

Quality 1.4105

According to Standard EN 10088-1 : 2014

Number 1.4105



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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X6CrMoS17	430F
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Chemical Analysis	C% max	Si% max	Mn% max	P% max	S% max	Cr% max	Mo% max
	0.08	1.5	1.50	0.04	0.15 - 0.35	16.0 - 18.0	0.20 - 0.60

Hot Work and Heat Treatment Temperatures

Temperature °C

Hot - Forming	Melting Range	Soft Annealing +A	Isothermal Annealing +I	Recrystallization +RA	Quenching & Tempering QT	Stress-relieving +SR
1150 - 815	1500 - 1490	850 - 750 air	not suitable	790-710 cooling to 300	not suitable	-
				then 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	> 1.5 ≤ 2	> 2 ≤ 2.5	> 2.5 < 3	> 3 ≤ 40	> 40 ≤ 63	> 63 ≤ 100	> 100 ≤ 150	> 150 ≤ 250
l	15	16	17	18	19	23	22	21	19	18
t	13	14	15	16	17	21	20	19	19	18