

By EFTCG

NODDIE **STEEEL**

STAINLESS
AND
GALVANIZED
STEEL

By EFTCG

NORDIC S T E E L

**STAINLESS
STEEL**



A large industrial warehouse filled with stacks of white panels on pallets, ready for production. The warehouse has a high ceiling with exposed beams and lights. The stacks are organized in rows, and the overall scene is clean and well-lit.

*"Ready for
production"*

Stainless Steel Standards and Chemical Values

		Int. Standards		Chemical Compositions (%)					Other Names	
		EN	ASTM/UNS	C	N	Cr	Ni	Mo		Others
GENERAL PURPOSE USE	FERRITIC	1.4003	S40977	≤ 0,030	≤ 0,030	10,5 – 12,5	0,30 – 1,00	-		
		1.4000	410S	≤ 0,08	-	12,0 – 14,0	-	-		
		1.4016	430	≤ 0,080	-	16,0 – 18,0	-	-	-	
		1.4509	S43932	≤ 0,030	-	17,5 – 18,5	-	-	Nb, Ti	
		1.4521	444	≤ 0,025	≤ 0,030	17,0 – 20,0	-	1,80 – 2,50	Ti	
	MARTENSITIC	1.4006	410	0,08 – 0,15	-	11,5 – 13,5	≤ 0,75	-	-	
		1.4021	420	0,16 – 0,25	-	12,0 – 14,0	-	-	-	
		1.4028	420	0,26 – 0,35	-	12,0 – 14,0	-	-	-	
		1.4313	S41500	≤ 0,05	≥ 0,02	12,0 – 14,0	3,5 – 4,5	0,30 – 0,70	-	
		1.4418	-	≤ 0,06	≥ 0,02	15,0 – 17,0	4,0 – 6,0	0,80 – 1,50	-	248Sv
	DUPLX	1.4162	S32101	0,03	0,22	21,5	1,5	0,30	5Mn	LDX 2101®
		1.4362	S32304	≤ 0,030	0,05 – 0,20	22,0 – 24,0	3,5 – 5,5	0,10 – 0,60	-	SAF 2304
		1.4462	S322052	≤ 0,030	0,10 – 0,22	21,0 – 23,0	4,5 – 6,5	2,50 – 3,50	-	2205
		1.4501	S32760	≤ 0,030	0,20 – 0,30	24,0 – 26,0	6,0 – 8,0	3,0 – 4,0	W	
		1.4410	S32750	≤ 0,030	0,20 – 0,35	24,0 – 26,0	6,0 – 8,0	3,0 – 4,5	-	SAF 2507
	AUSTENITIC	1.4310	301	0,05 – 0,15	≤ 0,11	16,0 – 19,0	6,0 – 9,5	≤ 0,80	-	
		1.4318	301LN	≤ 0,030	0,10 – 0,20	16,5 – 18,5	6,0 – 8,0	-	-	
		1.4372	201	≤ 0,15	0,05 – 0,25	16,0 – 18,0	3,5 – 5,5	-	7Mn	
		1.4568	631	≤ 0,09	-	16,0 – 18,0	6,5 – 7,80	-	Al	
		1.4301	304	≤ 0,07	≤ 0,11	17,5 – 19,5	8,0 – 10,5	-	-	
		1.4307	304L	≤ 0,030	≤ 0,11	17,5 – 19,5	8,0 – 10,5	-	-	
		1.4311	304LN	≤ 0,030	0,12 – 0,22	17,5 – 19,5	8,5 – 11,5	-	-	
		1.4541	321	≤ 0,08	-	17,0 – 19,0	9,0 – 12,0	-	Ti	
		1.4550	347	≤ 0,08	-	17,0 – 19,0	9,0 – 12,0	-	Nb	
