

1.4541 321

X6CrNiTi18-10	%C	%Si	%Mn	%P	%S	%Cr	%Cu	%Mo	%Ni	%Ti
	-	-	-	-	-	17.0	-	-	9.0	5*C
	0.08	1.00	2.00	0.045	0.030	19.0	-	-	12.0	0.70

STEEL PROPERTIES

1.4541 321 is an austenitic stainless steel with good corrosion resistance and elevated-temperature strength. It is often used in applications where both corrosion resistance and the ability to withstand high temperatures are essential

EQUIVALENT GRADES

EN 10088-3	1.4541	X6CrNiTi18-10
AFNOR	Z6CNT18.10	
GOST	-	
AISI	321	
BS	321S12	

APPLICATIONS

1.4541 321 is used in a range of applications, including heat exchangers, exhaust systems, chemical and pharmaceutical industry equipment, and high-temperature components in various industrial processes. It is selected for situations where both corrosion resistance and elevated-temperature strength are required.

HEAT TREATMENT

1.4541 321 is supplied in annealed +AT conditions.

Mechanical Values for 1.4541 321 at room temperature in EN 10088-3: 2014 in conditions 1C, 1E, 1D, 1X, 1G, 2D

Diameter (mm)	Heat Treatment Condition	Hardness HB max.	0.2% Proof strength min.	Tensile Strength R _m Mpa	Elongation after fracture A % Min.		Impact Energy (ISO-V) KV J Min.	
					(long)	(tr.)	(long)	(tr.)
-	+AT	-	-	Max 800	-	-	-	-
<= 160	-	215	190	500 to 700	40	-	100	-

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Mechanical Values for 1.4541 321 Bright Bars at room temperature in EN 10088-3: 2014 in conditions 2H, 2B, 2G, 2P

Diameter (mm)	Annealed		Heat Treatment Condition	0.2% Proof strength min.	Tensile Strength R _m Mpa	A5 % Min Elongation		Impact Energy (ISO-V) KV J Min.	
	R _m Mpa Max	HB Max				(long)	(tr.)	(long)	(tr.)
=<10	400	305	+AT	175	600 to 950	25	-	-	-
10<t<=16	380	305	+AT	165	580 to 950	25	-	-	-
16<t<=40	190	280	+AT	155	500 to 850	30	-	100	-
40<t<=63	190	260	+AT	145	500 to 850	30	-	100	-
63<t<=160	190	245	+AT	136	500 to 700	40	-	100	-

PRODUCTS OFFERED

- PEELED BARS
- BRIGHT BARS
- HEXAGONS
- SQUARES
- FLAT BARS
- WIRES