Table 17 — Mechanical properties for bright bars [a] at room temperature of heat-treated (see Table A.5) precipitation hardening steels in conditions 2H, 2B, 2G or 2P

Steel designation		**Thickness t or diameter [b] *d*** mm	**Annealed**		**Precipitation hardened**				
Name	Number		R_m MPa max.	HBW [c] max.	Heat treatment condition	$R_{p0,2}$ MPa min.	R_m MPa	A_5 [d] % min. (long.)	KV_2 J min. (long.)
Standard grade									
X5CrNiCuNb16-4	1.4542	≤ 10 [e]	1200	360	+P800	600	900 to 1100	10	-
		10 < t ≤ 16	1200	360		600	900 to 1100	10	-
		16 < t ≤ 40	1200	360		520	800 to 1050	12	75
		40 < t ≤ 63	1200	360		520	800 to 1000	18	75
		63 < t ≤ 160	1200	360		520	800 to 950	18	75
		≤ 100	-	-	+P930	720	930 to 1100	12	40
		≤ 100	-	-	+P960	790	960 to 1160	10	-
		≤ 100	-	-	+P1070	1000	1070 to 1270	10	-
Special grade									
X5NiCrTiMoVB25-15-2	1.4606	≤ 10 [e]	850	240	+P880	750	950 to 1200	15	30
		10 < t ≤ 16	800	230		750	950 to 1150	15	30
		16 < t ≤ 40	800	230		600	900 to 1150	18	40
		40 < t ≤ 50	700	212		550	880 to 1150	20	40

[a] Including cut lengths from wire.

[b] Width across flats for hexagons.

[c] For information only.

[d] Elongation A_5 is valid only for dimensions of 5 mm and above. For smaller diameters, the minimum elongation shall be agreed upon at the time of enquiry and order.

[e] In the range 1 mm ≤ d < 5 mm valid only for rounds. The mechanical properties of non-round bars with thicknesses < 5 mm shall be agreed at the time of enquiry and order.