PROFILES & ANGLES STANDARDS SHEET

BESHAY STEEL

بشاي للصلب

Standard	Grade	Mechanical Properties								Chemical Composition (wt٪)										
		Y.S (MPa)			T.S (MPa)		Elongation at Fracture (%) Lo=5.65 √S		Impact strength (J)	C			Si	Mn	P	S	N	Cu	C.E V		
		Thickness (mm)								Thickness (mm)									Thickness (mm)		
		≤ 16	> 16 ≤ 40	≥ 40 > 63	> 3 ≤ 100	≥ 3 > 40	≥ 3 > 40	≥ 40 > 63		≤ 16	> 16 ≤ 40	≥ 40							≤ 30	> 30 ≤ 40	> 40 ≥ 150
		Min.	Min.	Min.	Min.	Max.	Min.	Min.	Min.	Max.	Max.	Max.	Max.	Max.	Max	Max.	Max.	Max.	Max.	Max.	Max.
European	EN 10025-2																				
	S235JR	235	225	215	360	510	26	25	27	0.19	0.19	0.23	–	1.5	0.045	0.045	0.014	0.6	0.35	0.35	0.38
	S235J0	235	225	215	360	510	26	25	27	0.19	0.19	0.19	–	1.5	0.040	0.040	0.014	0.6	0.35	0.35	0.38
	S235J2	235	225	215	360	510	26	25	27	0.19	0.19	0.19	–	1.5	0.035	0.035	–	0.6	0.35	0.35	0.38
	S275JR	275	265	255	410	560	23	22	27	0.24	0.24	0.25	–	1.6	0.045	0.045	0.014	0.6	0.40	0.40	0.42
	S275J0	275	265	255	410	560	23	22	27	0.21	0.21	0.21	–	1.6	0.040	0.040	0.014	0.6	0.40	0.40	0.42
	S275J2	275	265	255	410	560	23	22	27	0.21	0.21	0.21	–	1.6	0.035	0.035	–	0.6	0.40	0.40	0.42
	S355JR	355	345	335	470	630	22	21	27	0.27	0.27	0.27	0.6	1.7	0.045	0.045	0.014	0.6	0.45	0.47	0.47
	S355J0	355	345	335	470	630	22	21	27	0.23	0.23	0.24	0.6	1.7	0.040	0.040	0.014	0.6	0.45	0.47	0.47
	S355J2	355	345	335	470	630	22	21	27	0.23	0.23	0.24	0.6	1.7	0.035	0.035	–	0.6	0.45	0.47	0.47
	S355K2	355	345	335	470	630	22	21	40	0.23	0.23	0.24	0.6	1.7	0.035	0.035	–	0.6	0.45	0.47	0.47
	S450J0	450	430	410	550	720	17	17	27	0.23	0.23	0.24	0.6	1.8	0.040	0.040	0.027	0.6	0.47	0.49	0.49

JR = The value of impact strength at tested at temperature 20 ℃ is 27J

J0 = The value of impact strength at tested at temperature 0 ℃ is 27J

J2 = The value of impact strength at tested at temperature - 20 ℃ is 27J

K2 = The value of impact strength at tested at temperature - 20 ℃ is 40J