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PRE-LAQUERED
Flat product in galvanised steel (EN 10346) with an organic film coating according to the EN 10169 Standard.

HOT ROLLED

Flat product Black or Pickled and Oiled.



Dimension tolerances

Normal dimensional tolerance ranges are guaranteed in accordance with EN 10151.

Chemical composition

The chemical composition conforms to the product grade reference standards and if specified by the customer, it may be guaranteed for suitability for galvanising (category A, B, or D) or welding.

Supply conditions

If specified by the customer, the skin-pass operation may be performed for products up to 3 mm thick.



Surface protection

To ensure surface protection against oxidation at pickled and oiled, a layer of protective oil is applied. In cases of supply without oil, there is no guarantee against oxidation.

Product weights

Maximum weight: 26 t
Internal diameter pickled and oiled: 610 mm
Internal diameter black: 760 or 610 mm
Maximum external diameter: 2.000 mm

Mechanical characteristics and dimensions for coil supply

	ReL Rm (MPa) (MPa)	A80 min (%)							
Grade			Thickness (mm)				Thickness (mm)	Width (mm)	
			≤1,5	>1,5 ≤2	> 2 ≤2,5	> 2,5 < 3	≥3 (L0=5,65 √S0)	(IIIII)	
	Low carbon forming steel (EN 10111)								
DD11	t < 2 mm 170 - 360 t ≥ 2 mm 170 - 340	440 máx.	22	23	2	4	28	1,4 - 6,0	800 – 1550
	Structural steel (EN 10025-2)								
S235JR	235 min	360 - 510	18	19	20	21	26	1,4 - 6,0	
S275JR	275 min	t <3 430 - 580 t ≥ 3 410 - 560	16	17	18	19	23		800 - 1550
S355JR	355 min	t <3 510 - 680 t≥3 470 - 630	15	16	17	18	22	2,0 - 6,0	
High yield strength steels (EN 10149-2)									
S315 MC	315 min	390 – 510	20 24			24	20 (2	000 4550	
\$355 MC	355 min	430 - 550		19	19 23			2,0 - 6,0	800 – 1550

COLD ROLLED

Flat product in cold Rolled material with batch annealing.



Mechanical characteristics and dimensions for coil supply

Mechanical characteristics in accordance with EN10130

Grade	Re máx. (MPa)	Rm (MPa)	A80 min (%)	r90 min	n90 min	Thickness (mm)	Width (mm)
	Low carbon forming steel (EN 10130)						
DC01	280	270 - 410	28	-	-		
DC03	240	270 - 370	34	1,3	-	0,40 - 3,00	800 - 1550
DC04	210	270 - 350	38	1,6	0,180		

Dimension tolerances

Normal dimensional tolerance ranges are guaranteed in accordance with EN 10131.

Surface appearance

Surface quality type "A" in accordance with standard EN 10130.



Surface finishes

It conforms to standard EN 10130 in relation to the following surface finish conditions.

Surface finishes		Roughness (max.: 0,80 mm)	
Normal	m	0,6 µm < Ra ≤ 1,9 µm	
Semi-bright	g	Ra ≤ 0,9 µm	

Surface protection

To ensure surface protection against oxidation, a layer of protective oil is applied. In cases of supply without oil, there is no guarantee against oxidation.

Product weights

Maximum weight; 26 t Internal diameter: 610 mm

Maximum external diameter: 2.000 mm

GALVANIZED

Flat product galvanized by continuously immersion in a zinc bath.



Mechanical characteristics and dimensions for coil supply

Mechanical characteristics in accordance with EN10346.

