

1.4462 S31803

X2CrNiMoN25-20-5	%C	%Si	%Mn	%P	%S	%N	%Cr	%Cu	%Mo	%Ni
	-	-	-	-	-	0.10	21.0	-	2.50	4.5
	0.030	1.00	2.00	0.035	0.015	0.22	23.0	-	3.5	6.5

STEEL PROPERTIES

1.4462 S31803 is a duplex stainless steel that offers a combination of excellent corrosion resistance and high strength. It is used in applications where both properties are critical.

EQUIVALENT GRADES

EN 10088-3	1.4462	X2CrNiMoN25-20-5
AFNOR	Z3CND22.05AZ	
JIS	SUS329J3L	
AISI	S31803	
BS	318S13	

APPLICATIONS

1.4462 S31803 is used in a range of applications, including oil and gas industry components, chemical processing equipment, heat exchangers, and high-strength structural components in construction. It is chosen in situations where a combination of corrosion resistance and high mechanical strength is essential.

HEAT TREATMENT

1.4462 S31803 is supplied in annealed +AT conditions.

Mechanical Values for 1.4462 S31803 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	270	-	Max 800	-	-	-	-
<= 160	-	-	450	650 to 880	25	-	100	-

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Mechanical Values for 1.4462 S31803 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 Rm Mpa	A5 % Min Elongation		Impact Energy (ISO-V) KV J Min.	
	Rm Mpa Max	HB Max				(long)	(tr.)	(long)	(tr.)
=<10	650	305	+AT	700	850 to 1150	12	-	-	-
10<t<=16	650	305	+AT	700	850 to 1100	12	-	-	-
16<t<=40	450	280	+AT	650	650 to 1000	15	-	100	-
40<t<=63	450	260	+AT	650	650 to 1000	15	-	100	-
63<t<=160	450	245	+AT	650	650 to 880	25	-	100	-

PRODUCTS OFFERED

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