1.4724

	%C	%Si	%Mn	%P	%S	%Cr	%Al
X10CrAlSi13	-	0.70	-	-	-	12.0	0.70
	0.12	1.40	1.00	0.040	0.015	14.0	1.20

STEEL PROPERTIES

Heat-resistant ferritic steel with 13% chromium content with the addition of Aluminum and resistance to 950C in air work. Material shows satisfactory resistance to reducing gases containing sulfur compounds below 850C. Due to the difficulties related to cold forming, molding should be performed at elevated temperatures of 100-350C with cross-sections up to 6mm. Higher distortions and thicknesses should be formed within the 700-850C temp. range.

EQUIVALENT GRADES

	X10CrAlSi13
EN 10095	
AISI	405
AFNOR	Z10C13
BS	403S17
JIS	SUS405
UNS	-

APPLICATIONS

For construction parts, which should be resistant to scaling up to about 850°C and extensively inured to the effects of sulphurous gases. The inclination to carbonisation in reduced gases is very low.

HEAT TREATMENT

Solution annealing.

1.4724

Mechanical properties at room temperature for 1.4724 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
<12	+A	192	250	450-650	15

Physical properties of 1.4724 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 $\Omega mm^2/m$ At 20°C	Magnetizability
	200°C	400°C	600°C	800°C	1000°C	20°C	500°C			
7.7	10.5	115	12.0	12.5	-	21	23	0.50	0.75	Yes