Grade	Re max. (MPa)	Rm (MPa)	A80 min (%)	Thickness (mm)	Width (mm)	
	Low carbon forming steel					
DX51D	-	270 - 500	22	0,40 - 2,00	800 – 1550	
DX52D	140 - 300	270 - 420	26	2,01 – 2,50	800 – 1300	
DX53D	140 - 260	270 - 380	30	2,51 – 3,00	800 - 1000	
	Structural steel					
S220GD	220 min	300 min	20	0,40 - 2,00	800 - 1550	
S250GD	250 min	330 min	19	2,01 - 2,50	800 – 1300	
S280GD	280 min	360 min	18	2,51 – 3,00	800 - 1000	
\$320GD	320 min	390 min	17	0,40 - 0,60	800 - 1300	
\$350GD	350 min	420 min	16	0,61 - 2,00 2,01 - 3,00	800 - 1300 800 - 1000	

Dimension tolerances

Normal dimensional tolerance ranges are guaranteed in accordance with EN 10143.

Surface finishes

It conforms to standard EN 10346 in relation to the following surface finish conditions:

Designation	n EN 10346	Characteristics	
Types of finishes	Minimum star rating (M)	Star rating resulting from adequate control of the solidification	
T ((Ordinary finish (A)	Surface obtained directly after the immersion process	
Types of surfaces	Improved finish (B)	Surface obtained by skin-pass	

Types of coating

	Total minimum coating on both sides (g/m2)			
Type of coating	Triple sample testing	Single sample testing		
In accordance with EN 10346				
Z100	100	85		
Z140	140	120		
Z200	200	170		
Z225	225	195		
Z275	275	235		
Z350 (*)	350	300		
Other possible coatings				
Z120	120	102		
Z150	150	128		
Z180	180	153		
Z250	250	213		

^(*) Available only for W \leq 1250 mm and t \leq 1 mm

GALVANIZED

Flat product galvanized by continuously immersion in a zinc bath.



Surface protection

Trivalent chrome chemical treatment surface protection is applied (colourless appearance). Oil may also be applied.

Protección superficial rugosidad (tope: 0,80 mm)				
Chemical passivation (trivalent chromium)	С			
Oiled	0			
Chemical passivation and oiled	СО			

Product weights

Maximum weight; 25 t
Internal diameter: 610 mm

Maximum external diameter: 2.000 mm





PRE-LAQUERED

Flat product in galvanised steel (EN 10346) with an organic film coating according to the EN 10169 Standard.



Mechanical characteristics and dimensions for coil supply

Mechanical characteristics according to the EN10346 Standard.

Grade	Re max. (MPa)	Rm (MPa)	A80 min (%)	Thickness (mm)	Width (mm)	
	Acero para conformación en frío					
DX51D	-	270 - 500	22			
DX52D	140 - 300	270 - 420	26	0,35 - 1,5	800 - 1500	
DX53D	140 - 260	270 - 380	30			
	Acero estructural					
S220GD	220 min	300 min	20			
S250GD	250 min	330 min	19	0,35 - 1,5	800 - 1500	
S280GD	280 min	360 min	18			
\$320GD	320 min	390 min	17	0,35 - 1,5	800 – 1500	
S350GD	350 min	420 min	16			

Coating

The structure of the paint coating is detailed in the following table:

	Thickness (um)	Material
Top Coat	20	High-solids polyester or aliphatic cycle (HDP)
Primer	5	High-solid polyester (HDP)
Back	7	Polyester + Epoxy (SP-EP)

Colour	Gloss 60°	AE
Pyrenean White	33	0,7
Ral 9010	30	0,7
Ral 9006	24	1,2
Tile Red	35	1,0
Navarra Green	35	1,2
RAL 3009	35	1,2

Other coatings (colour and thickness) can be made on request.

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PRE-LAQUERED

Flat product in galvanised steel (EN 10346) with an organic film coating according to the EN 10169 Standard.

Colour

Top coat colours available:

Pyrenean White Tile Red Navarra Green RAL 3009 RAL 9006 RAL 9010

Back Colour: RAL 7032

Other characteristics

Impact resistance test: ≥ 18 J

Coating characteristics tested according to the EN 13523 series: Bending resistance test (Adhesion): s $2\,T$ Bending resistance test (Cracking): $\leq 2\,T$













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