

Quality	40CrMoV4-6
According to Standard	EN 10269 : 2013 (E)
Number	1.7711



Comparable Standards	EN	W.N.
	40CrMoV4-6	1.7711

Chemical Analysis	C %	Si % max	Mn %
	0.36 to 0.44	≤ 0.40	0.45 to 0.85
	B	Cr %	Mo %
	-	0.90 to 1.20	0.50 to 0.65
	P% max	S% max	Al _{tot}
	0.025	0.035	≤ 0.015
	Ni %	V %	Others
	-	0.25 to 0.35	-

Guidance for Heat Treatment

Heat Treatment Symbol ^a	Normalizing, quenching or Solution annealing temperature °C	Type of cooling ^b	Tempering or precipitation treatment (and time) °C
+ QT ^d	880 to 950	w, o	670 to 720
+ QT ^e	940 to 970	w, o	600 to 700

Mechanical Properties at Room Temperature

Heat Treatment Condition ^{a,b}	Hardness	Diameter ^c	Proof Strength	Tensile strength
	HBW max	d mm	R _{p0.2} Mpa min.	R _m Mpa
+ QT	-	d ≤ 100	700	850 to 1000
		100 < d ≤ 160	640	850 to 1000
+ A	241	-	-	-
	Elongation after fracture	Reduction in area	Impact energy (ISO-V) at 20°C	
	A % min.	Z % min.	KV ₂ J min.	
	14	45	40	
	14	45	40	
	-	-	-	