



The Permanent Magnets and Assemblies Division of Arnold Magnetic Technologies manufactures and assembles Bobbin Wound Coils with a wide array of options to suit customer specifications. Produced in Arnold's China facility, these coils are easily able to be shipped worldwide.



BOBBIN WOUND COILS

Bobbin Wound Electromagnetic Coils

Arnold offers precision layered or random wound coils engineered to meet your design requirements. Our custom engineered coils use high quality, bondable magnet wire to reach the electrical specs you need and keep your design as small as possible.

Bobbin wound coils are available in standard or custom bobbin sizes, in a range of plastic and injection molded materials. Choices are available in magnet wire sizes, insulation, pins or displacement terminals and other components.

Dimensions

Automated Winding

	No Manual Intervention		With Manual Intervention	
	metric	imperial	metric	imperial
Wire Size:	0.6-2.0(mm)	~#12-22 AWG	0.4-1.0(mm)	~#19-46 AWG
Max Winding OD: (Outside Diameter)	150(mm)	5.91 in	100(mm)	3.94 in
Max Axial Length:	133(mm)	5.24 in	100(mm)	3.94 in

Testing & Quality Control

Lead-free soldering of joints is performed in a temperature and humidity controlled environment. Typical solder used is BS EN 29453:1994 Grade 95A, 96S, 97C, 99C with a melting temperature of >200°C.

Coils are certified after completion by:

- ♦ Resistance
- ♦ OD of winding
- ♦ Voltage and time of Voltage test

Applications

- ♦ Active Engine Mounts
- ♦ Fire/Safety Electromagnetic Door Holder
- ♦ Reed Switches
- ♦ Audio Components
- ♦ High Frequency Magnetic Amplifiers
- ♦ Ham Radios
- ♦ Harmonic Generators
- ♦ Emission Controls
- ♦ Transformers
- ♦ Hydraulic Valves
- ♦ Compressor Clutches
- ♦ Oscillators
- ♦ Flux Gate Magnetometers
- ♦ Pulse Transformers

Encapsulated Coils

Coils can be coated with durable, temperature resistant varnish/ thermoplastics, chosen to suit your design's specific max temp requirement. This will protect your coil assembly from moisture, corrosion, vibration and other harsh conditions.

Capabilities

- ♦ Coated Copper – type of varnish specific to max temp requirement
- ♦ Terminations & Lead Wires as required
- ♦ Injection molding of bobbins
- ♦ Finished assemblies