

ADVANCED MATERIALS



Inquire about additional base fiber types, coating levels, sizing, lengths and packaging options

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NICKEL COATED FIBERS (NIFIBER)

Carbon fibers are widely used in commercial and defense applications because of their strength and weight properties. Conductive Composites has developed proprietary coating processes that coats individual filaments with thin, uniform coatings of pure metal. Our coated fibers are the ultimate combination of high strength, light weight and high conductivity.

- Every filament is uniformly coated with pure, ductile, smooth nickel
- Superior handling characteristics
- Drop-in replacement in standard manufacturing processes
- Multiple engineered spec ranges, including industry exclusive 20% range coated products
- Additional base fibers available - aramid, cellulose, and others
- Sizing options and converted formats (0.1mm to 25mm) available

PARAMETER	UNIT	VALUE	VALUE	VALUE
Product Number		1AC1-12	1BC1-12	1CC1-12
Electrical Resistance	ohms/meter	4.1	2.6	1.6
Density	grams/cm ³	2.15	2.38	2.67
Linear Yield	feet/pound (meters/kg)	1450 (975)	1250 (840)	1075 (720)
Percent Nickel	% by weight	22	32	42
Heritage name		12K20	12K30	12K40
Ultimate Strength (minimum)	Ksi (MPa)	400 (2760)		
Modulus (minimum)	Msi (GPa)	30 (206.8)		
Elongation at Break (minimum)	percent	1.2		
Nickel Coating Purity	percent	99.9		
Base Fiber		12K Standard Modulus Carbon Fiber		
Sizing		Upon request		
Packaging		3-7 lb/spool	3-8 lb/spool	3-9 lb/spool
		6 spools per box	6 spools per box	6 spools per box