02

## ALUMINISED (+AS)

# 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.

### > ALUMINISED (+AS)

Aluminised coating consists of a special aluminium-silicon mixture. Silicon between 8% and 11% and the remainder aluminium.

This type of coating is particularly suitable for resisting corrosion even at very high temperatures of up to 650 °C.

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

Surface Finish		Surface Treatment		
Finish	Appearance	С	Passivated	
А	Standard	0	Oiled	
В	Enhanced	со	Passivated + Oiled	
		S	Anti fingerprint	

#### Coating grades (+AS)

AS	AS 100	AS 120	AS 150	AS 200
Thickness (µm)	17/17	20/20	25/25	33/33



# 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.



# Main fields of application:

CONSTRUCTION AND BUILDING

AGRICULTURAL MACHINERY

CARPENTRY

PROFILES

AUTOMOTIVE AND TRANSPORT

Thickness (mm)	EN 10346	HX260LAD+AS	HX300LAD+AS	HX340LAD+AS
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

## **Mechanical properties**

Thickness (mm)	HX380LAD+AS	HX420LAD+AS	HX460LAD+AS	HX500LAD+AS
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.

