STEEL GRADE DATASHEET · ÇELIK KALITESI FÖYÜ

30CrNiMo8

Ni-Cr-Mo Steel for Quenching and Tempering (High Hardenability)

W.-Nr. **1.6580** | EN 10083-3

Delivery **+A, +QT** | Density **7.85 g/cm³**

CHEMICAL COMPOSITION

ELEMENT	WEIGHT %
C	0.26–0.34
Si	≤ 0.40
Mn	0.50–0.80
P	≤ 0.025
S	≤ 0.035
Cr	1.80–2.20
Mo	0.30–0.50
Ni	1.80–2.20

MECHANICAL PROPERTIES (+QT)

SECTION (MM)	R_{EH} MIN MPA	R_M MPA	A MIN %
d ≤ 16	1050	1250–1450	9
16 < d ≤ 40	1050	1250–1450	9
40 < d ≤ 100	900	1100–1300	10
100 < d ≤ 160	800	1000–1200	11
160 < d ≤ 250	700	900–1100	12

Hardness Note: +QT: Rm 900–1450 MPa ≈ 265–425 HB · HB values are an approximate conversion per EN ISO 18265; EN 10083-3 specifies strength, not hardness, for +QT · +A (soft annealed) for machining.

INTERNATIONAL EQUIVALENTS

EN	30CrNiMo8
W.-Nr. (DIN)	1.6580
AFNOR (old)	≈ 30CND8

TYPICAL APPLICATIONS

- Heavily loaded drive and transmission shafts
- Large-section gears and pinions
- Heavy-machinery forgings (crank and connecting parts)
- Large-diameter high-strength bolts and studs
- Mining and construction equipment components
- Couplings and torsion-loaded parts

Values are given per the relevant standard and are for information only; they do not replace the order specification. They may vary with section size, delivery condition and heat treatment. Binding values are those of the order confirmation and inspection document (EN 10204 3.1).

Quotation and stock
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