03

Cold forming and drawing steels

Electrogalvanized

Following cold rolling, the rolled product can be coated with a layer of zinc on one or both sides by means of an electrostatic deposition process. The coating by this method is thus uniform and with a constant thickness.

The electrogalvanising process allows the steel substrate to be uniformly protected from atmospheric corrosion and to have an excellent weldability.

Albasider can supply its customers with electro-galvanised plates, tapes and straps in thicknesses between 0.4 and 3 mm.

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

Surface Finish	
Finish	Appearance
A	Standard
B	Enhanced

Surface Treatment	
P	Phosphated
PC	Phosphated + Passivated
C	Passivated
PCO	Phosphated + Passivated + Oiled
CO	Passivated + Oiled
PO	Phosphated + Oiled
O	Oiled
S	Anti fingerprint
U	Untreated

Coating grades (+ZE)

ZE	ZE 25	ZE 50	ZE 75	ZE 100
Thickness (µm)	2.5/2.5	5/5	7.5/7.5	10/10

Please note: differentiated thickness can be supplied on request.

Cold-forming and drawing steels

These steels are used for deep and very deep drawing, with excellent formability.

Due to their low carbon content, they have a good aptitude for welding.

The higher the grade chosen, DC01 ⟶ DC06, the greater the material's propensity for deep drawing.

Main fields of application:

- HOUSEHOLD APPLIANCES
- INDUSTRY
- ELECTRONICS
- CIVIL AND INDUSTRIAL SUPPLIES

Mechanical properties

Thickness (mm)	**EN 10152**	**DC01+ZE**	**DC03+ZE**	**DC04+ZE**	**DC05+ZE**	**DC06+ZE**
0.40 - 0.50	Re (Mpa)	140 - 320	140 - 280	140 - 260	140 - 240	130 - 220
	Rm (Mpa)	270 - 410	270 - 370	270 - 350	270 - 330	270 - 350
	A 80 (%)	≥ 24	≥ 30	≥ 33	≥ 35	≥ 37
	r 90	-	-	-	-	-
	n 90	-	-	-	-	-
0.51 - 0.70	Re (Mpa)	140 - 300	140 - 260	140 - 240	140 - 220	130 - 200
	Rm (Mpa)	270 - 410	270 - 370	270 - 350	270 - 330	270 - 350
	A 80 (%)	≥ 26	≥ 32	≥ 35	≥ 37	≥ 39
	r 90	-	≥ 1.30	≥ 1.60	≥ 1.90	≥ 2.10
	n 90	-	-	≥ 0.17	≥ 0.19	≥ 0.21
0.71 - 2	Re (Mpa)	140 - 280	140 - 240	140 - 220	140 - 200	130 - 180
	Rm (Mpa)	270 - 410	270 - 370	270 - 350	270 - 330	270 - 350
	A 80 (%)	≥ 28	≥ 34	≥ 37	≥ 39	≥ 41
	r 90	-	≥ 1.30	≥ 1.60	≥ 1.90	≥ 2.10
	n 90	-	-	≥ 0.17	≥ 0.19	≥ 0.21
2.01 - 3	Re (Mpa)	140 - 280	140 - 240	140 - 220	140 - 200	130 - 180
	Rm (Mpa)	270 - 410	270 - 370	270 - 350	270 - 330	270 - 350
	A 80 (%)	≥ 28	≥ 34	≥ 37	≥ 39	≥ 41
	r 90	-	≥ 1.10	≥ 1.40	≥ 1.70	≥ 1.90
	n 90	-	-	≥ 0.17	≥ 0.19	≥ 0.21

Legend

Re (MPa) = Yield strength (inelastic index); **Rm (Mpa)**= Tensile strength;
A 80 (%)= Elongation for thickness <3 mm; **r 90**= anisotropy; **n 90**= work hardening.

Please note:

Tests carried out transversely to the rolling direction.

Albasider
From steel to you