

42CrMo4

Chrome-Molybdenum Q&T Steel

W.-Nr. 1.7225

AISI/SAE 4140

EN 10083-3

Delivery +A, +QT

Density 7.85 g/cm³

CHEMICAL COMPOSITION

ELEMENT	WEIGHT %
C	0.38–0.45
Si	≤ 0.40
Mn	0.60–0.90
P	≤ 0.025
S	≤ 0.035
Cr	0.90–1.20
Mo	0.15–0.30

MECHANICAL PROPERTIES (+QT)

SECTION (MM)	R _{EH} MIN MPA	R _M MPA	A MIN %
d ≤ 16	900	1100–1300	10
16 < d ≤ 40	750	1000–1200	11
40 < d ≤ 100	650	900–1100	12
100 < d ≤ 160	550	800–950	13
160 < d ≤ 250	500	750–900	14

INTERNATIONAL EQUIVALENTS

EN	42CrMo4	JIS	SCM440
W.-Nr. (DIN)	1.7225	GOST	≈ 38XM (38KhM)
AISI/SAE	4140	BS 970 (UK)	708M40 (EN19)
ASTM	A29 / A322 (4140)	GB (China)	42CrMo

TYPICAL APPLICATIONS

- Gears, shafts and axles
- Hydraulic piston rods (pre-chrome blanks)
- Crankshafts and eccentric shafts
- Tool holders and machine components
- High-strength bolting, property classes 8.8–12.9
- Oil & gas forged components

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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