### **GALVANNEALED (+ZF)**

# Structural steel

#### **Hot-coated**

Flat-rolled carbon steel products can be coated with special metals or mixtures of metals, to completely avoid or postpone as much as possible the oxidation process of the steel.

These coatings may vary in type and thickness depending on the customer's needs and the impact that a given environmental context may have on the material.

Albasider is able to supply its customers with sheets, strips and strips of hot-coated materials, with thicknesses between 0.4 and 3 mm. Albasider also provides its customers with a wide range of coating types.

	Thickness	Width	
Plates	0.40 - 3	≤2000	
Tapes	0.40 - 3	≤2000	
Straps	0.40 - 3	da 180 a 2000	

#### > Galvannealed coating (+ZF)

The galvannealed coating consists of a special zinc-iron mixture. Iron accounts for between 8 and 12%, the remainder being zinc.

Compared to a conventional galvannealed coating, this coating gives better weldability and better suitability for painting.

It is the ideal coating for spot welding and high-end painting applications.

Surface Finish Finish Appearance		Surface Treatment		
		С	Passivated	
	Α	Standard	0	Oiled
	В	Enhanced	СО	Passivated + Oiled

#### Coating grades (+ZF)

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ZF	ZF 80	ZF 100	ZF 120	ZF 140
Thickness (um)	6/6	7/7	8/8	10/10



# Structural steel

The category of coated structural steels allows users to have excellent performance in terms of strength, with a high minimum yield strength index.

In addition to these mechanical properties, the chosen coating allows protection from oxidation even after the material has been processed.

The higher the grade chosen, S220GD → S550GD, the greater the material's propensity for mechanical resistance.

## Main fields of application:

CONSTRUCTION

CARS AND TRANSPORT

CIVIL AND INDUSTRIAL SUPPLIES

MECHANICAL CARPENTRY

**PROFILES** 

#### **Mechanical properties**

Thickness (mm)	EN 10346	S220GD+ZF	S250GD+ZF	S280GD+ZF	S320GD+ZF
	Re (Mpa)	≥220	≥ 250	≥280	≥320
0.40 - 0.50	Rm (Mpa)	≥300	≥330	≥360	≥390
	A 80 (%)	≥ 16	≥ 15	≥ 14	≥13
	Re (Mpa)	≥220	≥ 250	≥280	≥320
0.51 - 0.70	Rm (Mpa)	≥ 300	≥330	≥360	≥390
	A 80 (%)	≥ 18	≥ 17	≥ 16	≥ 15
	Re (Mpa)	≥220	≥ 250	≥280	≥320
0.71 - 3	Rm (Mpa)	≥300	≥330	≥ 360	≥390
	A 80 (%)	≥20	≥ 19	≥ 18	≥ 17

Thickness (mm)	S350GD+ZF	S390GD+ZF	S420GD+ZF	S450GD+ZF	S550GD+ZF
	≥350	≥390	≥ 420	≥ 450	≥ 550
0.40 - 0.50	≥ 420	≥460	≥480	≥ 510	≥ 560
	≥ 12	≥ 12	≥ 11	≥ 10	-
	≥ 350	≥390	≥ 420	≥ 450	≥ 550
0.51 - 0.70	≥ 420	≥ 460	≥ 480	≥ 510	≥ 560
	≥ 14	≥ 14	≥ 13	≥ 12	-
0.71 - 3	≥ 350	≥ 390	≥ 420	≥ 450	≥ 550
	≥ 420	≥ 460	≥ 480	≥ 510	≥ 560
	≥ 16	≥16	≥ 15	≥ 14	-

Please note: Tests carried out transversely to the rolling direction.

