

Stainless Steel Slit Coil

Stainless steel slit coil is used extensively in many industries. BS Stainless coil can be manufactured with a safe edge, or oscillated to match customer requirements.

Typical uses of stainless steel precision slit coil include heat exchangers, heating elements, flexible tubing, filtration devices, cutlery products, springs, and surgical instruments.

Grades

Our stainless steel sheet/plate is available in 300, 400 and 200 series. Each type has its own characteristics. The most popular grades are, 304 which can be easily roll-formed or shaped and due to its excellent corrosion resistance and weldability, it is one of the most popular grades available. 316 is an alloy that contains molybdenum which increases the corrosion resistance and is particularly effective in acidic environments as it provides a greater resistance to pitting corrosion. 321 is a variation of 304 with the addition of titanium, it is resistant to intergranular corrosion and has excellent weldability. Type 430 is a ferritic stainless steel alloy which offers good corrosion resistance and is predominately used in the domestic and catering industries.

Common Grades and Specifications

BS EN 10088-2

Chemical composition % by mass MAX unless otherwise stated

Austenitic

Type	Name	Number	C	Si	Mn	P	S	N	Cr	Mo	Ni	Others
304	X5CrNi18-10	1.4301	0.07	1	2	0.045	0.015	0.11	17.5/19.5	-	8.0/10.5	-
304L	X2CrNi18-9	1.4307	0.030	1.00	2.00	0.045	0.015	0.11	17.5/19.5	-	8.0/10.5	-
316	X5CrNiMo17-12-2	1.4401	0.07	1.00	2.00	0.045	0.015	0.11	16.5/18.5	2.00/2.50	10.0/13.0	-
316L	X2CrNiMo17-12-2	1.4404	0.030	1.00	2.00	0.045	0.015	0.11	16.5/18.5	2.00/2.50	10.0/13.0	-

Ferritic

Type	Name	Number	C	Si	Mn	P	S	N	Cr	Mo	Ni	Others
409	X2CrTi12	1.4512	0.030	1.00	1.00	0.040	0.015	-	10.5/12.5	-	-	Ti: 6(C+N)/0.65
430	X6Cr17	1.4016	0.08	1.00	1.00	0.040	0.015	-	16.0/18.0	-	-	-
439	X3CrTi17	1.4510	0.05	1.00	1.00	0.040	0.015	-	16.0/18.0	-	-	Ti: [4*(C+N)+0.15]/0.80
441	X2CrTiNb18	1.4509	0.030	1.00	1.00	0.040	0.015	-	17.5/18.5	-	-	Ti: 0.10/0.60 Nb: 3C+0.30/1.00

Other grades are available on request.

Stainless Steel Coil Processing

Thickness	Width
0.3mm	Up to 1000mm
0.4mm	Up to 1250mm
0.5mm to 3mm	Up to 1580mm
MAX 3mm	

These are the sizes we can slit to; other widths and thicknesses are available upon request.

Finishes

Finish	Description
2B	Smooth finish, reflective grey sheen. Most widely used surface finish.
Bright Annealed (BA)	Cold rolled, annealed in a controlled atmosphere to retain a highly reflective finish.
Hot Rolled (HR)	Scaled finish, ideal if surface finish is not a key concern.
2D	Cold rolled, low reflective matt surface.
2E	Cold rolled, rough and dull finish.

Other finishes are available upon request.

Quality

All BS Stainless steel strip/coil is manufactured to the highest quality within the scope of ISO 9001:2015 accredited management system and manufactured to BS EN 10088-2 specification.

