Stainless Steel - EN Standards for Stainless Steel H.R.



For Hot Rolled stainless steel the old BS1449 and BS1501 standards have been replaced by EN Standards:

EN10088-2Replaces BS1449-Part 2: 1983

EN10028-7Replaces BS1501-Part3: 1990

EN10095Covers Heat Resisting Grades

EN10259 & ISO 9445: Tolerances for COLD Rolled material (Sheets, plate, coil) up to 6.5mm thick

EN10029 & ISO 18286: Tolerances for 'Quarto' Hot Rolled Plate 3mm thick and above

EN10051 & Now ISO 9445 / 9444: Tolerances for Continuosly Produced (CPP) Hot Rolled Plate

MATERIAL CERTIFICATION

Where multi-certification is required, a combination of EN10088-2, EN10028-7, EN10029 or 10051 will appear together with the appropriate ASTM Standards.

TOLERANCES

For Cold Rolled Plate please refer to the datasheet on cold rolled

Note that in this Datasheet there are two sets of tolerances tables - One set for Quarto Plate to EN10029 and one set for CPP plate to EN10051

For CPP there are 3 categories of tolerances according to the grade where:

B = Ferritic & Martensitic Grades

C = Austenitic Grades without Mo

D = Austenitic Grades with Mo

FLATNESS - QUARTO PLATE

Thickness (mm)	Tols (mm) over Given Length (mm)	Tols (mm) over Given Length (mm)
	1000	2000
3 to 4.9	9	14
5 to 7.9	8	12
8 to 14.9	7	11
15 to 24.9	7	10
25 to 39	6	9
40 to 250	5	8

LENGTH - QUARTO PLATE

Length (mm)	Tolerance in (mm)	Tolerance in (mm)
Under 4000	-0	+20
4000 to 5999	-0	+30
6000 to 7999	-0	+40

WIDTH - QUARTO PLATE

Nominal Thickness (mm)	Tolerance (mm)	Tolerance (mm)
Up to 40	-0	+20
40 to 150	-0	+25
150 to 400	-0	+30



THICKNESS - QUARTO PLATE

Thickness (mm)	Tolerance (mm) CLASS B	Tolerance (mm) CLASS B	
	Minus	Plus	
3 to 4.9	0.3	0.7	
5 to 7.9	0.3	0.9	
8 to 14.9	0.3	1.1	
15 to 24.9	0.3	1.3	
25 to 39.9	0.3	1.7	
40 to 79.9	0.3	2.3	
80 to 149	0.3	2.9	
150 to 250	0.3	3.3	

FLATNESS - CPP

For CPP there are 3 categories of tolerances according to the grade where:

B = Ferritic and Martensitic Grades

C = Austenitic Grades without Mo

D = Austenitic Grades with Mo

* These flatness tolerances only apply for thicknesses up to 25mm

** To be agreed at the time of enquiry and order

Width (mm)	Tols* for given category	Tols* for given category	
	В	С	D**
Up to 1200	18	23	**
1200 to 1500	23	30	**
Over 1500	28	38	**

LENGTH - CPP

Length (mm)	Tolerance (mm)	Tolerance (mm)
Under 2000	-0	+20
2000 to 7999	-0	0.05 x Length

WIDTH - CPP

Length (mm)	Plus Tols (mm) (-0)	Plus Tols (mm) (-0)
Up to 1200	+20	+3
1201 to 1850	+20	+5
Over 1850	+25	+6

THICKNESS - CPP

These figures must be increased for stainless steel by: 15% for Ferritic & Martensitic 30% for Austenitic 40% for Moly Grades

Thickness (mm)	Tols +/- (mm) for given width	Tols +/- (mm) for given width	Tols +/- (mm) for given width	Tols +/- (mm) for given width
	Up to 1200	1201 to 1500	1501 to 1800	Over 1800
Up to 2.0	0.17	0.19	0.21	-
2.01 to 2.5	0.18	0.21	0.23	0.25
2.51 to 3.0	0.20	0.22	0.24	0.26
3.01 to 4.0	0.22	0.24	0.26	0.27
4.01 to 5.0	0.24	0.26	0.28	0.29
5.01 to 6.0	0.26	0.28	0.29	0.31
6.01 to 8.0	0.29	0.30	0.31	0.35
8.01 to 10.0	0.32	0.33	0.34	0.40
10.01 to 12.50	0.35	0.36	0.37	0.43
12.51 to 15.0	0.37	0.38	0.40	0.46
15.01 to 25.0	0.40	0.42	0.45	0.50

WIDTH - CPP

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REVISION HISTORY

Datasheet Updated 18 July 2019

DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and $\,$ manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources.

 $\label{eq:material} \textbf{Material supplied by the Company may vary significantly from this data, but}$ will conform to all relevant and applicable standards.

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