**ALUMINISED (+AS)** 

# Cold-forming and drawing 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

#### > 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.

Surface Finis	sh	Surface Treatment		
Finish	Appearance	С	Passivated	
Α	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



## Cold forming and drawing steels

The coated drawing steels category provides users with excellent performance in terms of deep drawing, bendability and formability.

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

The higher the grade chosen, DX51D → DX57D, the greater the material's propensity for deep drawing.

### Main fields of application:

**HOUSEHOLD APPLIANCES** 

AUTOMOTIVE AND TRANSPORT

INDUSTRY

CIVIL AND INDUSTRIAL SUPPLIES

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AIR CONDITIONING

PIPES

**PROFILES** 

#### Caratteristiche meccaniche

Spessore (mm)	EN 10346	DX51D+AS	DX52D+AS	DX53D+AS	DX54D+AS	DX55D+AS	DX56D+AS	DX57D+AS
	Re (Mpa)	-	140 - 360*	140 - 260	120 - 220	140 - 240	120 - 180	120 - 170
	Rm (Mpa)	270 - 500	270 - 420	270 - 380	260 - 350	270 - 370	260 - 350	260 - 350
0.40 - 0.50	A 80 (%)	≥ 18	≥22	≥ 26	≥ 30	≥ 26	≥ 35	≥ 37
	r 90	-	-	-	≥1	-	≥ 1.30	≥ 1.50
	n 90	-	-	-	≥ 0.15	-	≥ 0.17	≥ 0.18
	Re (Mpa)	-	140 - 360*	140 - 260	120 - 220	140 - 240	120 - 180	120 - 170
	Rm (Mpa)	270 - 500	270 - 420	270 - 380	260 - 350	270 - 370	260 - 350	260 - 350
0.51 - 0.70	A 80 (%)	≥ 20	≥ 24	≥28	≥32	≥28	≥ 37	≥ 39
	r 90	-	-	-	≥ 1.20	-	≥ 1.50	≥ 1.70
	n 90	-	-	-	≥ 0.17	-	≥ 0.19	≥ 0.20
	Re (Mpa)	-	140 - 360*	140 - 260	120 - 220	140 - 240	120 - 180	120 - 170
	Rm (Mpa)	270 - 500	270 - 420	270 - 380	260 - 350	270 - 370	260 - 350	260 - 350
0.71 - 1.49	A 80 (%)	≥ 22	≥ 26	≥ 30	≥ 34	≥ 30	≥ 39	≥ 41
	r 90	-	-	-	≥ 1.40	-	≥ 1.70	≥ 1.90
	n 90	-	-	-	≥ 0.18	-	≥ 0.20	≥ 0.21
	Re (Mpa)	-	140 - 360*	140 - 260	120 - 220	140 - 240	120 - 180	120 - 170
	Rm (Mpa)	270 - 500	270 - 420	270 - 380	260 - 350	270 - 370	260 - 350	260 - 350
1.50 - 1.99	A 80 (%)	≥ 22	≥ 26	≥ 30	≥ 34	≥ 30	≥ 39	≥ 41
	r 90	-	-	-	≥ 1.20	-	≥ 1.50	≥ 1.70
	n 90	-	-	-	≥ 0.18	-	≥ 0.20	≥ 0.21
	Re (Mpa)	-	140 - 360*	140 - 260	120 - 220	140 - 240	120 - 180	120 - 170
	Rm (Mpa)	270 - 500	270 - 420	270 - 380	260 - 350	270 - 370	260 - 350	260 - 350
2-3	A 80 (%)	≥ 22	≥ 26	≥ 30	≥ 34	≥ 30	≥ 39	≥ 41
	r 90	-	-	-	≥1	-	≥ 1.30	≥ 1.50
	n 90	-	-	-	≥ 0.18	-	≥ 0.20	≥ 0.21

Please note: Tests carried out transversely to the rolling direction. \*Parameter valid for surface appearance A. Surface appearance B has a Re (Mpa) = 140 - 300.