		1.4305	303	≤ 0,10	≤ 0,11	17,0 – 19,0	8,0 – 10,0	-	Cu	
		1.4303	305	≤ 0,06	≤ 0,11	17,0 – 19,0	11,0 – 13,0	-	-	
		1.4306	304L	≤ 0,030	≤ 0,11	18,0 – 20,0	10,0 – 12,0	-	-	
		1.4401	316	≤ 0,07	≤ 0,11	16,5 – 18,5	10,0 – 13,0	2,00 – 2,50	-	
		1.4404	316L	≤ 0,030	≤ 0,11	16,5 – 18,5	10,0 – 13,0	2,00 – 2,50	-	
		1.4436	316	≤ 0,05	≤ 0,11	16,5 – 18,5	10,5 – 13,0	2,50 – 3,00	-	
		1.4432	316L	≤ 0,030	≤ 0,11	16,5 – 18,5	10,5 – 13,0	2,50 – 3,00	-	
		1.4406	316LN	≤ 0,030	0,12 – 0,22	16,5 – 18,5	10,0 – 12,5	2,00 – 2,50	-	
1.4429		S31653	≤ 0,030	0,12 – 0,22	16,5 – 18,5	11,0 – 14,0	2,50 – 3,00	-		
1.4571		316Ti	≤ 0,08	-	16,5 – 18,5	10,5 – 13,5	2,00 – 2,50	Ti		
1.4435		316L	≤ 0,030	≤ 0,11	17,0 – 19,0	12,5 – 15,0	2,50 – 3,00	-		
1.4438	317L	≤ 0,030	≤ 0,11	17,5 – 19,5	13,0 – 16,0	3,00 – 4,00	-			
1.4439	317LMN3	≤ 0,030	0,12 – 0,22	16,5 – 18,5	12,5 – 14,5	4,00 – 5,00	-			
1.4466	S31050	≤ 0,020	0,10 – 0,16	24,0 – 26,0	21,0 – 23,0	2,00 – 2,50	-			
1.4539	904L	≤ 0,020	≤ 0,15	19,0 – 21,0	24,0 – 26,0	4,00 – 5,00	1,5Cu	904L		
1.4529	N08926	≤ 0,020	0,15 – 0,25	19,0 – 21,0	24,0 – 26,0	6,00 – 7,00	Cu			
1.4547	S31254	≤ 0,020	0,18 – 0,25	19,5 – 20,5	17,5 – 18,5	6,00 – 7,00	Cu	254 SMO®		
1.4565	S34565	≤ 0,030	0,30 – 0,60	24,0 – 26,0	16,0 – 19,0	4,00 – 5,00	5,5Mn			
HEAT RESISTANT	FERRITIC	1.4713	-	≤ 0,012	≤ 0,02	6,00 – 8,00	-	-	0,7Al	
		1.4724	-	≤ 0,012	≤ 0,02	12,00 – 14,00	-	-	0,8Al	
		1.4742	-	≤ 0,012	≤ 0,02	17,00 – 19,00	-	-	1Al	
		1.4762	-	≤ 0,012	≤ 0,02	23,00 – 26,00	-	-	1,4Al	
	AUSTENITIC	1.4948	304H	0,05	-	18,1	8,3	-	-	
		1.4878	321	≤ 0,10	-	17,00 – 19,00	9,00 – 12,00	-	Ti	
		1.4818	S30415	0,04 – 0,08	0,12 – 0,20	18,00 – 20,00	9,00 – 11,00	-	1,3Si, Ce	153MA™
		1.4833	309S	≤ 0,15	≤ 0,11	22,00 – 24,00	12,00 – 14,00	-	-	
		1.4828	-	≤ 0,20	≤ 0,11	19,00 – 21,00	11,0 – 13,00	-	2Si	
		1.4835	S30815	0,05 – 0,12	0,12 – 0,20	20,00 – 22,00	10,00 – 12,00	-	1,6Si, Ce	253MA®
1.4845	310S	≤ 0,10	≤ 0,11	24,00 – 26,00	19,00 – 22,00	-	-			
1.4841	314	≤ 0,20	≤ 0,11	24,00 – 26,00	19,00 – 22,00	-	2Si			

