BUREAU OF INDIAN STANDARDS (Not to be reproduced without permission of BIS or used as an Indian Standard)

Draft Amendment 2 to IS 15997:2012

LOW NICKEL AUSTENITIC STAINLESS STEEL SHEET AND STRIP FOR UTENSILS AND KITCHENAPPLIANCES— SPECIFICATION

ICS 77.140.50,97.040.01	
Alloy Steels and forgings	Last date for receipt of
Sectional Committee, MTD 16	comments is 11 Feb 2024

(First cover page, Hindi title) — — Substitute 'बर्तनो अवं रसोईघर साधित्रों के लिए अल्प निकेल ऑस्टेनिटिक स्टेनलेस इस्पात की प्लेट, चादर और पत्ती- विशिष्टि ' for 'बर्तनो अवं रसोईघर साधित्रों के लिए अल्प निकेल ऑस्टेनिटिक स्टेनलेस इस्पात की चादर और पत्ती- विशिष्टि'.

(*First cover page and Page 1, English title*) — — Substitute 'LOW NICKEL AUSTENITIC STAINLESS STEEL PLATE, SHEET AND STRIP FOR UTENSILS AND KITCHEN APPLIANCES— SPECIFICATION' *for* 'LOW NICKEL AUSTENITIC STAINLESS STEEL SHEET AND STRIP FOR UTENSILS AND KITCHEN APPLIANCES— SPECIFICATION'.

(*Page* 1, *clause* 2) — Delete the following reference:

IS No. Title

1387 : 1993 General requirements for the supply of metallurgical materials (second revision)

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

IS No. Title

IS 8910:2022/Steel and Steel Products — General Technical Delivery Requirements(SecondISO 404:2013Revision)

(Page 1, clause 4.1) — Substitute 'IS 8910' for 'IS 1387'.

(*Page* 1, *clause* 4.2) — Substitute the following for the existing:

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

- a) Chemical composition (Only for Hot-Rolled steels and thickness t > 4mm))
- b) Chemical composition and Mechanical Properties in the annealed condition.
- c) Chemical Composition and Mechanical properties, in any other condition as agreed to between the purchaser and the supplier.'

(*Page* 1, *clause* 4.2) — Insert the following new clause:

'4.3 Information to be given by the purchaser

4.3.1 Basis for 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
- e) Surface Finish (*see* **11**)
- f) Edge condition (see 13)
- g) Method of manufacture, if any specified.'

(*Page* 1, *clause* 7) — Substitute the following for the existing:

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

(Page 2, clause 9.3) — Insert the following at the end of the clause:

'For conditions other than those mentioned in Table-3, the mechanical properties shall be mutually agreed to between the purchaser and the supplier.'

(*Page* 3, *Table* 4) — Substitute the following for the existing Table 4:

		_	- ·		
Condition	Finish	Description	Remarks		
(1)	(2)	(3)	(4)		
Hot rolled	a) No.0	Hot rolled and/or annealed	Suitable only for certain heat resisting applications where surface is not important, presence of scale impairs resistance to corrosion. Surface inspection is not practicable and fool proof		
Hot rolled b) No.:		Hot rolled, annealed and descaled (Pickled)	Generally used for industrial application where heat and corrosion resistance is more important and smoothness and uniformity of finish are not important. Repair grinding marks may be present in local areas		
	c) 2D	Cold rolled, annealed and descaled (Pickled)	A dull, smooth and uniform surface finish most suited for deep drawing applications		
	d) 2B	Cold rolled, annealed, descaled (Pickled) and skin passed	A smoother and brighter surface finish (as compared to 2D) most suitable for general applications		
	e) BA	Cold Rolled, bright annealed in protective atmosphere	A cold rolled reflective surface finish. Suitable for applications demanding bright and lustrous surface.		
Cold Rolled	f) No.3	Coarse grit polished surface finish	A uniform polished surface finish obtained with coarse abrasives of 100-120 grit on one or both surfaces. Suitable for use as a finish polished surface such as for panelling or any other application requiring such surface finish		
	g) No.4	Standard polished surface finish	A standard uniform polished surface finish produced with abrasives of 120-150 grit size and the finish is finer than No.3 finish. Suitable for general purpose polished finish used for panelling, appliances, equipment and architectural applications		

Table 4 Surface Finish

(*Clause* 11)

(Page 3, clause 12) — Substitute the following for the existing:

'12 DIMENSIONS

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

Thickness : 0.20 - 50 mm;

Width : upto 2000 mm; '

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

Table 5 Permissible Variations in Thickness for Hot-Rolled Product (Clause 14.1)

61 N		Tolerance on Thickness for Width				
SI No.	Thickness	< 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	

All dimensions in millimeters

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 more than 25 mm, tolerances on thickness shall be agreed to between the purchaser and the manufacturer/the seller.

