

## ADVANCED MATERIALS



## INDUSTRIES WE SERVE:

- Electronics
- Telecommunications
- Aerospace
- Security
- Medical
- Specialty Construction
- Consumer Products
- Defense

## NICKEL COATED FIBERS (NIFIBER)

Nickel coated fibers present an ultimate combination of low density, high strength, toughness, and high conductivity. Conductive Composites uses a proprietary coating process where fibers are uniformly coated with a thin, robust, and ductile film of pure nickel. Our conductive fibers have superior handling properties, excellent conductivity/shielding capabilities, and are available in tow, cut and precision converted formats. We coat a wide range of both synthetic and natural fiber types including carbon, cellulose, silk, cotton, aramid and others.



## COMPOSITE FIBERS

Composite fibers are widely used in commercial and defense applications for their outstanding strength/weight properties. Our nickel coating process adds electrical conductivity and shielding performance for a multifunctional materials system that is easily and directly integrated into components, systems, and platforms. Our composite fibers present an ultimate combination of low density, high strength, toughness, and high conductivity.



## CUTFIBER (CHOPPED & SIZED STAPLE)

Our chopped/sized conductive fiber staple is available with a range of nickel coating levels and in lengths from 6mm to 24mm. The unique properties of our CutFiber makes them a perfect high performance structural and conductive additive for thermosets, thermoplastics, and composite products.



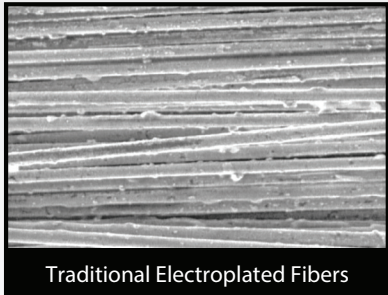
## PRECISION COATED & CONVERTED FIBER (PC<sup>2</sup>F)

Our precision coated & converted conductive fibers (PC<sup>2</sup>F) is a highly uniform short fiber format in lengths from 3mm to 100µm. PC<sup>2</sup>F is a high-performance structural and conductive additive that is both lighter and longer than typical nickel coated graphite formats. With a wide range of available nickel coating levels, our easily dispersible and high uniformity conductive short fiber format is perfectly suited for conductive gaskets, elastomer, sealants, adhesives, paints, and other systems.

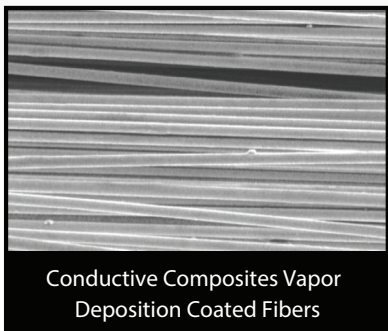


## CHEMICAL VAPOR DEPOSITION (CVD)

Conductive Composites' proprietary process continuously coats every filament of a tow and provides many advantages over other coated fibers.



Traditional Electroplated Fibers



Conductive Composites Vapor Deposition Coated Fibers

## NIFIBER NICKEL CVD COATED FIBERS

Product #	Product Name	Base Fiber	Nickel Coating Level (weight %)	Tow Count	Linear Resistance (ohm/m), nominal
1AC1-12	12K20	Carbon	22 +/-5	12K	4.50
1BC1-12	12K30	Carbon	32 +/-5	12K	3.00
1CC1-12	12K40	Carbon	42 +/-5	12K	2.00
1DC1-12	12K55	Carbon	55 +/-5	12K	1.65

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

## CUT FIBER

Product #	Base Fiber	Nominal Nickel Coating Level (weight %)	Length Nominal	Sizing nominal	Format
1AC1CH-6S3	Carbon	20%	6mm	4% PUT	Chopped Staple
1CC1CH-6S3	Carbon	40%	6mm	4% PUT	Chopped Staple

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

## PRECISION COATED & CONVERTED FIBER (PC<sup>2</sup>F)

Product #	Base Fiber	Nominal Nickel Coating Level (weight %)	Length Nominal	Sizing	Format
1AC1PC-0.15	Carbon	20%	0.15mm	optional	powder
1CC1PC-0.15		40%			
1AC1PC-0.25	Carbon	20%	0.25mm	optional	powder
1CC1PC-0.25		40%			
1AC1PC-0.5	Carbon	20%	0.5mm	optional	powder
1CC1PC-0.5		40%			
1AC1PC-1	Carbon	20%	1mm	optional	powder
1CC1PC-1		40%			

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

Conductive Composites believes these values to be typical, however, Conductive Composites does not assume any liability whatsoever for accuracy or completeness of any information contained in this document. Conductive Composites does not warrant this product with respect to merchantability or suitability for use, including any intellectual property or trade restrictions, which is the sole responsibility of the purchaser and/or end user. Always refer to materials handling instructions and safety documentation when using this or any other material. ©2023 Conductive Group.