Stainless Steel Applications

ASTM CODE	SPECIFICATIONS	APPLICATIONS
304	Base kind of stainless steel. For mechanical strength and oxidation up 400°C	Household goods, hollow-ware, catering equipment, food and process industry equipment, dairy equipment, nitrogen and hydrogen tanks, metal furniture, car parts and other vehicles, etc.
304L	Same as 304 with low carbon (better formability).	Thick-walled welded structures, strongly oxidizing environments as nitric acid, lining for coal hoppers, liquid fertilizer spray tanks, tomato paste storage tanks, etc.
321	Useful in higher temperatures and with the content of titan higher corrosion resistance.	Thick-walled welded structures, high temperature applications, aircraft collector rings and exhaust stacks, cabin heaters, carburetor air intensifier tubes, exhaust manifolds, jet engine parts, etc
316	For mechanical strength and oxidation up to 600 °C. Excellent ductility, formability and toughness. Due to the content of Mo resistant to high oxidation and acid.	Textile-brewery-paper-medical and fatty acid industry, acetic acid compounds, etc.
316L	Same as 316 with low carbon but resistant up to 400°C.	Thick-walled welded structures in the same scope of application as 316
316 Ti	The version of 316, Ti alloyed, resistant to higher temperatures and oxidations.	Thick-walled welded structures in corroding environments, high temperature applications, developed for highly corrosive environments in the chemical and process industries and for sea water applications.
309S	At 1050 °C higher oxidation resistance.	High temperature applications.
310	At 1100 °C higher oxidation resistance.	High temperature applications, blast furnace parts, chemical and petro-chemical industries.
310S	Same as 310 slightly higher resistance.	Same as 310
430	Better surface, without Ni, magnetic.	Bright surface applications on decorative equipments.
S32205	Combine many of the properties of austenitic and ferritic steels. Offer good resistance to localized and uniform corrosion.	Chemical tankers, pulp and paper industry, oil and gas industry, structural components in bridges, etc.

Stainless Steel Surface Finishes

CODE	SURFACE	
EN	ASTM	NORDIC
1D	1	No1
		Hot-rolled, heat treated, pickled.
2E	1	2E
		Semi cold-rolled, heat treated, mechanically, descaled, followed by pickling Cold rolled acc. to EN but not ASTM.
2D	2D	2D
		Cold-rolled, heat treated, pickled.
2B	2B	2B
		Cold-rolled, heat treated, pickled, skin passed.
2R	BA	BA
		Cold-rolled, bright annealed, (May be skin passed).
2H	TR	TR
		Work hardened.
2G	3	3N
		Cold-rolled, heat treated, pickled and polished.
2J	6	SB
		Cold-rolled, heat treated, pickled and brushed or dull polished.
2K	4	4N
		Cold-rolled, heat treated, pickled and fine / satin polished.
2P	8	No.8
		Bright polished, mirror finish.

By EFTCG

NORDIC STEEL

**GALVANIZED
STEEL**



GALVANIZED STEEL

Hot Dipped Galvanized Flat Steel is obtained by the process of surface cleaning, annealing, galvanize (zinc) coating, drying, respectively, of Fullhard product rolled to the final thickness. Optionally, tempering, lubrication and passivation applications are also made. It has improved corrosion resistance. It can be shaped, welded and painted.



