

1.4742

Brand name | SICRO 10

Standards	Material No.	EN Designation
	1.4742	X10CrAlSi18

Description | 1.4742 is a heat resistant ferritic chromium stainless steel with aluminum in addition.

Special properties | Resistant to scaling up to 1000°C. Resistant to oxidizing sulphuric gases.

Chemical Composition	C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
	≤ 0.12	0.70-1.40	1.00	0.04	0.015
	Cr %	Al %			
	17.0-19.0	0.70-1.20			

Mechanical Properties 20°C	Hardness HB 30 ≤ HB	0.2% Yield strength R _p ≥ N/mm ²	Tensile strength R _m N/mm ²	Elongation A ₅ ≥ %	Resistant on air up to °C
	212	270	500-700	15	1000
	Modulus of elasticity kN/mm ²				
	200				

Physical Properties 20°C	Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
	7.7	500	19	0.93

Suitable welding filler materials | 1.4820; 1.4773; 1.4829

Application | Furnace engineering, mechanical engineering, cement industry

Available forms for 1.4742 /	Sheets/Plates	Bars	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
						