

Table 11 — Mechanical properties at room temperature of heat-treated (see Table A.4) martensitic steels in conditions 1C, 1E, 1D, 1X, 1G and 2D

Steel designation		Thickness t or diameter ^a d	Heat- treatment condition ^b	Hardness	0,2 %-proof strength	Tensile strength	Elongation after fracture	Impact energy (ISO- V)
Name	Number	mm		HBW ^c max.	R _{p0,2} ^d MPa min.	R _m ^d MPa	(long.) (tr.)	(long.) (tr.)
Standard grades								
X12Cr13	1.4006	-	+A	220	-	max. 730	-	-
		≤ 160	+QT650	-	450	650 to 850	15	25
X12CrS13	1.4005	-	+A	220	-	max. 730	-	-
		≤ 160	+QT650	-	450	650 to 850	12	-
X15Cr13	1.4024	-	+A	220	-	max. 730	-	-
		≤ 160	+QT650	-	450	650 to 850	15	-
X20Cr13	1.4021	-	+A	230	-	max. 760	-	-
		≤ 160	+QT700 +QT800	-	500 600	700 to 850 800 to 950	13 12	25 20
X30Cr13	1.4028	-	+A	245	-	max. 800	-	-
		≤ 160	+QT850	-	650	850 to 1000	10	12
X39Cr13	1.4031	-	+A	245	-	max. 800	-	-
		≤ 160	+QT800	-	650	800 to 1000	10	12
X46Cr13	1.4034	-	+A	245	-	max. 800	-	-
		≤ 160	+QT800	-	650	800 to 1000	10	12
X65Cr13	1.4037	≤ 160	+A	265		840		