Advantages of Galvanized Steel



Cost Advantage



High Strength



Formability



Weldability



Corrosion Resistance



Paintability



Recycling Opportunity

ARE AS OF USAGE

Areas of Usage

Automotive, White Goods, Construction and Building Sectors



STANDARD AND QUALITIES

	Product Group	NordicSteel Grade	Standard Grades	Standard	Similar Standards				
					ASTM Standard	EN Standard	JIS Standard	AS/NZS Standard	
Continuously Hot Dip Zinc Coated Low Carbon Steel for Cold Forming	GZR	DX51D+Z	DX51D+Z	EN 10346:2015	CS Type C	-	SGCC	G1-G2	
	GZR	DX52D+Z	DX52D+Z	EN 10346:2015	CS Type B	-	SGCD1	G2	
	GZR	DX53D+Z	DX53D+Z	EN 10346:2015	FS Type B	-	SGCD2	G3	
	GZR	DX54D+Z	DX54D+Z	EN 10346:2015	DDS Type A	-	SGCD3	-	
	GZR	DX56D+Z ^{(1) (3)}	DX56D+Z	EN 10346:2015	EDDS	-	-	-	
	GZR	DX57D+Z ⁽³⁾	DX57D+Z	EN 10346:2015	EDDS	-	-	-	
	GZR	CS Type C ⁽¹⁾	CS Type C	ASTM A653M:2015	CS Type C	DX51D+Z	SGCC	G1-G2	
	GZR	CS Type B ⁽¹⁾	CS Type B	ASTM A653M:2015	CS Type B	DX52D+Z	SGCD1	G2	
	GZR	FS Type B ⁽¹⁾	FS Type B	ASTM A653M:2015	FS Type B	DX53D+Z	SGCD2	G3	
	GZR	DDS Type A ⁽¹⁾	DDS Type A	ASTM A653M:2015	DDS Type A	DX54D+Z	SGCD3	-	
	GZR	HCT450X ⁽³⁾	HCT450X	EN 10346:2015	-	-	-	-	
	Continuously Hot Dip Zinc Coated Low/ Ultra Low Carbon Steel for Cold Forming	GZR	HCT490X ⁽³⁾	HCT490X	EN 10346:2015	-	-	-	-
GZR		HCT590X ⁽³⁾	HCT590X	EN 10346:2015	-	-	-	-	
GZR		S220GD+Z	S220GD+Z	EN 10346:2015	SS Gr. 230	-	SGCC	-	
GZR		S250GD+Z	S250GD+Z	EN 10346:2015	SS Gr. 255	-	SGC340	G250	
GZR		S280GD+Z	S280GD+Z	EN 10346:2015	SS Gr. 275	-	SGC400	-	
GZR		S320GD+Z	S320GD+Z	EN 10346:2015	ASTM A53 HSLAS Gr. 340	-	SGC440	G300	
GZR		S350GD+Z	S350GD+Z	EN 10346:2015	SS Gr. 340	-	SGC490	G350	
GZR		S390GD+Z ⁽¹⁾	S390GD+Z	EN 10346:2015	SS Gr. 410	-	-	-	
GZR		S420GD+Z ⁽¹⁾	S420GD+Z	EN 10346:2015	SS Gr. 410	-	-	-	
GZR		S450GD+Z ^{(1) (3)}	S450GD+Z	EN 10346:2015	SS Gr. 480	-	-	G450	
GZR		S550GD+Z ^{(1) (3)}	S550GD+Z	EN 10346:2015	SS Gr. 550	-	SGC570	G500 - G550	
Continuously Hot Dip Zinc Coated High Yield Strength Dual Phase Steels		GZR	SSGRADE33 ⁽¹⁾	SS Gr. 230	ASTM A653M:2015	-	S220GD+Z	SGCC	-
	GZR	SSGRADE50 ⁽¹⁾	SS Gr. 340	ASTM A653M:2015	-	S350GD+Z	SGC490	G350	
	GZR	SSGRADE80 ⁽¹⁾	SS Gr. 550	ASTM A653M:2015	-	S550GD+Z	SGC570	G500 - G550	
	GZR	HX180BD+Z ^{(1) (2) (3)}	HX180BD+Z	EN 10346:2015	-	-	-	-	
	GZR	HX220BD+Z ^{(1) (2) (3)}	HX220BD+Z	EN 10346:2015	BHS Gr. 180	-	-	-	
	GZR	HX260BD+Z ^{(1) (2) (3)}	HX260BD+Z	EN 10346:2015	SHS Gr. 210	-	-	-	
	GZR	HX300BD+Z ^{(1) (2) (3)}	HX300BD+Z	EN 10346:2015	BHS Gr. 210	-	-	-	
	GZR	HX340BD+Z ^{(1) (2) (3)}	HX340BD+Z	EN 10346:2015	SHS Gr. 280	-	-	-	
	GZR	HX180YD+Z ^{(1) (2) (3)}	HX180YD+Z	EN 10346:2015	BHS Gr. 280	-	-	-	
	GZR	HX220YD+Z ^{(1) (2) (3)}	HX220YD+Z	EN 10346:2015	-	-	-	-	
	GZR	HX260YD+Z ^{(1) (2) (3)}	HX260YD+Z	EN 10346:2015	SHS Gr. 300	-	-	-	
	Continuously Hot Dip Zinc Coated Structural Steels	GZR	HX300YD+Z ^{(1) (2) (3)}	HX300YD+Z	EN 10346:2015	BHS Gr. 300	-	-	-
GZR		HX260LAD+Z ⁽¹⁾	HX260LAD+Z	EN 10346:2015	-	-	-	-	
GZR		HX300LAD+Z ⁽¹⁾	HX300LAD+Z	EN 10346:2015	-	-	-	-	
GZR		HX340LAD+Z ⁽¹⁾	HX340LAD+Z	EN 10346:2015	-	-	-	-	
GZR		HX380LAD+Z ⁽³⁾	HX380LAD+Z	EN 10346:2015	-	-	-	-	
GZR		HX420LAD+Z ⁽³⁾	HX420LAD+Z	EN 10346:2015	-	-	-	-	
GZR		HX460LAD+Z ⁽³⁾	HX460LAD+Z	EN 10346:2015	-	-	-	-	
GZR		HX500LAD+Z ⁽³⁾	HX500LAD+Z	EN 10346:2015	-	-	-	-	
Continuously Hot Dip Zinc Coated Ultra Low Carbon Steel for Cold Forming									

