

# Cold rolled strip **STAINLESS STEEL**

## AVAILABLE STOCK

FT3/ANGL/QUAL/March 2009

NF EN 10088-2		BS	AISI	material condition	available thickness
<i>ferretic steel</i>					
X6Cr17	1.4016	430S17	430	annealed 2R (BA)	0.3 to 3.00
<i>austenitic steel</i>					
X10CrNi 18-8	1.4310	301S21	301	cold rolled 2H	0.1 to 1.50
X2CrNi 18-9	1.4307	304S11	304L	annealed 2B - 2R (BA)	0.2 to 3.00
X5CrNi 18-10	1.4301	304S31	304	annealed 2B - 2R (BA)	0.2 to 3.00
X6CrNiTi 18-10	1.4541	321S31	321	annealed 2B - 2R (BA)	0.2 to 0.8
X2CrNiMo 17-12-2	1.4404	316S11	316L	annealed 2B - 2R (BA)	0.2 to 3.00

Thickness tolerances according to standard NF EN ISO 9445.

## Surface finishes : NF EN 10088-2

	delivery condition	surface condition
<b>2H</b>	Cold rolled condition (for higher tensile strength)	bright aspect
<b>2D</b>	Cold rolled followed by heat treatment, pickling	smooth appearance, good ductility
<b>2B</b>	Cold rolled followed by heat treatment, pickling and skin passed to give an appropriate luster	smooth and more luster than 2D
<b>2R</b>	Bright heat treatment after cold rolling	smooth and bright aspect with good reflecting power

## CHEMICAL COMPOSITION : NF EN 10088-2

Grade	%									
	C	Si	Mn	P	S	N	Cr	Mo	Ni	Ti
<b>X6Cr17</b>	≤ 0.08	≤ 1	≤ 1	≤ 0.04	≤ 0.015		16 to 18			
<b>X10CrNi 18-8</b>	0.05 - 0.15	≤ 2	≤ 2	≤ 0.045	≤ 0.015	≤ 0.11	16 to 19	≤ 0.8	6 to 9.5	
<b>X2CrNi 18-9</b>	≤ 0.03	≤ 1	≤ 2	≤ 0.045	≤ 0.015	≤ 0.11	17,5 to 19,5		8 to 10	
<b>X5CrNi 18-10</b>	≤ 0.07	≤ 1	≤ 2	≤ 0.045	≤ 0.015	≤ 0.11	17 to 19,5		8 to 10.5	
<b>X6CrNiTi 18-10</b>	≤ 0.08	≤ 1	≤ 2	≤ 0.045	≤ 0.015		17 to 19		9 to 12	5xC to 0.7
<b>X2CrNiMo 17-12-2</b>	≤ 0.03	≤ 1	≤ 2	≤ 0.045	≤ 0.015	≤ 0.11	16.5 to 18.5	2 to 2.5	10 to 13	

## Mecanical properties at 20°C: annealed condition

Grade	Tensile strength TS N/mm <sup>2</sup>	Yield strength YS 0.2 N/mm <sup>2</sup> min	Elongation E80 mm %min
<b>X6Cr17</b>	450 - 600	260	20
<b>X10CrNi 18-8</b>	600 - 950	250	40
<b>X2CrNi 18-9</b>	520 - 700	220	45
<b>X5CrNi 18-10</b>	540 - 750	230	45
<b>X6CrNiTi 18-10</b>	520 - 720	220	40
<b>X2CrNiMo 17-12-2</b>	530 - 680	240	40

## Tensile strength in cold rolled condition:

NF EN 10 088-2	Tensile strength TS (N/mm <sup>2</sup> )
C 700	700 to 850
C 850	850 to 1000
C 1000	1000 to 1150
C 1150	1150 to 1300
C 1300	1300 to 1500