

Quality	34CrNiMo6
According to Standard	EN 10083-3:2006 (E)
Number	1.6582



Comparable Standards	EN	W.N.	AISI
	34CrNiMo6	1.6582	4340

Chemical Analysis	C %	Si % max	Mn %	P% max	S% max.	Cr %
	0.30 to 0.38	0.40	0.50 to 0.80	0.025	0.035	1.30 to 1.70
	Mo %	Ni %	V	B		
	0.15 to 0.30	1.30 to 1.70	—	—		

Hot Work and Heat Treatment Temperatures

Quenching ^{c,d}	Quenching ^e	Tempering ^f	End Quench Test
°C	agent	°C	°C
830 to 860	Oil or Water	540 to 660	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	1000	1200 to 1400	9	40	—
16 mm < d ≤ 40 mm 8 mm < t ≤ 20 mm	900	1100 to 1300	10	45	45
40 mm < d ≤ 100 mm 20 mm < t ≤ 60 mm	800	1000 to 1200	11	50	45
100 mm < d ≤ 160 mm 60 mm < t ≤ 100 mm	700	900 to 1100	12	55	45
160 mm < d ≤ 250 mm 100 mm < t ≤ 160 mm	600	800 to 950	13	55	45