1 - All grades which is nearest EN standards shall be subject to negotiation at the time of enquiry and order.

2 - Issues and/or tolerances not mentioned here to be agreed at the time of enquiry and order.

3 - Under development.

PRODUCTION LIMITS

Product Group	Min. Thickness	Max Thickness	Min. Width	Max Width	Surface Quality	Coating Mass	Surface Type	Passivation Type	Oiling Type	Inner Diameter
Galvanized	0,30	3,00	900	1300	A	60/600	Bright (BR) Semi Bright (SB) Matt (M) Rough (R)	Chromated Non Chromated	0 - 3,00 gr / m ²)	610/508
Galvanized	0,30	3,00	900	1300	B	60/275	Bright (BR) Semi Bright (SB) Matt (M) Rough (R)	Chromated Non Chromated	0 - 3,00 gr / m ²)	610/508

		Order Width (mm)									
		800	900	1000	1100	1200	1250	1280	1300		
Order Thickness (mm)	3.50									Order Thickness (mm)	
	3.00		•	•	•	•	•	•	•		
	2.50		•	•	•	•	•	•	•		
	2.00		•	•	•	•	•	•	•		
	1.50		•	•	•	•	•	•	•		
	1.00		•	•	•	•	•	•	•		
	0.50		•	•	•	•	•	•	•		
	0.49		•	•	•	•	•	•	•		
	0.40		•	•	•	•	•	•	•		
	0.39		•	•	•	•	•	•	•		
	0.35		•	•	•	•	•	•	•		
	0.34		•	•	•	•	•	•	•		
	0.30		•	•	•	•	•	•	•		
0.25											

MECHANICAL AND CHEMICAL PROPERTIES

Continuously Hot Dip Zinc Coated Low Carbon Steel for Cold Forming

Chemical Composition (%)								
NordicSteelGrade	Grade	Standard	C (max.)	Mn (max.)	P (max.)	S (max.)	Si (max.)	Ti (max.)
DX51D+Z	DX51D+Z	EN 10346:2015	0,18	1,20	0,12	0,045	0,50	0,30
DX52D+Z	DX52D+Z	EN 10346:2015	0,12	0,60	0,10	0,045	0,50	0,30

Mechanical Properties					
NordicSteelGrade	Grade	Standard	Re N/mm ² (max.)	Rm N/mm ²	A (%) A80 (min.)
DX51D+Z	DX51D+Z	EN 10346:2015	-	270-500	22
DX52D+Z	DX52D+Z	EN 10346:2015	140-300	270-420	26

Continuously Hot Dip Zinc Coated Low/Ultra Low Carbon Steel for Cold Forming

Chemical Composition (%)								
NordicSteelGrade	Grade	Standard	C (max.)	Mn (max.)	P (max.)	S (max.)	Si (max.)	Ti (max.)
DX53D+Z	DX53D+Z	EN 10346:2015	0,12	0,60	0,10	0,045	0,50	0,30
DX54D+Z	DX54D+Z	EN 10346:2015	0,12	0,60	0,10	0,045	0,50	0,30
DX56D+Z	DX56D+Z	EN 10346:2015	0,12	0,60	0,10	0,045	0,50	0,30
DX57D+Z	DX57D+Z	EN 10346:2015	0,12	0,60	0,10	0,045	0,50	0,30

