DC03 Cold Rolled Steel

OMEGA STEEL CO.
Istanbul · Dilovası plant

1.0347 · DC03 is the drawing grade of EN 10130 cold-rolled sheet: yield ≤ 240 MPa, tensile 270–370 MPa, elongation ≥ 34 %, lower carbon (≤ 0.10 %) and phosphorus than DC01, non-ageing for 6 months, so pressed panels, shallow drawn parts and embossed surfaces form without stretcher strains or splits. Material number 1.0347, old name St 13. Coil and sheet 0.50–3.0 mm, matt or bright, to order from Turkish mills.

1.0347 | Yield ≤ 240 MPa | A80 ≥ 34 % | Non-ageing 6 months | 0.50–3.0 mm to order

DC03 is DC01 with the press shop in mind: a little softer, a lot more consistent, and guaranteed free of the Lüders lines that spoil a painted panel after a month in the warehouse. If your DC01 parts show flow marks or crack at a drawn corner, DC03 is the next order.

CHEMICAL COMPOSITION

Element	C	Mn	P	S
max. % (ladle)	0.10	0.45	0.035	0.035

Typical heat: C 0.03–0.05, Mn 0.20, Al 0.03–0.05 (killed).

MECHANICAL PROPERTIES AND FORMABILITY

Property	Requirement	Typical value	Note
Yield strength Rp0.2	≤ 240 MPa	170–210 MPa	
Tensile strength Rm	270–370 MPa	290–330 MPa	
Elongation A80	≥ 34 %	36–42 %	
r90	not specified	≈ 1.3	
n90	not specified	≈ 0.18	
Ageing	non-ageing 6 months	guaranteed	

EQUIVALENT GRADES

System	Grade	Note
DIN 1623 (old)	St 13	historic German
EN 10130 (1991)	Fe P03	previous edition
JIS G3141	SPCD	
ASTM A1008	DS Type B	
GB/T 5213	DC03	

WHICH SURFACE AND OILING A DRAWING GRADE NEEDS

Code	Meaning	Ra (µm)	Typical use
A	normal surface — minor defects (pores, scratches, slight marks) allowed	—	general fabrication, hidden parts
B	best surface — the better side free of defects that impair a uniform paint finish	—	visible painted or plated parts
b (bright)	smooth roll finish	≤ 0.4	chrome plating, decorative
g (semi-bright)	standard finish	0.4–0.9 (typ. 0.6–1.9)	painting, powder coating
m (matt)	shot-blasted rolls	0.6–1.9	deep drawing, paint adhesion
r (rough)	heavy texture	> 1.6	special
oiling	light rust-preventive oil both sides (standard); dry or heavy oil on request	—	

For a drawing grade the useful line is the roughness, not the code: a matt (m) finish carries lubricant into the die, while a bright (b) roll finish galls. Order "DC03 A m, oiled" unless the part is plated afterwards.

STANDARDS

EN 10130:2006 — DC03, 1.0347 · EN 10131 — tolerances · EN 10204 3.1 · Former DIN 1623 St 13 / EN 10130 Fe P03

Updated 22 September 2026 · figures are nominal; the mill certificate governs