ZINCATO (+Z)

# Structural steels

#### **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

#### > Galvanised (+Z)

The galvanised coating consists of a high-temperature bath of molten zinc, continuously applied to the steel substrate by means of a laminate immersion process.

This type of coating provides excellent corrosion resistance while simultaneously ensuring formability of the material and weldability.

Surface Finish		Surface Treatment			
Finish	Appearance	С	Passivated		
Α	Standard	0	Oiled		
		S	Anti fingerprint		

#### Coating grades (+Z)

Z	Z 80	Z 100	Z 140	Z 200	Z 225	Z 275	Z 350	Z 450	Z 600	Z 725
Thickness (µm)	5/5	7/7	10/10	14/14	16/16	20/20	25/25	32/32	42/42	51/51



## Structural steels

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

AUTOMOTIVE AND TRANSPORT

CIVIL AND INDUSTRIAL SUPPLIES

MECHANICAL CARPENTRY
PROFILES

#### **Mechanical properties**

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

Thickness (mm)	S350GD+Z	S390GD+Z	S420GD+Z	S450GD+Z	S550GD+Z
0.40- 0.50	≥350	≥390	≥ 420	≥ 450	≥ 550
	≥ 420	≥ 460	≥ 480	≥ 510	≥ 560
	≥ 12	≥ 12	≥ 11	≥ 10	-
0.51 - 0.70	≥ 350	≥390	≥ 420	≥ 450	≥ 550
	≥ 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.

