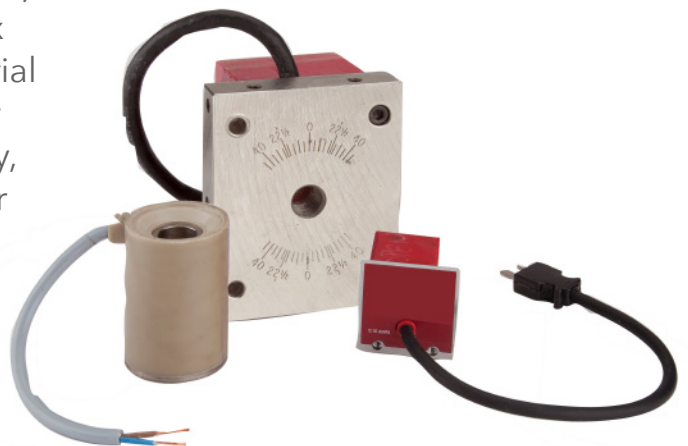


# CUSTOM COIL SOLUTIONS



## FOR AEROSPACE AND MILITARY TECHNOLOGY

Experts in fine-wire (to 58 gauge) precision windings for complex Aerospace, Military and Industrial Coil applications. Manufacturer of aerospace, industrial, military, nuclear, medical, marine, motor stators and communications industries.



# CUSTOM COIL SOLUTIONS FOR AEROSPACE & MILITARY TECHNOLOGY

## OVERVIEW

Fine-wire (to 58 gauge) precision windings for complex Aerospace and Military applications
Gyroscopes
Accelerometers
Military Ordinance
Guidance Systems
Munitions
Sensors
Night Vision
Tactical Weapons
Fire Controls
ITAR Compliant
J-STD-001 Soldering
Value-Added Assemblies, Connectors, Flex Circuits

## APPLICATIONS

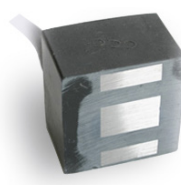
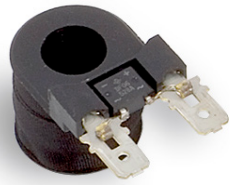
The coils we manufacture are used in applications from SBD armaments to human implantable devices as well as in every possible industrial environment.

## TECHNOLOGY

Classic Coil Company has developed proprietary Micro Coil Technology,
Precision windings under microscopes
Wire sizes #2 to #58
NASA Soldering Specification 8739.3 & J-STD-001
Computer-aided LCD-vision metrology inspection procedures
Value-added assemblies, lead wires, flex circuits with coils, connectors
Molding, vacuum-impregnating, transfer and liquid molding
ITAR Compliant
Tight tolerances for mission-critical applications
Fast turnaround for prototypes and small lot samples

## MATERIALS

We can produce just about any configuration of coil that you may need. Exotic materials such as gold, platinum and copper-clad aluminum have been used in our products.
We are not limited by size or configuration
2 to 58 gauge wire
Air coils, bobbin coils, ovals, rectangles and custom configurations
Gold wire
Silver wire
Platinum wire
Flex circuits soldered to coils
Over molding, liquid epoxy, vacuum-impregnation, transfer molding
Litz wire
Paper section coils for the nuclear industry



**Fine-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 environment-unintended 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, 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

