

Quality	709M40
According to Standard	PD 970:2005
Number	-



Comparable Standards	W.N.	AISI	DIN
	-	-	42CrMoS4

Chemical Analysis	C %	Mn %	Si %	Cr %	Ni %	Mo %
	0.36 to 0.44	0.70 to 1.00	—	0.90 to 1.20	—	0.25 to 0.35
	P%	S%				
	—	—				

Hot Work and Heat Treatment Temperatures

Preheat Treatment °C	Austenitizing °C	Hardening °C	Tempering °C
No Hardenability data specified		860 to 890	550 to 700

Mechanical Properties at Room Temperature

Condition	Ø mm.	Rp0,2 min. N/mm2	Rm N/mm2	A min. %	KV min. J	Max Hardness HB
Hardened and tempered + turned or ground	R > 100 ≤ 250	480	700 to 850	15	28	201 to 255
	S > 150 ≤ 250	540	775 to 925	13	22	223 to 277
	S > 63 ≤ 150	570	775 to 925	15	50	223 to 277
	T > 29 ≤ 100	665	850 to 1000	13	50	248 to 302
	U > 6 ≤ 63	740	925 to 1075	12	42	269 to 331
	V > 6 ≤ 29 ^d	835	1000 to 1150	12	42	293 to 352
	W > 6 ≤ 19 ^d	925	1075 to 1225	12	35	311 to 375
Hardened and tempered + cold drawn or hardened tempered + cold drawn + ground	R > 100 ≤ 250	510	700 to 850	12	50	201 to 255
	S > 63 ≤ 150	585	775 to 925	11	50	223 to 277
	T > 29 ≤ 100	680	850 to 1000	9	50	248 to 302
	U > 13 ≤ 63	755	925 to 1075	9	42	269 to 331
	V > 6 ≤ 29 ^d	850	1000 to 1150	9	42	293 to 352
	W > 6 ≤ 19 ^d	940	1075 to 1225	8	35	311 to 375
Softened + turned, ground or cold drawn or turned, ground or cold drawn + finally softened	-	-	-	-	-	255 max.