Mechanical Properties							
	Grade	Standard	Re N/mm ² (max.)	Rm N/mm ²	A (%) A80 (min.)	r90 (min.)	n90 (min.)
DX53D+Z	DX53D+Z	EN 10346:2015	140-260	270-380	30	-	-
DX54D+Z	DX54D+Z	EN 10346:2015	120-220	260-350	36	1,60	0,18
DX56D+Z	DX56D+Z	EN 10346:2015	120-180	260-350	39	1,90	0,21
DX57D+Z	DX57D+Z	EN 10346:2015	120-170	260-350	41	2,10	0,22

Continuously Hot Dip Zinc Coated Structural Steels

Chemical Composition (%)								
NordicSteelGrade	Grade	Standard	C (max.)	Mn (max.)	P (max.)	S (max.)	Si (max.)	Ti (max.)
S220GD+Z	S220GD+Z	EN 10346:2015	0,20	1,70	0,10	0,045	0,60	-
S250GD+Z	S250GD+Z	EN 10346:2015	0,20	1,70	0,10	0,045	0,60	-
S280GD+Z	S280GD+Z	EN 10346:2015	0,20	1,70	0,10	0,045	0,60	-
S320GD+Z	S320GD+Z	EN 10346:2015	0,20	1,70	0,10	0,045	0,60	-
S350GD+Z	S350GD+Z	EN 10346:2015	0,20	1,70	0,10	0,045	0,60	-
S390GD+Z	S390GD+Z	EN 10346:2015	0,20	1,70	0,10	0,045	0,60	-
S420GD+Z	S420GD+Z	EN 10346:2015	0,20	1,70	0,10	0,045	0,60	-
S450GD+Z	S450GD+Z	EN 10346:2015	0,20	1,70	0,10	0,045	0,60	-
S550GD+Z	S550GD+Z	EN 10346:2015	0,20	1,70	0,10	0,045	0,60	-

Mechanical Properties					
NordicSteelGrade	Grade	Standard	Re N/mm ² (min.)	Rm N/mm ² (min.)	A (%) A80 (min.)
S220GD+Z	S220GD+Z	EN 10346:2015	220	300	20
S250GD+Z	S250GD+Z	EN 10346:2015	250	330	19
S280GD+Z	S280GD+Z	EN 10346:2015	280	360	18
S320GD+Z	S320GD+Z	EN 10346:2015	320	390	17
S350GD+Z	S350GD+Z	EN 10346:2015	350	420	16
S390GD+Z	S390GD+Z	EN 10346:2015	390	460	16
S420GD+Z	S420GD+Z	EN 10346:2015	420	480	15
S450GD+Z	S450GD+Z	EN 10346:2015	450	510	14
S550GD+Z	S550GD+Z	EN 10346:2015	550	560	-

High Strength Low Alloyed Zinc Coated Steels by Continuous Hot-Dip Process for Cold Forming

Chemical Composition (%)										
NordicSteelGrade	Grade	Standard	C (max.)	Mn (max.)	P (max.)	S (max.)	Si (max.)	Al Total (min.)	Nb (max.)	Ti (max.)
HX260LAD+Z	HX260LAD+Z	EN 10346:2015	0,11	1,00	0,03	0,025	0,50	0,015	0,09	0,15
HX300LAD+Z	HX300LAD+Z	EN 10346:2015	0,12	1,40	0,03	0,025	0,50	0,015	0,09	0,15
HX340LAD+Z	HX340LAD+Z	EN 10346:2015	0,12	1,40	0,03	0,025	0,50	0,015	0,10	0,15
HX380LAD+Z	HX380LAD+Z	EN 10346:2015	0,12	1,50	0,03	0,025	0,50	0,015	0,10	0,15
HX420LAD+Z	HX420LAD+Z	EN 10346:2015	0,12	1,60	0,03	0,025	0,50	0,015	0,10	0,15
HX460LAD+Z	HX460LAD+Z	EN 10346:2015	0,15	1,70	0,03	0,025	0,50	0,015	0,10	0,15
HX500LAD+Z	HX500LAD+Z	EN 10346:2015	0,15	1,70	0,03	0,025	0,50	0,015	0,10	0,15

