

Quality S275J2

According to Standard EN 10025 - 2 : 2004

Number 1.0145



Comparable Standards	German DIN	France AFNOR	Spain UNE	China GB	U.K. B.S.	Russia GOST	USA AISI - SAE	Japan JIS
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Q275 St4sp, CT4nc

Chemical Analysis

C% max	Si% max	Mn% max	P% max	S% max	N% max	Cu% max
0.18		1.50	0.025	0.025		0.40

Hot Work and Heat Treatment Temperatures

Temperature °C

Hot - Forming	Supply State +U	Soft Annealing +A	Isothermal Annealing +I	Normalising & Tempering	Quenching & Tempering QT	Stress-relieving +SR
1200 - 850	natural state	690 air		920 air	920 water	50° under the temperature of tempering
				540 - 650 air	540 - 665 air	

Mechanical Properties at Room Temperature

Minimum Yield Strength R^{eH}
Mpa
Nominal Thickness mm

≤ 16	> 16 ≤ 40	> 40 ≤ 63	> 63 ≤ 80	> 80 ≤ 100	> 100 ≤ 150	> 150 ≤ 200	> 200 ≤ 250
275	265	255	245	235	225	215	205

Tensile Strength R
Mpa
Nominal Thickness mm

< 3	> 3 ≤ 100	> 100 ≤ 150	> 150 ≤ 250
430 to 580	410 to 560	400 to 540	380 to 540

Minimum percentage elongation after fracture %

	L = 80 mm. Normal thickness mm				L = 5.65 √S ₀ . Nominal thickness mm					
	≤ 1	> 1	> 1.5	> 2	> 2.5	> 3	> 40	> 63	> 100	> 150
		≤ 1.5	≤ 2	≤ 2.5	< 3	≤ 40	≤ 63	≤ 100	≤ 150	≤ 250
l	15	16	17	18	19	23	22	21	19	18
t	13	14	15	16	17	21	20	19	19	18