

TYPE	STANDARD	GRADE	thickness : t mm.	CHEMICAL COMPOSITION (max)										TENSION TEST						BEND TEST		IMPACT TEST			
				C	Si	Mn	P	S	N	Cu	OTHER ELEMENTS		Yield Point min		Tensile Strength		Elongation min		Angle (Degree)	Inside radius	Temp (°C)	Absorbion energy min (Joule)			
											thickness	CEV	thick : t mm.	Kgf / mm ² [MPa, N/mm ²]	thick : t mm.	Kgf / mm ² [MPa, N / mm ²]	thick : t mm.	% L ₀ =5.65*√S ₀							
Hot rolled products of non-alloy structural steels	EN10025 (2004E)	S235JR	t ≤ 40	0.19	-	1.50	0.045	0.045	0.014*	0.60	thickness	CEV	*The %N max. does not apply if the chemical composition shows a minimum total Al content of 0.015%.	t ≤ 16	24 [235]	36 - 52 [360 - 510]	Direction**	L	T	** For plate, strip and wide flats with width ≥ 600 mm, the direction transverse (T) to the rolling direction applies and for all other products the values apply for the direction parallel (L) to the rolling direction.	20 (JR) : When ordered. 0 (JO)	10<t≤150 27 Subside specimen For normal thickness 6 - 12 mm.			
			t > 40	0.23							t ≤ 40	0.35		16 < t ≤ 40	23 [225]		3 ≤ t ≤ 40	26	24						
		S235JO	ALL	0.19	-	1.60	0.045	0.045			t ≤ 40	0.40		40 < t ≤ 63	22 [215]		42 - 57 [410 - 560]	40 < t ≤ 63	25				23		
			t ≤ 40	0.24							t ≤ 16	28 [275]		3 ≤ t ≤ 40	23		21								
		S275JR	t ≤ 40	0.24	-	1.60	0.045	0.045			t ≤ 40	0.40		16 < t ≤ 40	27 [265]		48 - 64 [470 - 630]	40 < t ≤ 63	22				20		
			t > 40	0.25							t ≤ 16	28 [275]		3 ≤ t ≤ 40	22			20							
		S275JO	ALL	0.21	-	1.70	0.045	0.045			t ≤ 30	0.45		40 < t ≤ 63	26 [255]			40 < t ≤ 63	21				19		
			t ≤ 40	0.27							t ≤ 16	36 [355]		40 < t ≤ 63	21			19							
		S355JR	ALL	0.27	-	1.70	0.045	0.045			t ≤ 30	0.45		16 < t ≤ 40	35 [345]			48 - 64 [470 - 630]	40 < t ≤ 63				21	19	
			t ≤ 30	0.23							30 < t ≤ 100	0.47		40 < t ≤ 63	34 [335]				40 < t ≤ 63				21	19	
		S355JO	t ≤ 30	0.23	-	1.70	0.045	0.045			t > 30	0.24		40 < t ≤ 63	34 [335]				48 - 64 [470 - 630]				40 < t ≤ 63	21	19
			t > 30	0.24							40 < t ≤ 63	34 [335]		40 < t ≤ 63	21								19		