TYPE	STANDARD	GRADE	thickness : t	CHEMICAL COMPOSITION (max)								TENSION TEST						BEND TEST		IMPACT TEST	
												Yield Point min		Tensile Strength		Elongation min		Angle	Inside radius	Temp	Absorbtion energy min
			mm.	C	Si	Mn	P	S	N	Cu	OTHER ELEMENTS	thick : t mm.	Kgf / mm² [MPa ,N/mm²]	thick : t mm.	Kgf / mm² [MPa , N / mm²]	thick : t mm.	% $L_o=5.65*\sqrt{S_o}$	(Degree)		(^{0}C)	(Joule)
General Structural Purposes	DIN 17 100 (1980)	St 37 - 2 (t>25)[1]	t ≤ 16	0.21	-	-	0.065	0.065	0.010*	-	* It is permissible to exceed the maximum value indicate , provided a P content per 0.001% N of 0.005% P below the maximum value indicated is maintained. the N content may not , however , exceed a value of 0.014% N in the sample analysis.	t ≤ 16	24 [235]	3< t ≤ 100	35 - 48 [340 - 470]	Direction	L / T	180	3< t≤ 63 L = 1t T = 2t	+ 20	10≤ t ≤ 16 27
			16 < t ≤ 63	0.25								16< t ≤ 40	23 [225]			3 ≤ t ≤ 40	26 / 24				
												40 <t ≤ 63	22 [215]			40< t ≤ 63	25 / 23				
		St 44 - 2 All t[1]	t ≤ 40	0.24	-	-	0.060	0.060		-		t ≤ 16	28 [275]		42 - 55 [410 - 540]	3 ≤ t ≤ 40	22 / 20	180	3< t≤ 63 L = 2.5t T = 3t	+ 20	10 ≤t ≤ 63 27
			40 < t ≤ 63	0.25								16 < t ≤ 40	27 [265]			40 <t ≤ 63	21 / 19				
												40 <t ≤ 63	26 [255]								
		St 52 - 3 All t[1]	t ≤ 30	0.22	0.60	1.70	0.050	0.050	-	-		t ≤ 16	36 [355]		50 - 64 [490 - 630]	3 ≤ t ≤ 40	22 / 20	180	3< t≤ 63 L = 2.5t T = 3t	0 (U) , - 20 (N)	10≤t≤ 63 27
			30 < t ≤ 63	0.24								16 < t ≤ 40	35 [345]			40 <t ≤ 63	21 / 19				
												40 <t ≤ 63	34 [335]								

NOTE 1) Delivery condition is Normalizing (N) and for usually normalized products the delivery is ordered in the hot-formed untreated condition (U) , the mechanical tests do not apply to the delivery condition.