

Coil Cord Solutions

Winchester Interconnect™ designs and manufactures coil cords and coil cord assemblies to the most stringent reliability and performance specifications. For more than 50 years, Winchester coil cords have provided dependable service in diverse military, medical, industrial, geophysical, commercial aviation, portable power, and lighting applications.

Standard and Custom Coil Cords

Between our standard and custom products, Winchester offers coil cord options for every application. Among the options:

- Ruggedized materials such as flex-resistant PVC and polyurethane formulations
- Effective shielding including foil, spiral, and reverse spiral constructions
- Performance specifications including retractability, pull force, flex life, chemical resistance, and operating temperature
- Wide size range, from wrist-worn coil cords for static control to thick retractable cords for industrial or military machines
- Connectorized coil cord assemblies, both mechanical and overmolded designs
- Unique Over Molded Epoxy Backshell Design Capabilities
- Impedance controlled Rigid Flex Nano Assemblies



Advanced Coil Cord Design and Testing Capabilities

Get coil cord design help from Winchester! Aren't sure what is needed? Contact our experienced engineering team with your most difficult design challenges.

Winchester maintains an in-house test lab that can evaluate coil cord performance characteristics – including flex life, retractability, and pull strength. And if you need a custom test for your coil cord, we can help develop one.

Electrical Testing

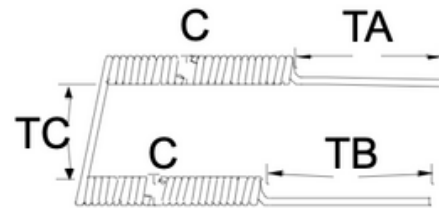
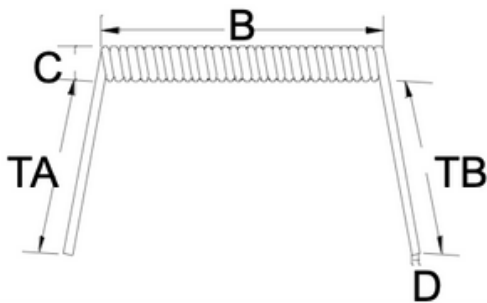
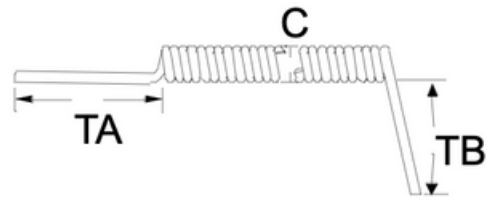
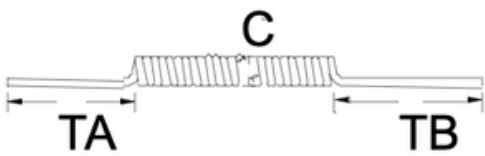
- Hi-Pot
- V/Time
- Spark
- DCR
- Impedance
- Category
- Capacitance
- Attenuation
- Eye Pattern
- Cirrus Test

Mechanical Testing

- Hi-Pot
- V/Time
- Spark
- DCR
- Impedance
- Category
- Capacitance
- Attenuation
- Eye Pattern
- Cirrus Test



Coil Cord Capabilities



Auto Traverse Coil Limits

Coil Body Length: 44" MAX COIL TO LENGTH
Tangent A Length: 39" MAX
Tangent B Length: 3-48" but can go longer than 48"
Mandrel Diameter: .500" MAX
Cable Diameter: .375" MAX

Industrial Auto Coil Limits

Coil Body Length: 74" MAX COIL TO LENGTH
Tangent A Length: 16" MIN
Tangent B Length: 3-48" but can go longer than 48"
Mandrel Diameter: .500" MIN
Cable Diameter: TBD

Manual Traverse Coil Limits

Coil Body Length: Approximately 96" (exceptions where the mandrel is flexible enough to bend into a u-shape)
Tangent A Length: 240" dependent on weight and flexibility of cable
Tangent B Length: UNLIMITED
Mandrel Diameter: Max approximately 15"
Cable Diameter: Max approximately 1"

- ➔ Coil retraction compound selection 'snappiness' from fastest to slowest:
Hytrell, Polyurethane, Santoprene, Pebax, PVC
- ➔ Retraction will be influenced by: Conductor Count, AWG, Insulation and Cable construction
- ➔ Custom cables designed for your application - coil cords from 1 inch to 100 feet or more extended coil length