**Torroid Coils**  
Used in electronics industries and other special applications

## CAPABILITIES

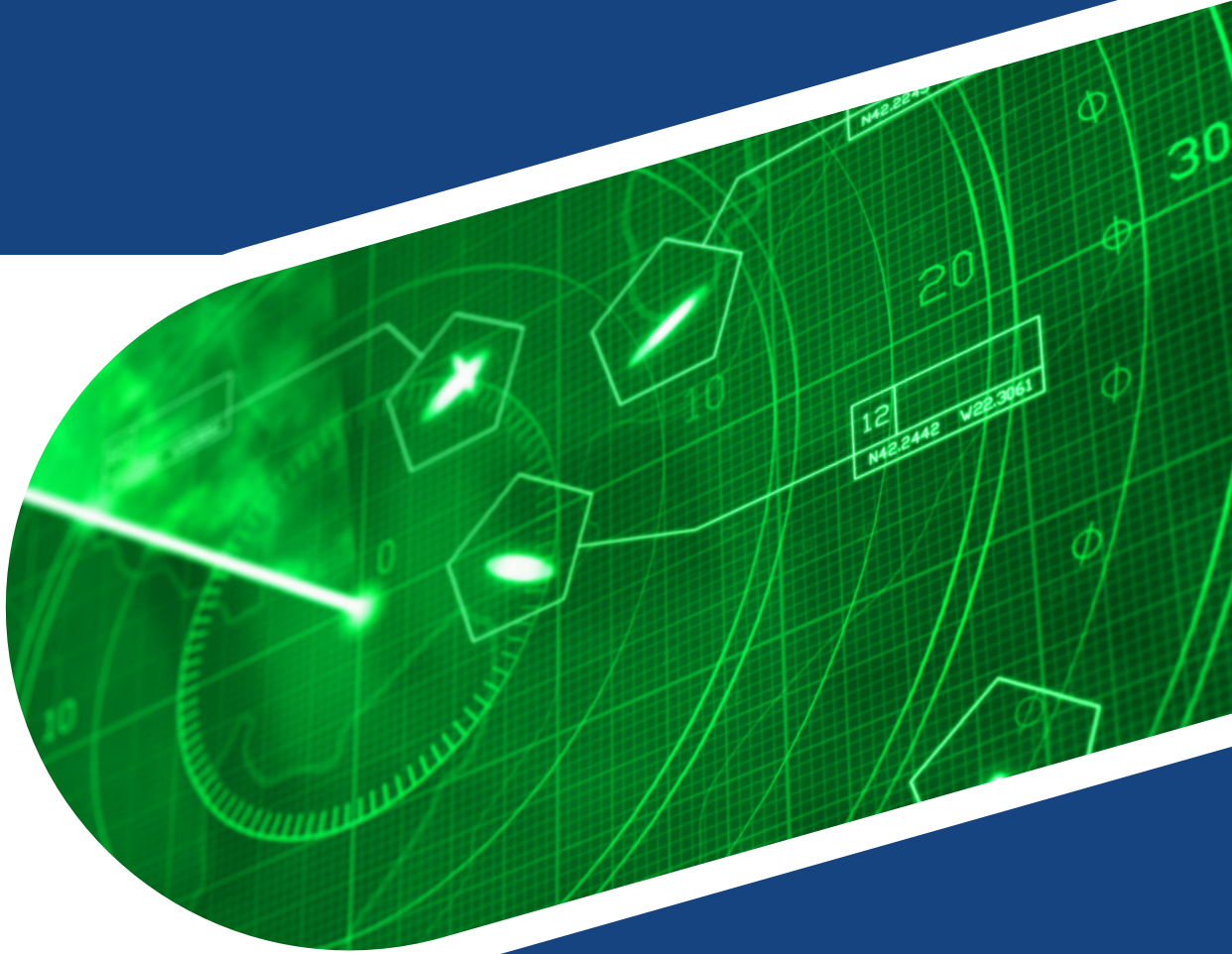
Classic Coil has the equipment and personnel to meet all of your most demanding requirements.
Semi-clean coil fabrication, testing and packing facility
Closed loop single- and four-spindle, computer-controlled winding machines capable of perfect layer winding and microscope-equipped operators
Precision fine-wire tension devices
Fine-wire stripping processes
Microprocessor-controlled tinning, soldering and secondary assembly stations
Microprocessor-controlled ovens and freezers
CCD camera-equipped microscopes with 20" LCD viewing monitors for inspection, training, and dimensional confirmation
Solid-state, multi-megahertz, multi-functional frequency testing instruments

## QUALITY ASSURANCE

ISO 9001:2015 Certified
J-STD-001 and IPC-A-620 Certified operators and inspectors
Nuclear power industry certification
Numerous aerospace awards for quality
Hold tolerances to +/- (.0005") to (.0127mm)
CCD camera-equipped microscopes for inspection and dimensional confirmation



Size doesn't matter; Classic can do it all



Specialized coils for military guidance and control systems



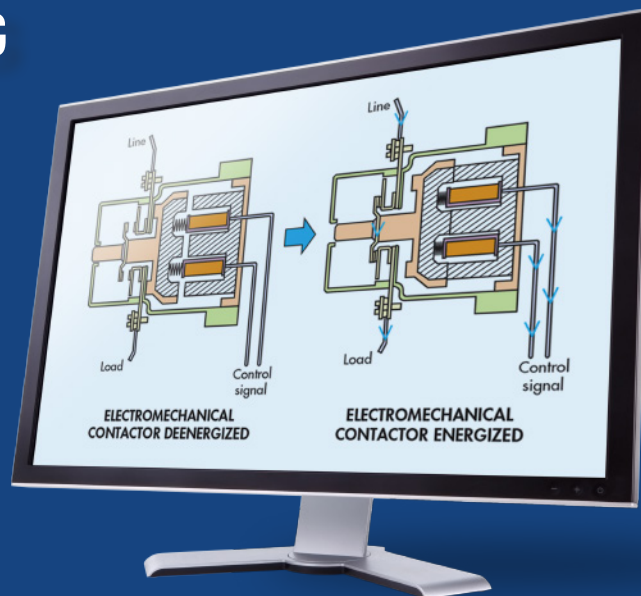
# ENGINEERING ASSISTANCE

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: Our engineering department utilizes a variety of CAD and engineering programs to assist in the design, construction and performance of your products.

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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