CUSTOM COIL SOLUTIONS



FOR INDUSTRIAL TECHNOLOGY

Over a decade of experience in thermoplastic and thermoset molding from bobbins to total encapsulation. Materials include nylon, polypropylene, polyester, PBT and custom- formulated molding compounds. Industries served include: aerospace, military, automotive, nuclear, marine and communications.





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OVERVIEW

Coils surpass the rigid standards of the nuclear and military industries in the United States, Europe and Japan.

Engineering assistance for application requirements

Will help design latest in pin or insulation displacement terminal technology

Environmentally friendly bobbin molding and over molding with inserts using the latest Dupont[®] technology

Automated coil manufacturing equipment as well as handcrafted units

SPC collection, charts shared with customers

Computerized coil winding, ultra-fine wire

Cellular manufacturing with guick lead times and KANBAN pull systems

Facilities are available for R&D and prototyping

Nuclear industry-certified, high-temperature paper section coils

Open pot molds, vacuum impregnation and thermoset materials

UL Yellow Card Class B to H; Class N materials for special needs

Wire sizes from #2 to #58

PCB and/or component integration into encapsulation

Internet site for electronic data transfer of production data

APPLICATIONS

Each application requires unique expertise. Military guidance system and sensors are wound with fine wire (thinner than 38 AWG), often under a microscope. Fluid control coils are usually over molded while cellular manufacturing and design for automation are important cost containment procedures. Switchgear, clutches, and large electromechanical brakes require a robust design capable of dealing with adverse environments, and part feeding and motor-control coils must withstand a constantly vibrating operation.

Fluid Control Valves	
Oxygen Monitoring Systems	
ISA Bus Control Valves	
Proximity Sensors	
Naval and Industrial Switchgear	
Industrial Clutches and Brakes	
Nuclear Fluid Control	
Relay and Motor Controls	
Instruments – Fluid Measurement and Analog	
Fire Suppression System	
Part Feeding/Automation Equipment	
Electro-Magnetic Security Systems	
Vehicle Wash Systems	
HVAC Stator Encapsulation	
Railroad Signaling and Control	
Harness Assemblies with or without Coils	















Fin^{e-wire} Coils wound with 38-58AWG magnet wire, usually a miniature coil or involving more than one type of wire wound in a complex manner.

Encapsulated Coils Provide an external seal and insulation from environmentunintended electrical conductors

Tape Wrapped Coils "Dry" coils used in guidance, proximity sensor, medical, optical, and relay technology.

Liquid Epoxy Coils Used in applications requiring over molding, such as switchgear, outen as switch year, clutch and brake coil, and motor control coils.

Paper Section Coils Uses mica paper to insulate each layer of copper wire for applications in nuclear power, mining and ignition coils.

Part Feeding Coils Electromagnets with coil and laminations, vacuum-impregnated with epoxy

Value-added Assemblies PCB assembly



ENCAPSULATIONS INCLUDE

Whether your needs are for a thermoplastic, thermoset, liquid pour or varnish encapsulation, Classic can deliver.

Injection, transfer, liquid moldings, and varnish impregnations

Specialty in paper section coils

Special coils used in all types of instrumentation

QUALITY AND PERFORMANCE

Customer awards for quality and on-time delivery Fast turnaround and flexible production schedules Quick response time from initial quote through delivery Dedicated team with expertise in specialty needs Certified KANBAN supplier Certified JIT vendor to Fortune 500 companies

Standard inspection methods or customized for every need: Resistance, Dielectric, Current, Surge, Turns Count, and Inductance

> Size doesn't matter; Classic can do it all

ENGINEERING ASSISTANCE

Classic Coil is happy to offer engineering assistance as a service to our clients. Our engineering staff stands ready to work with you through each step of the process to optimize your coil design for functionality and low cost. It all starts with understanding your product's environment through to first production runs. We follow Advanced Product Quality Planning (APQP) guidelines for product development.

For qualified projects, we make prototypes at a minimum charge plus any out-of-pocket tooling costs.

OUR BACKGROUND AND MISSION

Classic Coil Company was founded in 1973 and, always maintaining its original excellence, has grown and expanded to meet the needs of its clients. Over the decades, our business leaders have followed a philosophy of continuous improvement, ensuring manufacturing efficiencies to keep costs down and negotiated supply contract terms to benefit our customers. We remain innovative, incorporating new technologies, upgrading equipment and software, and exploring new products and markets. We believe in tapping into the long-term knowledge



Engineering assistance categories include:

- Bobbin Design
- Magnet Wire & Lead Wire Selection Magnetic Path Components Encapsulant Decisions CAD Component Files Materials Selection

Above: CAD programs for all file types to assist in the engineering phase of projects

of our employees, many of whom have been with the company since its inception. Our capabilities and philosophy give us an edge in today's very competitive marketplace, an edge that can assist you with all of your electromagnetic coil and assembly needs.



At left: Company headquarters in Technology Park, Bristol, Connecticut



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