



S355J2C

Non-alloy steel for structural purposes

(W. NR. 1.0579)

CHEMICAL COMPOSITION: (heat analysis according to the EN 10025-2:2019 standard)

	C %			Si %	Mn %	¹ P %	S %	N %	Cu %
	For thicknesses in mm								
	≤16	>16≤40	>40						
FROM	-	-	-	-	-	-	-	-	-
TO	0,20	0,20	0,22	0,55	1,60	0,025	0,025	-	0,55

¹P and S = max. 0,030% for long products

*MECHANICAL FEATURES: (according to the EN 10277:2018 standard)

Thickness mm	Rolled + peeled rolled (+SH)		Cold drawn (+C)		
	hardness HB	Rm (MPa)	Rp _{0,2} minimum values (MPa)	Rm (MPa)	A ₅ % minimum values
≥5≤10			520	630 - 950	6
>10≤16			450	580 - 880	7
>16≤40	140 - 187	470 - 630	350	530 - 850	8
>40≤63	140 - 187	470 - 630	335	500 - 770	9
>63≤100	140 - 187	470 - 630	315	470 - 740	9

* Delivery condition: as rolled.

PROPERTIES :

Calculation of the equivalent carbon:

$$CEV = C + \frac{Mn}{6} + \frac{Cr+Mo+V}{5} + \frac{Ni+Cu}{15}$$

Weldability:

This steel grade is generally suitable to welding.

Notes:

CORRESPONDENCE WITH OTHER STANDARDS (purely as an indication) :

EN 10277-2:2008 S355J2C	UNI 7070 Fe 510 D	DIN 17 100 St 52-3 N	BS 4360 50 D8
-----------------------------------	-----------------------------	--------------------------------	-------------------------