

1.4841

	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%N
X15CrNiSi25-21	-	1.50	-	-	-	24.0	19.00	-
	0.20	2.50	2.00	0.045	0.015	26.0	22.00	≤0.11

STEEL PROPERTIES

High-alloy chromium-nickel-silicon steel with austenitic structure, heat-resistant up to 1150 °C (in practice up to 1100 °C), creep-resistant up to 690 °C, used for heavily loaded parts of kit that need resistance to oxidation and various loads at high temperatures. H25N20S2 steel is that the right choice for components operating in a very gas environment containing Nitrogen and Oxygen. Unfortunately, the grade doesn't show the identical properties in touch with Sulphur compounds. At high concentrations, its heat resistance drops to approx. 900 °C. Lower temperatures also apply to figure in reducing gases environment, or within the case of sediments.

EQUIVALENT GRADES

EN 10095	1.4841	X15CrNiSi25-21
AISI	314	
AFNOR	-	
BS	-	
JIS	SUH310	
UNS	S31400	

APPLICATIONS

1.4841 is mainly used in the fields of industrial furnaces, incinerators, heat treatment plants and petrochemical industry.

HEAT TREATMENT

Solution annealing.

1.4841

Mechanical properties at room temperature for 1.4841 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	223	230	550-750	30

Physical properties of 1.4841 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	18.0	19.0	15	19	0.50	0.90	No