

To design and manufacture high quality RF ferrite micro-coils requires:

- **High-Grade Ferrite Materials**
  - Global Coils has an established network of ferrite material suppliers. With multiple qualified partners, we provide the security of reducing your reliance on sole sources.
  - Access to pressed, molded, or extruded ferrite parts in standard or custom geometries.
  - Access to wide variety of ferrite properties with frequency ratings to 100MHz and beyond for inductive applications, low loss factors, temperature stability, wide ranges of permeability and resistivity, etc.
- **Control of Tolerances**
  - Tight electrical tolerances in a finished coil begin with the tightest tolerance control of the ferrite. Global Coils offer multiple means to control tolerances.
  - Unmatched precision machining – Global Coils has in-house capabilities to machine ferrite materials to tolerances that are not available from any standard ferrite suppliers.
  - Hi-speed automated sorting – If precision machining is not an option due to geometry or material properties, Global Coils has high-speed, automated sorting to optimize winding profiles based on individual core properties.
- **Precision Winding**
  - Global Coils can wind wire as fine as 10 micron in single or multiple layers.
  - Precise wire positioning.
  - Ability to accommodate a wide variety of bobbin/core geometries.
- **Experience, Engineering and Testing**
  - Experience since 1974 in the design and manufacturing of miniature telecoils for Hearing Health.
  - The founders of Global Coils were the pioneers of industrial RFID product in Europe beginning in 1979. This led to high-volume production for the automotive industry. Leveraging on this RF experience and high volume manufacturing capability, Global Coils has successfully worked with leaders in the Hearing Health market to develop custom, high frequency RF coils for high-running products.
  - Variety of protective coating options available – clear or opaque, flexible or rigid, dip coated or vacuum deposition, etc. – to suit a wide range of environmental requirements.
  - Various packaging configurations – leaded, thru-hole, surface mount, etc. – utilizing soldered or TC welded connections to ultrafine winding wire.
  - Test capability from audio to RF frequencies for most electrical properties – R, L, Q, magnetic sensitivity, self-resonant frequency, etc.
- **Production Capabilities**
  - Multi-spindle, high-speed winding equipment available to satisfy high-volume requirements.
  - Array handling of parts through multiple operations.
  - Automated dispensing systems for cements, solder pastes, etc.
  - Operators trained and experienced in miniature coil fabrication.
  - Off-shore production facilities to minimize cost.
  - ISO 9001:2008 Certified