



S355D

Non-alloy steel for structural purposes

CHEMICAL COMPOSITION: (heat analysis according to the ISO 630-2:2021 standard)

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

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

*MECHANICAL FEATURES: (according to the EN ISO 683-7:2024 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 10025-2:2019 S355J2C	UNI 7070 Fe 510 D	DIN 17 100 St 52-3 N	BS 4360 50 D8
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