DC06 Cold Rolled Steel

OMEGA STEEL CO.
Istanbul · Dilovası plant

1.0873 · DC06 is the top grade of EN 10130: an interstitial-free (Ti/Nb-stabilised, C ≤ 0.02 %) cold-rolled steel with yield ≤ 180 MPa, tensile 270–350 MPa, elongation ≥ 38 %, guaranteed r90 ≥ 2.1 and n90 ≥ 0.22, and complete freedom from strain ageing. Material number 1.0873. It is the automotive super-deep-drawing sheet for the most complex panels and the safest choice for parts that must never show stretcher strains. Coil and sheet 0.50–2.0 mm, imported to order.

1.0873 | IF steel, C ≤ 0.02 % | r90 ≥ 2.1 · n90 ≥ 0.22 | No strain ageing | 0.50–2.0 mm to order

DC06 is the end of the drawing scale: a steel with almost no carbon or nitrogen left in solution, so it cannot age, cannot show Lüders lines and draws deeper than any other plain carbon sheet. Car makers specify it for the panels that fail in everything else; we order it by heat from EU and Turkish lines for customers who need that margin.

CHEMICAL COMPOSITION

Element	C	Mn	P	S	Ti
max. % (ladle)	0.02	0.25	0.020	0.020	0.30

Typical IF heat: C 0.002–0.005, N ≤ 0.004, Ti 0.05–0.08 (or Nb 0.02), Mn 0.10.

MECHANICAL PROPERTIES AND DEEP-DRAWING INDICES

Property	Requirement	Typical value	Note
Yield strength Rp0.2	≤ 180 MPa	120–160 MPa	
Tensile strength Rm	270–350 MPa	280–320 MPa	
Elongation A80	≥ 38 %	42–50 %	
r90	≥ 2.1	2.3–2.6	guaranteed
n90	≥ 0.22	0.23–0.26	guaranteed
Ageing	none (IF)	none	

EQUIVALENT GRADES

System	Grade	Note
DIN 1623 (old)	—	historic German
EN 10130 (1991)	Fe P06	previous edition
JIS G3141	SPCG	
ASTM A1008	EDDS (IF)	
GB/T 5213	DC06	

SURFACE AND OILING FOR AN INTERSTITIAL-FREE GRADE

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	—	

IF steel is bought for its forming limit, so specify m finish, light oil and surface A unless the panel is visible; a bright finish on DC06 is a plating requirement, not a drawing one.

STANDARDS

EN 10130:2006 — DC06, 1.0873 · EN 10131 — tolerances · EN 10204 3.1 · Former EN 10130 Fe P06

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