(*Page* 4, *Table* 6) — Substitute the following for the existing Table 6:

Table 6 Permissible Variations in Thickness for Cold-Rolled Product

(Clause 14.1)

All dimensions in millimeters

	T h to have a set	Tolerance on Thickness for Width			
SI No.	Thickness	< 1000	1000 to < 1250	1250 to < 1600	1600 to ≤ 2000
(1)	(2)	(3)	(4)	(5)	(6)
(i)	From 0.20 to <0.30	±0.04	±0.04	_	_
(ii)	From 0.30 to <0.40	±0.05	±0.05	±0.05	—
(iii)	From 0.40 to <0.60	±0.08	±0.08	±0.08	—
(iv)	From 0.60 to <0.80	±0.10	±0.10	±0.10	—
(v)	From 0.80 to <1.25	±0.12	±0.15	±0.15	±0.15
(vi)	From 1.25 to <1.50	±0.13	±0.15	±0.20	±0.20
(vii)	From 1.50 to <2.00	±0.15	±0.20	±0.20	±0.20
(viii)	From 2.00 to <2.50	±0.20	±0.20	±0.25	±0.25
(ix)	From 2.50 to <3.00	±0.25	±0.25	±0.30	±0.30
(x)	From 3.00 to <4.00	±0.30	±0.30	±0.35	±0.35
(xi)	From 4.00 to <5.00	±0.35	±0.35	±0.40	±0.40

NOTES

1 For Width>2000mm, tolerances on thickness shall be agreed to between the purchaser and the manufacturer/the seller

2 Tolerances on thickness which are not mentioned in the above table shall be agreed to between the purchase and the manufacturer/the seller

3 For thickness of 5 mm and above, the tolerance shall be agreed as between the purchase and the manufacturer/the seller

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

Table 7 Permissible Variations in Width for Mill Edge in Hot and Cold Rolled Product
(<i>Clause</i> 14.2.1)
All dimensions in millimeters

All dimensions in minimeters					
SI No	Width	Tolerance on Width			
51110	wiath	Plus	Minus		
(1)	(2)	(3)	(4)		
i	< 250	5	0		
ii	≥250, <500	20	0		
iii	≥500, <1000	30	0		
iv	≥1000, ≤2000	35	0		

NOTE – For width >2000mm, tolerances on width shall be agreed to between the purchaser and the manufacturer/supplier.

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

Table 8 Permissible Variations in Width for Trimmed Edge Hot-Rolled Product
(Clause 14.2.2)All dimensions in millimeters

CLNG		Tolerand	plerance on Width	
SI No.	Width	Plus	Minus	
	(2)	(3)	(4)	
1	≤ 2000	5	0	

NOTE – For width > 2000mm, tolerances on width shall be agreed to between the purchaser and the manufacturer.

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

Table 9 Permissible Variations in Width for Trimmed Edge Cold Rolled Productfor Cold Rolled Strip in Coils and Cut Lengths

			Tolerance on Width			
SI. No.	Thickness	<250	250 to <500	500 to <1000	1000 to <1250	1250 to ≤ 2000
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	<0.6	±0.20	±0.30	±0.50	±1.00	±1.00
2	From 0.6 to < 1.00	±0.25	±0.30	±0.50	±1.00	±1.00
3	From 1.00 to < 1.50	±0.30	±0.40	±0.60	±1.20	±1.20
4	From 1.50 to < 2.50	±0.40	±0.50	±0.70	±1.40	±1.40
5	From 2.50 to < 4.00	±0.40	±0.50	±0.80	±1.60	±1.60
6	From 4.00 to < 5.00	±0.50	±0.70	±1.00	±2.00	±2.00

NOTES

1 For thicknesses of 5mm and above, tolerances shall be agreed to between the purchaser and the manufacturer/the seller

2 For Width >2000mm, tolerances on width shall be agreed to between the purchaser and the manufacturer/supplier.

(Page 5, clause 17.2) — Substitute the following for the existing clause:

'17.2 BIS Certification Marking

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

(Page 5, clause 17.2.1) — Delete