Mechanical Properties					
NordicSteelGrade	Grade	Standard	Re N/mm ² (max.)	Rm N/mm ²	A (%) A80 (min.)
HX260LAD+Z	HX260LAD+Z	EN 10346:2015	260-330	350-430	26
HX300LAD+Z	HX300LAD+Z	EN 10346:2015	300-380	380-480	23
HX340LAD+Z	HX340LAD+Z	EN 10346:2015	340-420	410-510	21
HX380LAD+Z	HX380LAD+Z	EN 10346:2015	380-480	440-560	19
HX420LAD+Z	HX420LAD+Z	EN 10346:2015	420-520	470-590	17
HX460LAD+Z	HX460LAD+Z	EN 10346:2015	460-560	500-640	15
HX500LAD+Z	HX500LAD+Z	EN 10346:2015	500-620	530-690	13

Continuously Hot Dip Zinc Coated High Yield Strength Dual Phase Steels

Chemical Composition (%)												
NordicSteelGrade	Grade	Standard	C (max.)	Mn (max.)	P (max.)	S (max.)	Si (max.)	Al total	Cr+Mo (max.)	Nb+Ti (max.)	V (max.)	B (max.)
HCT450X	HCT450X	EN 10346:2015	0,14	2,00	0,08	0,015	0,75	0,015-1,0	1,00	0,15	0,20	0,005
HCT490X	HCT490X	EN 10346:2015	0,14	2,00	0,08	0,015	0,75	0,015-1,0	1,00	0,15	0,20	0,005
HCT590X	HCT590X	EN 10346:2015	0,15	2,50	0,04	0,015	0,75	0,015-1,5	1,40	0,15	0,20	0,005

Mechanical Properties							
NordicSteelGrade	Grade	Standard	Re N/mm ²	Rm N/mm ² (min.)	A (%) A80 (min.)	n10-UE (min.)	BH2 N/mm ² (min.)
HCT450X	HCT450X	EN 10346:2015	260-340	450	27	0,16	30
HCT490X	HCT490X	EN 10346:2015	290-380	490	24	0,15	30
HCT590X	HCT590X	EN 10346:2015	330-430	590	20	0,14	30

Continuously Hot Dip Zinc Coated Low Carbon Steel for Cold Forming

Chemical Composition (%)														
NordicSteelGrade	Grade	Standard	C (max.)	Mn (max.)	P (max.)	S (max.)	Al (min.)	Cu (max.)	Ni (max.)	Cr (max.)	Mo (max.)	V (max.)	Nb (max.)	Ti (max.)
CS Type B	CS Type B	ASTM A653M:2015	0,02-0,15	0,60	0,03	0,035	-	0,25	0,20	0,15	0,06	0,008	0,008	0,025
CS Type C	CS Type C	ASTM A653M:2015	0,08	0,60	0,10	0,035	-	0,25	0,20	0,15	0,06	0,008	0,008	0,025
FS Type B	FS Type B	ASTM A653M:2015	0,02-0,10	0,50	0,02	0,03	-	0,25	0,20	0,15	0,06	0,008	0,008	0,025
DDS Type A	DDS Type A	ASTM A653M:2015	0,06	0,50	0,02	0,025	0,01	0,25	0,20	0,15	0,06	0,008	0,008	0,025

Mechanical Properties					
NordicSteelGrade	Grade	Standard	Re N/mm ² (min.)	Rm N/mm ² (min.)	A (%) A50 (min.)
CS Type B	CS Type B	ASTM A653M:2015	205-380	-	20
CS Type C	CS Type C	ASTM A653M:2015	170-410	-	15
FS Type B	FS Type B	ASTM A653M:2015	170-310	-	26
DDS Type A	DDS Type A	ASTM A653M:2015	140-240	-	32

Continuously Hot Dip Zinc Coated Structural Steels

Chemical Composition (%)														
NordicSteelGrade	Grade	Standard	C (max.)	Mn (max.)	P (max.)	S (max.)	Si (max.)	Cu (max.)	Ni (max.)	Cr (max.)	Mo (max.)	V (max.)	Nb (max.)	Ti (max.)
SSGRADE33	SS Gr. 230	ASTM A653M:2015	0,20	1,35	0,10	0,04	-	0,25	0,20	0,15	0,06	0,008	0,008	0,025
SSGRADE50	SS Gr. 340	ASTM A653M:2015	0,25	1,35	0,20	0,04	-	0,25	0,20	0,15	0,06	0,008	0,008	0,025
SSGRADE80	SS Gr. 550	ASTM A653M:2015	0,20	1,35	0,04	0,04	-	0,25	0,20	0,15	0,06	0,008	0,008	0,025

