

Quality	42CrMo4
According to Standard	EN 10083-3:2006 (E)
Number	1.7225



Comparable Standards	EN	W.N.	AISI
	42CrMo4	1.7225	4140

Chemical Analysis	C %	Si % max	Mn %	P% max	S% max.	Cr %
	0.38 to 0.45	0.40	0.60 to 0.90	0.025	0.035	0.90 to 1.20
	Mo %	Ni %	V	B		
	0.15 to 0.30	—	—	—		

Hot Work and Heat Treatment Temperatures

Quenching ^{c,d}	Quenching ^e	Tempering ^f	End Quench Test
°C	agent	°C	°C
820 to 800	Oil or Water	540 to 680	850 ± 5

Mechanical Properties at Room Temperature

Mechanical Properties for the ruling section (see EN 10083-1:2006, Annex A) with a diameter) d) or for flat products thickness (f) of

	Re min. MPa ^c	R _m	A min. %	Z min. %	KV ^b min. J
d ≤ 16 mm t ≤ 8 mm	900	1100 to 1300	10	40	—
16 mm < d ≤ 40 mm 8 mm < t ≤ 20 mm	750	1000 to 1200	11	45	35
40 mm < d ≤ 100 mm 20 mm < t ≤ 60 mm	650	900 to 1100	12	50	35
100 mm < d ≤ 160 mm 60 mm < t ≤ 100 mm	550	800 to 950	13	50	35
160 mm < d ≤ 250 mm 100 mm < t ≤ 160 mm	500	750 to 900	14	55	35