

1.4845

	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%N
X8CrNi25-21			-	-	-	24.0	19.00	-
	0.10	1.50	2.00	0.045	0.015	26.0	22.00	0.11

STEEL PROPERTIES

Creep-resistant and heat-resistant H23N18 steel could be a chromium-nickel austenitic grade with an increased nickel content compared to H23N13, showing high strength, ductility, resistance in air and oxidizing atmosphere to high temperatures up to 1050 °C. The steel is employed for mechanically loaded parts that employment at high temperatures. For H23N18 not every work environment is correct. Steel involved with reducing gases, and containing sulphur compounds in higher concentrations, endures temperatures up to 900 °C. With small impurities it can workout to 1000 °C. it's used for parts of the furnace, installations, hooks, stands, trolleys, responsible screws, furnace casings, etc.

EQUIVALENT GRADES

EN 10088-1	1.4845	X8CrNi25-21
AISI	310S	
AFNOR	Z12CN2520	
BS	310S24	
JIS	SUH310	
UNS	S31008	

APPLICATIONS

Furnace and Apparatus Engineering.

HEAT TREATMENT

Solution annealing.

1.4845

Mechanical properties at room temperature for 1.4845 as per EN 10095 in the usual delivery condition

Flat products with thickness a	Heat Treatment Condition	Hardness HB max.	0.2% Proof strength MPa. min.	Tensile Strength R _m MPa.	A % Min. Long Products
<160	+AT	192	210	500-700	35

Physical properties of 1.4845 as per EN 10095

Density Kg/dm ³	Linear Expansion Coefficient 10 ⁻⁶ k ⁻¹ Between 20°C and (°C)					Thermal conductivity W (m.K)		Specific Heat capacity kJ(kg.K)	Electrical resistivity Ωmm ² /m At 20°C	Magnetizability
	200°C	400°C	600°C	800°C	1000°C	20°C	500°C			
7.9	15.5	17.0	17.5	18.5	19.0	15	19	0.50	0.85	No