

Hot-dip galvanized coils for construction according to EN 10346

Product description

Continuously galvanized structural coils of S220GD - S350GD steel grades are products that have both guaranteed strength characteristics and corrosion resistance due to zinc coating. These products are used for steel construction and profiles. S220GD - S350GD coated steel flat products are produced according to EN 10346. The density of zinc coating varies depending on consumers' requirements.

Application

S220GD - S350GD galvanized products are used for manufacturing bent profiles (z, c, sigma, etc.) for lightweight thin-walled steel structures. These profiles are applied for roof and wall girders for the construction and modernization of manufacturing, trading and warehouse facilities. In addition, the profiles for these buildings may be used as primary load-bearing structures.

The advantages of S220GD - S350GD steel profiles are low metal consumption thanks to the use of high-strength rolled products, high corrosion and weather resistance, high seismic resistance of buildings and the opportunity to implement diverse architectural solutions.

Available dimensions

S220GD - S350GD steel products are produced in coils 0.4-2.0 mm thick and 950-1250 mm wide. Tolerances on dimensions and shape are according to EN 10143.

The inner diameter of the coil is 600±20 mm. Coil weight is up to 15 tons.

Steel grade		Dimensions, thickness x width, mm
Name	Number	
S220GD	1.0241	0.40-2.00 x 950-1250
S250GD	1.0242	
S280GD	1.0244	
S320GD	1.0250	0.70-2.00 x 950-1250
S350GD	1.0529	

Notes: Dimensions and technical requirements of flat products should be agreed during the conclusion of contracts. Galvanized sheet (cut from coils) is available by agreement.

Chemical composition according to EN 10346 (ladle analysis)

Steel grade	Coating type symbol	Content of element, max. %				
		C	Si	Mn	P	S
S220GD, S250GD, S280GD, S320GD, S350GD	+Z	0,20	0,60	1,70	0,10	0,045

Mechanical properties of galvanized products

Steel grade	Proof strength, $R_{p0,2}$, MPa, min.	Tensile strength, R_m , MPa, min.	Elongation, A_{80} , %, min.
S220GD	220	300	20
S250GD	250	330	19
S280GD	280	360	18
S320GD	320	390	17
S350GD	350	420	16

Weight of zinc coating

Coating designation	Minimum total coating mass (triple spot test), both surface, g/m ²	Coating thickness, μm
Z100	100	5-12
Z140	140	7-15
Z200	200	10-20
Z225	225	11-22
Z275	275	13-27

Notes. Other coating classes should be agreed during the conclusion of contracts. Requirements for forming and weldability of finished products should be taken into consideration when ordering the weight of zinc coating.

Surface quality

Products can be delivered with a normal spangle (N) or minimized spangle (M)

Surface quality –as coated surface (A)

Surface treatment/protection: chemical passivation (C)

