Custom Magnetic Products for Renewable Energy Applications

The exponential growth in the renewables market has allowed Us at MK Magnetics, Inc. to become a major supplier of cores for transformers and low loss inverter and converter filter cores to this dynamic industry. Our products support solar and wind projects around the globe and include thermally stable, multiple -cut amorphous and nanocrystalline cores as well as large stacked and bonded assemblies. From small planar cores to cores weighing as much as 4,000 lbs. Our success in this market is built on a reputation for delivering standard and custom products that can meet the requirements of a broad range of applications. This is possible through advanced design capabilities and manufacturing processes that are at the forefront of the magnetics industry.

MK Magnetics' tape wound cores can be manufactured with multiple cuts and from various alloys such as silicon steel, amorphous, and ultra-low loss nanocrystalline. Manufacturing processes include computer-controlled annealing lines that take place in tightly controlled atmospheric conditions. We also utilize cutting edge insulative coatings and high strength, high-temperature proprietary bonding epoxies that provide superior quality bonds.

A key element in all of our manufacturing processes is quality; we operate an ISO 9001:2008 certified facility and conform to EIA standard RS 217 as a standard practice. Our comprehensive development to delivery solutions include volumes that range from a single prototype to long-term contract manufacturing. The value that we offer has allowed our products to be deployed in renewable applications that range from power generation to transportation.

To learn more about our full capabilities for renewable energy magnetics, see the table below or contact us directly.

Custom Magnetic Products Case Study Highlights

Project Name & Description	Low Core Loss Inverter & Converter Filter Cores and Step Up Transformers
Capabilities Applied/Processes	• Custom computer-controlled annealing and atmospheric conditions for optimal annealing of our cores • Superior bonding and cutting technology
Overall Part Dimensions	Ability to manufacture from small planar cores to very large cores in excess of 4000 lbs.
Tightest Tolerances	± EIA Standard RS217 typical or as required
Material Used	Any of our electrical steel material, from higher loss cost effective Silicon Steels and amorphous to ultra-low loss Nanocrystalline
Industry for Use	Photo Voltaic (PV) Solar Energy, Wind Power Generation, Green Energy, Battery Chargers, Electric Hybrid Vehicles: Automobiles, Buses, Mass Transit, Motorcycles, Ships, Submarines, Locomotives
In Process Testing/Inspection Performed	Core loss and other specialized magnetic testing as required
Volume	From prototypes to mass production
Delivery/Turnaround Time	Typical 3 - 4 weeks with expedited delivery available
Delivery Location	Worldwide
Standards Met	ISO 9001:2008