Narrow Strip Tolerances (Width <600mm, Thickness < 3mm)

Thickness Tolerance

Specified Thickness (t)	w < 125			125 ≤ w < 250			250 ≤ w < 600		
	Normal	Fine (F)	Precision(P)	Normal	Fine (F)	Precision(P)	Normal	Fine (F)	Precision(P)
0.05 ≤ t < 0.10	±0.10t	±0.06t	±0.04t	±0.12t	±0.10t	±0.08t	±0.15t	±0.10t	±0.08t
0.10 ≤ t < 0.15	±0.010	±0.008	±0.006	±0.015	±0.012	±0.008	±0.020	±0.015	±0.010
0.15 ≤ t < 0.20	±0.015	±0.010	±0.008	±0.020	±0.012	±0.010	±0.025	±0.015	±0.012
0.20 ≤ t < 0.25	±0.015	±0.012	±0.008	±0.020	±0.015	±0.010	±0.025	±0.020	±0.012
0.25 ≤ t < 0.30	±0.017	±0.012	±0.009	±0.025	±0.015	±0.012	±0.030	±0.020	±0.015
0.30 ≤ t < 0.40	±0.020	±0.015	±0.010	±0.025	±0.020	±0.012	±0.030	±0.025	±0.015
0.40 ≤ t < 0.50	±0.025	±0.020	±0.012	±0.030	±0.020	±0.015	±0.035	±0.025	±0.018
0.50 ≤ t < 0.60	±0.030	±0.020	±0.014	±0.030	±0.025	±0.015	±0.040	±0.030	±0.020
0.60 ≤ t < 0.80	±0.030	±0.025	±0.015	±0.035	±0.030	±0.018	±0.040	±0.035	±0.025
0.80 ≤ t < 1.00	±0.030	±0.025	±0.018	±0.040	±0.030	±0.020	±0.050	±0.035	±0.025
1.00 ≤ t < 1.20	±0.035	±0.030	±0.020	±0.045	±0.035	±0.025	±0.050	±0.040	±0.030
1.20 ≤ t < 1.50	±0.040	±0.030	±0.020	±0.050	±0.035	±0.025	±0.060	±0.045	±0.030
1.50 ≤ t < 2.00	±0.050	±0.035	±0.025	±0.060	±0.040	±0.030	±0.070	±0.050	±0.035
2.00 ≤ t < 2.50	±0.050	±0.035	±0.025	±0.070	±0.045	±0.030	±0.080	±0.060	±0.040
2.50 ≤ t ≤ 3.00	±0.060	±0.045	±0.030	±0.070	±0.050	±0.035	±0.090	±0.070	±0.045

Width Tolerance

Specified Thickness (t)	Specified Width (w)											
	w ≤ 40			40 < w ≤ 125			125 < w ≤ 250			250 < w < 600		
	Normal	Fine (F)	Precision (P)	Normal	Fine (F)	Precision (P)	Normal	Fine (F)	Precision (P)	Normal	Fine (F)	Precision (P)
t < 0.25	+0.17/-0	+0.13/-0	+0.10/-0	+0.20/-0	+0.15/-0	+0.12/-0	+0.25/-0	+0.20/-0	+0.15/-0	+0.50/-0	+0.50/-0	+0.40/-0
0.25 ≤ t < 0.50	+0.20/-0	+0.15/-0	+0.12/-0	+0.25/-0	+0.20/-0	+0.15/-0	+0.30/-0	+0.22/-0	+0.17/-0	+0.60/-0	+0.50/-0	+0.40/-0
0.50 ≤ t < 1.00	+0.25/-0	+0.20/-0	+0.15/-0	+0.25/-0	+0.22/-0	+0.17/-0	+0.40/-0	+0.25/-0	+0.20/-0	+0.70/-0	+0.60/-0	+0.50/-0

$1.00 \leq t < 1.50$	+0.25/-0	+0.22/-0	+0.15/-0	+0.30/-0	+0.25/-0	+0.17/-0	+0.50/-0	+0.30/-0	+0.22/-0	+1.0/-0	+0.70/-0	+0.60/-0
$1.50 \leq t < 2.50$	---	---	---	+0.40/-0	+0.25/-0	+0.20/-0	+0.60/-0	+0.40/-0	+0.25/-0	+1.0/-0	+0.80/-0	+0.60/-0
$2.50 \leq t \leq 3.00$	---	---	---	+0.50/-0	+0.3/-0	+0.25/-0	+0.6/-0	+0.40/-0	+0.25/-0	+1.2/-0	+1.0/-0	+0.80/-0

