Nickel Coated Fibers - Precision Chopped (PCF)

Conductive Composites has developed a proprietary Chemical Vapor Deposition (CVD) coating process where fibers are coated with a very thin, robust, and ductile film of pure nickel. Our process produces a conductive fiber with superior handling properties and excellent conductivity/shielding capabilities. Through a Precision Converting Process, these fibers are converted into short, precise, millimeter and sub-millimeter coated fiber lengths. This provides our customers and partners with a high-performance structural and conductive additive that is both lighter and longer than typical nickel coated graphite powder. Due to their precise lengths and easy dispersion, precision chopped fibers are very effective and economical as a conductive additive for paints, gaskets, sealants, molding compounds, and adhesives.

Precision Chopped provides a consistent structure for superior dispersion in the product material

Precision Chopped Fiber (uniform length & coating)

Milled Fiber (non-uniform length and loss of coating)

Surface Resistivity of Precision Converted NiCVD Coated Carbon Fiber (PCF) in ABS/MEK polymer films
Precision Chopped Fiber

- Light weight, high strength, high aspect ratio
- Uniform coating on fibers
- Easy insertion into existing systems
- Increased conductivity & shielding performance
- Improvements in strength & structural integrity through lower loading levels
- Integrates easily into high volume manufacturing systems
- Improved capabilities of flexible plastics & composites manufacturing
- Improved corrosion resistance
- Lower density than nickel coated graphite