

Ecorsteel

Antifingerprint organic coated steel

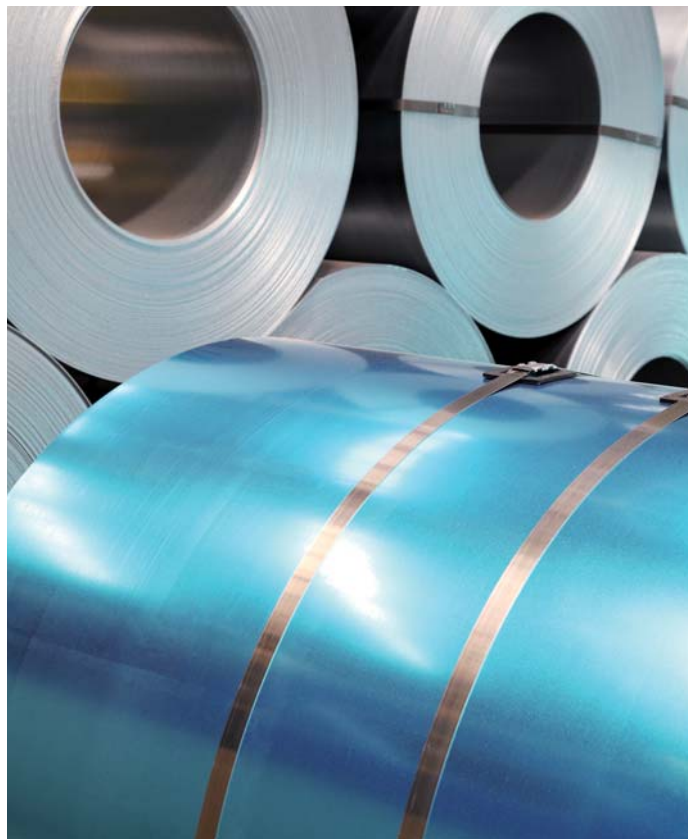
Ecorsteel is an innovative steel product with a **permanent, ecological and antioxidant** organic coating. Its peculiar **anti-fingerprint** properties give new opportunities to manufacturers in the sector of building and construction (structures, details), household appliances, design and furniture, thanks to the combination of **aesthetic values** and a high **forming and drawing capability**. Special finishing is available in several light colour shades.

Main features

- Anti-fingerprint transparent or colour hued protective coating on hot dip galvanized steel
- High formability and deep drawing capability
- Colour coating directly possible without pre-treatment
- Protection from oxidation during transport and storage
- Over two times higher resistance compared to Cr3+ treated products

Applications

- Building sector: roofing, profiles, structural elements, sectional doors, shutters
- Household appliances: washing and drying machines, dish-washers, hi-fi components chassis
- Other industries: metal switchboards, metal furniture, metal hoods and ducts, metal shelving



Dimensions

Thickness	from 0,25 to 4 mm
Min. width	upon request
Max width	1500 mm

Steel grade feasibility

MANUFACTURING STANDARD	PRODUCT DESIGNATION	GRADE
EN 10346	Steel flat products for cold forming	DX 51D, DX52D, DX53D, DX54D, DX56D (other grades upon request)
EN 10346	Structural steels	S220GD, S250GD, S250GD-DM*, S280GD, S280GD-DM*, S320GD, S350GD
Marcegaglia standard	Structural steels for construction	S390GD (STP 0074) S450GD (STP 0111)
EN 10346	High yield strength steels for cold forming	HX260LAD, HX300LAD, HX340LAD, HX380LAD, HX420LAD, HX220YD, HX260YD
EN 10346	Dual phase steels	DP600, DP800, DP1000 (other grades upon request)
ASTM A653	Hot dip galvanized steel	
Upon request: supply of grades not included in the above mentioned standards or grades according to customers' standards, including major automotive manufacturers.		

(*) According to Italian D.M. 14.01.2008 "Technical norms for construction"

Technical characteristics

PROPERTY	TEST/CHARACTERISTIC	GALVANIZED HDG (Cr3+)	ECORSTEEL
surface protection	salt spray test (1)	Max 72 hours with white oxidation <5%	> 150 hours 0% white oxidation
	constant humidity test (2)	Max 168 hours with white oxidation <5%	> 500 hours (21 cycles)
formability	coefficient of friction	$\mu d < 0,50$	$\mu d < 0,15$
weldability	weldability range	$\Delta \lambda > 1 \text{ kA}$	$\Delta \lambda > 1 \text{ kA}$
surface appearance	antifingerprinting	N/A	$\Delta E > 2$
electrical conductivity		$R \approx 18 \Omega \text{ mm}^2$	$R < 50 \Omega \text{ cm}^2$
max. temperature (suggested)		N/A	200 °C
de-greasability	loss of organic coating	0%	< 10%
paintability (3)	adhesion in dry conditions		0 (4)
	adhesion over wet paint	No paintability without pre-treatment	0-2 (4)
	delamination strength		< 3 mm
	impact test		0 adhesion loss up to 10 J

(1) Salt spray resistance according to ISO 7253/DIN 50021

(2) Humidity chamber resistance according to DIN 50017

(3) Approximate values

(4) Paint adhesion coefficient according to ISO 2409

Hot dip galvanization

COATING	Coating is expressed in weight of zinc (g) over one square meter of product (total of two sides)	Z50 up to Z800 g/m ²
SURFACE FINISHES	Standard finish for industrial use	A (normal appearance)
	Skinpassed surface	B (improved surface)
	Smooth cylinder skinpass	B1 (smooth)
	Double smooth cylinder skinpass	B2 (bright)
	Highest standard of finish	C (superior)
SURFACE APPEARANCE	Normal spangle	N
	Reduced spangle	M

Notes:

General Supply Conditions apply; material supplied according to EN norms in force as specified on order placement

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