Edge Camber Tolerance

Specified width (w)	Edge camber tolerances for measuring lengths			
	1000		2000	
	Normal		Precision	
$10 < w < 25$	4	16	1.5	6
$25 < w < 40$	3	12	1.25	5
$40 < w < 125$	2	8	1.0	4
$125 < w < 600$	1.5	6	0.75	3

Wide Strip Tolerances (Width 600 - 2100mm, Thickness 0.3 - 8.0mm)

Thickness Tolerance

Specified Thickness (t)	Normal tolerances for a nominal width w of			Special tolerances (S) for a nominal width w of		
	$w < 1000$	$1000 < w < 1300 \leq w$	$1300 < w < 2100 \leq w$	$w < 1000$	$1000 < w < 1300 \leq w$	$1300 < w < 2100 \leq w$
$t < 0.30$	± 0.030	--	--	± 0.030	--	--
$0.30 \leq t < 0.50$	± 0.04	± 0.04	--	± 0.030	± 0.035	--
$0.50 \leq t < 0.60$	± 0.045	± 0.05	--	± 0.035	± 0.035	--
$0.60 \leq t < 0.80$	± 0.05	± 0.05	--	± 0.040	± 0.040	--
$0.80 \leq t < 1.00$	± 0.055	± 0.06	± 0.07	± 0.040	± 0.050	± 0.050
$1.00 \leq t < 1.20$	± 0.06	± 0.07	± 0.08	± 0.050	± 0.055	± 0.060
$1.20 \leq t < 1.50$	± 0.08	± 0.08	± 0.10	± 0.055	± 0.060	± 0.060
$1.50 \leq t < 2.00$	± 0.08	± 0.09	± 0.11	± 0.065	± 0.070	± 0.080
$2.00 \leq t < 2.50$	± 0.09	± 0.11	± 0.13	--	--	--

$2.50 \leq t < 3.00$	± 0.11	± 0.13	± 0.15	--	--	--
$3.00 \leq t < 4.00$	± 0.14	± 0.15	± 0.16	--	--	--
$4.00 \leq t < 5.00$	± 0.15	± 0.17	± 0.19	--	--	--
$5.00 \leq t < 6.00$	± 0.17	± 0.20	± 0.23	--	--	--
$6.00 \leq t \leq 8.00$	± 0.17	± 0.22	± 0.25			

Width Tolerance

Specified Thickness (t)	Normal tolerances for a specified width w of					Special tolerances (S) ¹ for a nominal width w of		
	$w \leq 125$	$125 < w < 250 </w$	$250 < w < 600 </w$	$600 < w < 1000 </w$	$1000 < w < 2100 </w$	$w \leq 125$	$125 < w < 250 </w$	$250 < w < 600 </w$
$t < 1.00$	+0.5/-0	+0.5/-0	+0.7/-0	+1.5/-0	+2.0/-0	+0.3/-0	+0.3/-0	+0.6/-0
$1.00 \leq t < 1.50$	+0.7/-0	+0.7/-0	+1.0/-0	+1.5/-0	+2.0/-0	+0.4/-0	+0.5/-0	+0.7/-0
$1.50 \leq t < 2.50$	+1.0/-0	+1.0/-0	+1.2/-0	+2.0/-0	+2.5/-0	+0.6/-0	+0.7/-0	+0.9/-0
$2.50 \leq t < 3.50$	+1.2/-0	+1.2/-0	+1.5/-0	+3.0/-0	+3.0/-0	+0.8/-0	+0.9/-0	+1.0/-0
$3.50 \leq t \leq 8.00$	+2.0/-0	+2.0/-0	+1.2/-0	+4.0/-0	+4.0/-0	--	--	--

Edge Camber Tolerance

Specified width (w)	Edge camber tolerances for measuring lengths	
	1000	2000
$10 \leq w < 40$	2.5	10
$40 \leq w < 125$	2	8
$125 \leq w < 600$	1.5	6
$600 \leq w \leq 2100$	1	4