**GALVANNEALED (+ZF)** 

# High-strength 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

#### > 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		Surface Treatment	
Finish	Appearance	С	Passivated
Α	Standard	0	Oiled
В	Enhanced	CO	Passivated + Oiled

#### Coating grades (+ZF)

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



## High-strength steels

Also called micro-alloy steels, in addition to a low carbon content they have a high purity internal molecular structure.

Due to their low carbon content, they exhibit improved weldability.

The ductility, fatigue resistance and formability of these steels offer high performance at a low weight.

### Principali campi di applicazione:

CONSTRUCTION AND BUILDING

AGRICULTURAL MACHINERY

CARPENTRY

**PROFILES** 

AUTOMOTIVE AND TRANSPORT

#### **Mechanical properties**

Thickness (mm)	EN 10346	HX260LAD+ZF	HX300LAD+ZF	HX340LAD+ZF
0.40 - 0.50	Re (Mpa)	260 - 330	300 - 380	340 - 420
	Rm (Mpa)	350 - 430	380 - 480	410 - 510
	A 80 (%)	≥20	≥ 17	≥ 15
0.51 - 0.70	Re (Mpa)	260 - 330	300 - 380	340 - 420
	Rm (Mpa)	350 - 430	380 - 480	410 - 510
	A 80 (%)	≥22	≥ 19	≥ 17
0.71 - 3	Re (Mpa)	260 - 330	300 - 380	340 - 420
	Rm (Mpa)	350 - 430	380 - 480	410 - 510
	A 80 (%)	≥ 24	≥ 21	≥ 19

Thickness (mm)	HX380LAD+ZF	HX420LAD+ZF	HX460LAD+ZF	HX500LAD+ZF
0.40 - 0.50	380 - 480	420 - 520	460 - 560	500 - 620
	440 - 560	470 - 590	500 - 640	530 - 690
	≥13	≥ 11	≥9	≥7
0.51 - 0.70	380 - 480	420 - 520	460 - 560	500 - 620
	440 - 560	470 - 590	500 - 640	530 - 690
	≥ 15	≥13	≥ 11	≥9
0.71 - 3	380 - 480	420 - 520	460 - 560	500 - 620
	440 - 560	470 - 590	500 - 640	530 - 690
	≥ 17	≥ 15	≥13	≥ 11

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

