0.40 to <0.60	±0.08	±0.08	±0.08	—
iii)	0.60 to <0.80	±0.10	±0.10	±0.10	—
iv)	0.80 to <1.25	±0.12	±0.15	±0.15	±0.15
v)	1.25 to <1.50	±0.13	±0.15	±0.20	±0.20
vi)	1.50 to <2.00	±0.20	±0.20	±0.25	±0.30
vii)	2.00 to <2.50	±0.20	±0.25	±0.30	±0.35
viii)	2.50 to <3.00	±0.25	±0.30	±0.30	±0.40
ix)	3.00 to <4.00	±0.30	±0.30	±0.35	±0.45
x)	4.00 to <5.00	±0.40	±0.40	±0.45	±0.60
xi)	5.00 to <6.00	±0.50	±0.50	±0.55	±0.70
xii)	6.00	±0.60	±0.60	±0.60	±0.75

NOTES

- 1) Thickness measurements are taken at least 15 mm from the edge of the product for trimmed edges and at least 25 mm from the edge for mill edges.
- 2) For Width>2000mm, tolerances on thickness shall be agreed to between the purchaser and the manufacturer/the seller
- 3) For thickness of above 6mm, tolerances shall be agreed upon between the purchaser and the manufacturer/seller.'

(Page 3, clause 10.2.1) — Substitute the following for the existing clause:

‘10.2.1 Mill edge

Unless otherwise agreed, product in mill edge for hot rolled and cold rolled shall have width tolerance as given in Table 6.’

(Page 3, clause 10.2.2) — Substitute the following for the existing:

‘10.2.2 Trimmed edge

Cold rolled and hot rolled product in trimmed edge shall have width tolerance as given in Table 7a and Table 7b.’

(Page 3, clause 10.3) — Substitute the following for the existing:

‘10.3 Length

Unless otherwise agreed, permissible variation in length for hot rolled and cold rolled shall be as given in Table 8.’

(Page 3, clause 10.4) — Substitute the following for the existing:

‘10.4 Flatness

Unless otherwise agreed, permissible variation in flatness for hot rolled and cold rolled shall be as given in Table 9.’

(Page 3, clause 10.5) — Substitute the following for the existing:

‘10.5 Camber

Unless otherwise agreed, permissible variation of camber in trim edge condition shall be as per Table 11 or Table 12 (see Fig. 1).’

(Page 4, Table 7a) — Substitute the following for the existing Table 7:

‘Table 7a Permissible Variations in Width for Trimmed Edge Cold Rolled Product for Cold Rolled Strip in Coils and Cut Lengths
(Clause 10.2.2)

All dimensions in millimeters

Sl No.	Thickness	Tolerance on Width				
		< 250	250 to <500	500 to < 1 000	1 000 to <1 250	1 250 to < 2 000
(1)	(2)	(3)	(4)	(5)	(6)	(7)
i.	Less than 0.6	+0.4, -0	+0.6, -0	+1.0, -0	+2.0, -0	+2.0, -0
ii.	From 0.60 to less than 1.00	+0.5, -0	+0.6, -0	+1.0, -0	+2.0, -0	+2.0, -0
iii.	From 1.00 to less than 1.50	+0.6, -0	+0.8, -0	+1.2, -0	+2.4, -0	+2.4, -0
iv.	From 1.50 to less than 2.50	+0.8, -0	+1.0, -0	+1.4, -0	+2.8, -0	+2.8, -0
v.	From 2.50 to less than 4.00	+0.8, -0	+1.0, -0	+1.6, -0	+3.2, -0	+3.2, -0
vi.	From 4.00 to less than 5.00	+1.0, -0	+1.4, -0	+2.0, -0	+4.0, -0	+4.0, -0

NOTES

- 1) For thicknesses of 5 mm and above, tolerances shall be agreed to between the purchaser and the manufacturer/seller.
- 2) For Width > 2 000 mm, tolerances on thickness shall be agreed to between the purchaser and the manufacturer/seller.’

(Page 3, clause 10.2.2) — Insert the new table 7b for permissible variations in width for trimmed edge hot rolled product:

‘Table 7b Permissible Variations in Width for Trimmed Edge Hot Rolled Product

(Clause 10.2.2)

All dimensions in millimeters

Sl. No.	Thickness	Tolerance on Width
		Trimmed Edge
(1)	(2)	(3)

i)	Less than 10 mm	+5, -0
ii)	From 10 mm up to and including 50 mm	+10, -0
<p>NOTES</p> <p>1) For thicknesses of 5 mm and above, tolerances shall be agreed to between the purchaser and the manufacturer/seller.</p> <p>2) For Width > 2000 mm, tolerances on width shall be agreed to between the purchaser and the manufacturer/the seller.</p>		

(Page 4, Table 8) — Substitute the following for the existing Table 8:

‘Table 8 Permissible Variations in Length of Hot Rolled or Cold Rolled specified Lengths
(Clause 10.3)

All dimensions in millimeters

Sl. No.	Thickness	Tolerance on Length	
		≤ 3 000 mm	> 3 000 mm
(1)	(2)	(3)	(4)
i)	Less than 10 mm	+10, -0	+(0.005 × L), -0
ii)	From 10 mm up to and including 25 mm	+15, -0	+(0.005 × L), -0’
<p>NOTE — For thicknesses of over 25 mm, tolerance on length shall be agreed to between the purchaser and the manufacturer/seller.</p>			

(Page 4, Table 9) — Substitute the following for the existing Table 9:

‘Table 9 Permissible Variation in Flatness¹⁾ for Hot Rolled or Cold Rolled Sheet and Plate
(Clause 10.4)

All dimensions in millimeters.

Sl. No.	Width	Length	Maximum Value of Flatness	
			Upstretched Condition	Stretched Condition
(1)	(2)	(3)	(4)	(5)
i)	Up to and excluding 1 000	Up to and including 2 000	15	3
		Over 2 000	20	6
ii)	1 000 and above	Up to and including 2 000	20	6
		Over 2 000	20	6
<p>¹⁾ Maximum deviation from a horizontal flat surface.’</p>				

(Page 5, Table 11) — Insert the following new Table 11:

Table 11 Permissible Values of Camber for Hot Rolled Strip
(Clause 10.5)
All dimensions in millimeters.

Sl. No.	Width mm	Maximum Value of Camber for any 2 000 mm Length
(1)	(2)	(3)
i)	Less than 250	10
ii)	From 250 to less than 500	8
iii)	From 500 to less than 1 000	5
iv)	From 1 000 to 1 500	5
NOTE: Applicable only in trim edge condition.		

(Page 5, Table 12) — Insert the following new Table 12:

Table 12 Permissible Values of Camber for Cold Rolled Strip
(Clause 10.5)
All dimensions in millimeters.

Sl. No.	Width mm	Maximum Value of Camber for any 2 000 mm Length
(1)	(2)	(3)
i)	Less than 50	10
ii)	From 50 to less than 250	8
iii)	From 250 to less than 500	5
iv)	From 500 and over	5
NOTE: Applicable only in trim edge condition.		