

1.4828 309

X15CrNiSi20-12	%C	%Si	%Mn	%P	%S	%Cr	%Cu	%Mo	%Ni	%N
	-	1.50	-	-	-	19.00	-	-	11.00	-
	≤0.20	2.50	≤2.00	0.045	0.015	21.00	-	-	13.00	≤0.11

STEEL PROPERTIES

1.4828 309 also known as an austenitic chromium-nickel stainless steel that is often used for high-temperature applications. Higher Silicon content gives it higher resistance to carburisation and higher Nickel and chrome give it higher oxidation resistance. Due to the higher content of carbon, it has better strength at higher temperatures.

EQUIVALENT GRADES

EN 10088-3	1.4828	X15CrNiSi20-12
AFNOR	Z15CNS20.12	
AISI	309	
BS	309S	

APPLICATIONS

1.4828 309 is typically used for car exhaust systems, heating elements, furnace components, burners, heat treatment baskets, gas flare heads.

HEAT TREATMENT

1.4828 309 is supplied in solution annealed +AT condition.

Mechanical Values for 1.4828 309 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	223	-	MAX 800	-	-	-	-
75	-	-	230	550 to 750	30	-	28	-

1.4828 309

Mechanical Values for 1.4828 309 Bright Bars at room temperature in EN 10088-3:2014 in conditions 1C,1E,1D,1X,1G & 2D

Diameter (mm)	Annealed		Heat Treatment Condition	0.2% Proof strength min.	Tensile Strength Rm Mpa	A5 % Min Elongation		Impact Energy (ISO-V) KV J Min.	
	Rm Mpa Max	HB Max				(long)	(tr.)	(long)	(tr.)
=<10	400	340	+AT	175	600 to 950	-	-	-	-
10<t<=16	380	340	+AT	158	580 to 950	-	-	-	-
16<t<=40	200	310	+AT	145	500 to 850	-	-	-	-
40<t<=63	200	290	+AT	135	500 to 850	-	-	-	-
63<t<=75	200	280	+AT	127	500 to 700	-	-	-	-

PRODUCTS OFFERED

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