

Standard & Custom Tape Wound Soft Magnetic Cores

As an industry leader in the design and manufacturing of tape wound soft magnetic cores, we are in a unique position to identify industry trends and changing customer needs. Early on in our history, we recognized a deficiency within the industry for custom manufactured tape wound soft magnetic cores. Although our lines of standard products are extensive, the increasing shift towards custom designs was an area of that required a solution. To accomplish this, we assembled a team of highly experienced tape wound core veterans with the goal of augmenting standard cores with highly customizable products. Superior Engineering and Customer Service Support are an inherent part of this process which allows us to manufacture cores that provide maximum performance. From innovative engineering to cutting edge materials such as nanocrystalline, various amorphous materials, 3% grain-oriented and 6.5% non-oriented silicon steel, 50% and 80% nickel materials, Supermendur, and many other highly specialized materials.

Another key advantage of this service is the flexibility of manufacturing capabilities. Within our facility, we can build cores weighing from .002 up to 4,000 lbs. +, and in dimensions up to 7.5' in height by 4' in width, depending on overall geometry. They can be configured as C, E, and pie type D-cores, cased and uncased toroid, bars, and a variety of custom shapes. We also have the flexibility and expertise to develop custom processes to accommodate virtually any core design with no restriction on volume. This is comprehensive offering and is backed up by a robust quality program and a full range of in-house testing capabilities, providing compliance with various industrial standards. We can typically begin delivering in 3-5 weeks with expedited deliveries available.

For more information, please see the table below or [contact](#) us directly.



Standard & Custom Tape Wound Soft Magnetic Core Capabilities

CAPABILITIES	Rapid Prototyping Custom Cores Custom Processes Multiple Cut Cores Engineering Support Design Support	Rapid Quoting Test Lab 70,000 sq. ft. Campus Stocking Programs -JIT -KANBAN
CUSTOM & STANDARD CORE CONFIGURATIONS	Tape Wound Cores / Cut Cores <ul style="list-style-type: none"> • C-Cores • E-Cores • Uncased Toroids including: Epoxy Coated, Cut in Half, Gapped, etc. • Cased Toroids including: Machined Nylon, Injection Molded, Aluminum, 	<ul style="list-style-type: none"> • etc. • Pie Type 3-phase Cores, • Bars • Other Custom Shapes • Other Special Configurations Available
PRODUCTS	Tape Cores Tape Wound Cores C-Cores (Single Phase) E-Cores (3-Phase) Toroid Cased Toroid, Gapped Toroid	Stacked Assemblies Custom Cores Custom Assemblies Multiple Cut Cores Epoxy Coated Cores Optiffluent Cores
CAPACITY	Small to Very Large Weights from .002 to 4,000 lbs. Sizes up to 7.5' tall and 3' wide Single piece production to 1M+	
MATERIALS	<ul style="list-style-type: none"> • Nanocrystalline • Prime DFARS Compliant, Finemet FT3, Vitroperm800 • Metglas® Inc. Finemet® FT-3W 5.6" wide, DFARS Compliant US Manufactured • DFARS (Defense Acquisition Regulations System) • Amorphous Materials • Metglas® 2605SA1 Material • Industry Standard Series • Optiffluent Core Series: Ultra-Low Loss Amorphous Cores • 2714 Cobalt-Based Amorphous • 3% Grain-Oriented Silicon Steel 	<ul style="list-style-type: none"> • Materials (GOS) • High Flux (17.6 KG) • Standard Flux (15.0 KG) • 80% Nickel Materials • Supermalloy • Permalloy • Square Permalloy • 50% Nickel Materials • Square Loop • Round Loop 4750 • Supermendur®, Cobalt-Iron High Flux Materials • 6.5% Non-Oriented Silicon Steel Materials • Other Specialized Materials

APPLICATIONS	Transformers Inductors Chokes Filters Converters Inverters Sensors C/Ts	Common Mode Chokes Pulse Transformers Antennas Magnetometers Motor Stators and Back Iron Solenoid Energy Harvesting
TESTING	Full Magnetics Test Laboratory Core Loss 3 Phase Testing CCFR (Constant Current Flux Reset) BH Loop	Magnetizing Current Inductance Pulse Testing Magnetic Amplifier Core Matching
PRODUCTION VOLUME	Prototyping to Production Low Volume High Volume *No minimum Order	We can typically begin delivering in 3-5 weeks with expedited deliveries available.
MARKETS SERVED	Aerospace Automotive Radar Military Medical Devices Medical Imaging Solar Wind Energy Storage Smart Grid Industrial Controls Oil and Mineral Exploration Directional Drilling Railroads and Locomotive Magnetic Levitation	Particle Accelerators Fusion Power UPS (Uninterruptible Power Supplies) Telecommunications Satellite Space Vehicle Welding Microwave Transmitter Hybrid Electric Vehicles <ul style="list-style-type: none"> • Automotive • Buses • Ship • Aircraft
INDUSTRY STANDARDS	ANSI (compliant) ASTM (compliant) ISO 9001:2015 ITAR DFARS	Mil-Spec (compliant) EIA Standard RS-217 REACH RoHS