



Grade	S355J2
European Standard Steel Grade	1.0557
Corresponding Standard	EN 10025-2-2004 Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels
Classification	Carbon Steel

S355J2 Chemical Element Composition Content (%)

	Component	C ①	Si	Mn	P ④	S ④⑤	Cu ⑥	More
厚度 $t \leq 16$	Minimum Value	-	-	-	-	-	-	⑦
	Maximum Value	0.2	0.55	1.6	0.025	0.025	0.55	
	Component	C ②	Si	Mn	P ④	S ④⑤	Cu ⑥	More
厚度 $16 < t \leq 40$	Minimum Value	-	-	-	-	-	-	⑦

	Component	C ②	Si	Mn	P ④	S ④⑤	Cu ⑥	More
	Maximum Value	0.2	0.55	1.6	0.025	0.025	0.55	
	Component	C ③	Si	Mn	P ④	S ④⑤	Cu ⑥	More
厚度 t>40	Minimum Value	-	-	-	-	-	-	⑦
	Maximum Value	0.22	0.55	1.6	0.025	0.025	0.55	

S355J2 Mechanical Properties

thickness t mm	Tensile Strength σ_b Mpa	Yield Point σ_s Mpa	Elongation or Extension Rate δ %
t<3	510~680	≥355	See Remarks
3≤t≤16	470~630	≥355	≥22
16<t≤40	470~630	≥345	≥22
40<t≤63	470~630	≥335	≥21
63<t≤80	470~630	≥325	≥20

thickness t mm	Tensile Strength σ_b Mpa	Yield Point σ_s Mpa	Elongation or Extension Rate δ %
80<t≤100	470~630	≥315	≥20
100<t≤150	450~600	≥295	≥18
150<t≤200	450~600	≥285	≥17
200<t≤250	450~600	≥275	≥17
250<t≤400	450~600	≥265	≥17

1 Approximate Comparison Table Carbon Structural Steel and Engineering Steel

China	Japan	United States	Germany		France	European Standard		Sweden	United Kingdom
GB	JIS	ASTM	DIN EN/DIN	W-Nr.	NF EN/NF	EN	Numerical Grade	SS	BS EN/BS
Q345D	SS490YA	A656	ASt52 St52-3N	1. 0577	A52FP	S355J2 Fe510D2① S355J2G4①	1. 0577	2134-01	224-460

2 Approximate Comparison Table Carbon Structural Steel and Engineering Steel

Japan	Germany	France	European Standard		United Kingdom
JIS	DIN EN/DIN	NF EN/NF	EN	Numerical Grade	BS EN/BS
SG365	19Mn6	BS4	P355NB	1. 0557	TypeE

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