Mechanical Properties					
NordicSteelGrade	Grade	Standard	Re N/mm ² (min.)	Rm N/mm ² (min.)	A (%) A50 (min.)
SSGRADE33	SS Gr. 230	ASTM A653M:2015	230	310	20
SSGRADE50	SS Gr. 340	ASTM A653M:2015	340	450	12
SSGRADE80	SS Gr. 550	ASTM A653M:2015	550	570	-

QUALITY CONTROL

Mechanical Tests

- ✓ Tensile Test
- ✓ Adhesion of Coating Test
- ✓ Surface Roughness Test
- ✓ Hardness Test (Optional)
- ✓ Bending Test

Chemical Analysis

- ✓ Galvanized Coating Weight Test
- ✓ Ladle Elemental Analysis- OES
- ✓ Chromate Analysis

STEEL SERVICE CENTERS



CUT TO LENGTH SHEET

Cut to Length production range for cold rolled coil, galvanized coil and prepainted coil;

Thickness : 0.30 - 6.00 mm
 Width : 350 - 1600 mm
 Length : 500 - 6000 mm

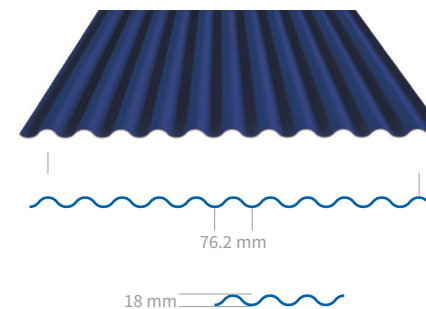
Packaging : It is packed on pallets with paper or steel packaging



ROLL FORMED PREPAINED AND GALVANIZED STEEL SHEET

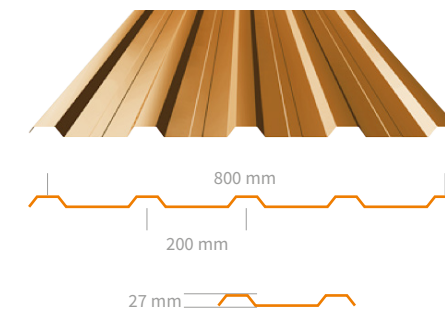
Corrugated Steel Sheet

Thickness : 0,25-0,80 mm
 Width : 875 mm Maks.
 Length : 6000 mm
 Form : 18 / 76,2



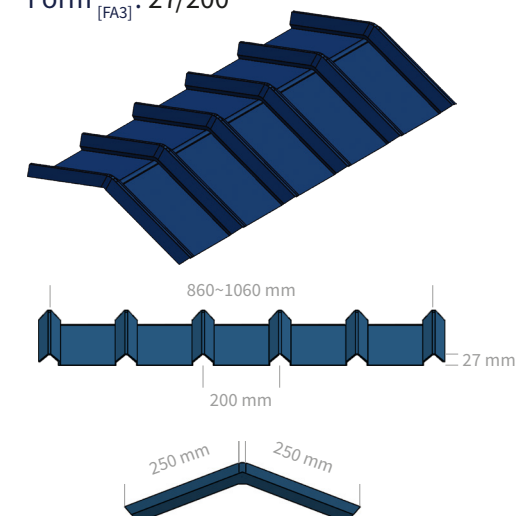
Trapezoidal Steel Sheet

Thickness : 0,25-1,20 mm
 Width : 860 mm ve 1060 mm
 Length : 500mm - 12.000 mm
 Form : 27 / 200



Ridge Steel

Width : 860 mm veya 1060 mm
 Length : 500 mm (250-250) -
 3000 mm (1500+1500)
 Form _[FA3] : 27/200



SLITTED STRIPS

Slitted Strips production range for cold rolled coil, galvanized coil, prepainted galvanized steel coil;

Thickness : 0,30 - 4,00 mm
 Width : 20 - 1600 mm

Packaging : Slitted steel coils are packed vertically or horizontally, with or without pallets.



In addition to its production, NordicSteel performs cut to length, slitting in the Steel Service Centers.