

NW CrAl6 Alloy Fiber

NW CrAl6 is a Fe-Cr-Al steel alloyed with rare earth elements which has high oxidation resistance at high temperatures. Due to the high contents of aluminium and chromium in combination with rare earth elements (Lanthanum, Yttrium, Cer, Hafnium, etc. ...), NW CrAl6 has good mechanical properties, thermal stability, thermal conductivity and oxidation resistance against high temperature.

NW CrAl6 alloy fiber is produced by the technique of bundle drawing with alloy wire, normally fiber diameter is from 6 μ m to 40 μ m. The fiber has a metallic color and a bright surface, which maintains the electrical conductivity, thermal conductivity, corrosion resistance, and high temperature resistance of the original alloy.

Chemical Composition of the Fiber

Grade	C%	Si%	Mn%	S%	P%	Cr%	Al%	Cu%	Ti%	Rare%
NWCrAl6	≤0.04	≤0.40	≤0.50	≤0.015	≤0.025	19.0-22.0	5.0-6.2	≤0.2	≤0.07	0.01-0.5

Applications

NW CrAl6 is specially designed to make DPF.

Technical Data

Diameter (μ m)	Strength Level	Strength (cN)	Elongation (%)
8	High strength	≥ 5.0	≥ 0.60
	Moderate strength	≥ 3.0	≥ 0.75
12	High strength	≥ 15.0	≥ 0.90
	Moderate strength	≥ 9.0	≥ 0.80
22	High strength	≥55.0	≥ 1.30
	Moderate strength	≥ 30.0	≥ 1.0
35	-	≥ 80.0	≥ 1.4
40	-	≥ 120.0	≥ 1.4

Note: the number of filaments can be customized according to customer requirements.