



**OVERVIEW | STATUS OF 12/2017 | E
HARDNESS
COMPARISON TABLE**

Strength after quenching and tempering (N / mm ²) annealing temperature 600 ° C				Values for the surface hardness of 90 minutes TENIFER treatment at 580 ° C.		
Material/ Short name	Material number	2 hours	6 hours	HV 1	HV 10	HV 30
Ck15	1.1141	600	550	350	300	200
C45W3	1.1730	750-850	700-800	450	350	250
Ck60	1.1221	750-900	700-800	450	350	250
20MnCr5	1.7147	800-950	800-900	600	450	400
53MnSi4	1.5141	850-950	800-900	450	400	350
90MnV8	1.2842	1000-1200	900-1100	550	450	400
42CrMo4	1.7225	900-1200	900-1100	650	500	450
X19NiCrMo4	1.2764	900-1100	900-1000	600	500	450
55NiCrMoV6	1.2713	1200-1400	1150-1300	650	550	500
56NiCrMoV7	1.2714	1300-1500	1250-1400	650	550	500
50NiCr13	1.2721	1200-1350	1100-1200	660	500	450
X20Cr13	1.2082	100-1200	1000-1200	>900	600	450
X35CrMo17	1.4122	1000-1200	1000-1200	>900	700	550
X210Cr12	1.2080	1500-1700	1400-1600	>800	600	450
X210CrW12	1.1436	1500-1800	1400-1650	>800	600	500
X165CrMoV12	1.2601	1400-1900	1400-1700	>800	650	500
45CrMoW58	1.2603	1500-1800	1400-1700	800	700	600
X32CrMoV33	1.2365	1700-1800	1600-1750	>900	850	700
X38CrMoV51	1.2343	1700-1900	1500-1700	>900	820	700
X37CrMoW51	1.2606	1700-1900	1600-1800	>900	800	700
X30WCrV53	1.2567	1700-1900	1600-1800	>900	850	750
X30WCrV93	1.2581	1500-1800	1500-1700	>900	850	800