

# 1.4539

	%C	%Si	%Mn	%P	%S	%Cr	%Mo	%Ni	%N	%Cu
XNiCrMoCuN25-20-5	-	-	-	-	-	19.0	4.00	24.00	-	1.20
	≤0.020	<0.70	≤2.00	≤0.030	≤0.010	21.0	5.00	26.00	≤0.15	2.00

## STEEL PROPERTIES

1.4539 is a grade of super austenitic steel that is partially classified as a nickel alloy. In the form of long, flat products, mainly used in the chemical, electric and petrochemical industries, it is resistant to various concentrations of sulfuric acid, phosphoric acid, nitric acid and orthophosphoric acid at high temperatures.

## EQUIVALENT GRADES

EN 10088-3	1.4539	XNiCrMoCuN25-20-5
AISI	926	
AFNOR	Z2NCDU25-20-06-AZ	
BS		
JIS		
UNS	N0836	

## APPLICATIONS

Chemical plants, refineries, petrochemical plants, bleaching tanks for the paper industry, flue gas desulfurization plants, applications in seawater, sulfuric and phosphoric acids.

## HEAT TREATMENT

Solution annealing 1050-1150° C.

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**Mechanical properties at room temperature for 1.4539 as per EN 10088-3 in the usual delivery condition**

Flat products with thickness <i>a</i>	Heat Treatment Condition	Hardness HB max.	0.2% Proof strength MPa. min.	Tensile Strength R <sub>m</sub> MPa.	A % Min. Long Products
<160	+AT	230	230	530 to 570	35

**Physical properties of 1.4539 as per EN 10088-1**

Density Kg/dm <sup>3</sup>	Linear Expansion Coefficient 10 <sup>-6</sup> k <sup>-1</sup> Between 20°C and (°C)					Thermal conductivity W/(m.K)		Specific Heat capacity kJ(kg.K)	Electrical resistivity Ωmm <sup>2</sup> /m At 20°C	Magnetizability
	200°C	400°C	20°C	100°C	300°C	20°C	500°C			
8.0	16.1	16.9	-	15.8	16.5	12	17.3	450	1.0	No