



# 503 Single Filar Coil Winder

EBD Coil winding technology is developed specifically to wind micro coils for minimally invasive medical devices. Our coil winders can wind coils down to .001" diameter wire on a .010" mandrel using our innovative closed-loop filar tension control system. The machine flexibility enables the filar tension to be recipe controlled from 5 grams to 600 grams during the entire wind.



## KEY FEATURES

- Winds stacked (tight pitch) or loose (variable or fixed pitch) coils on a spinning mandrel.
- Right chuck position can be adjusted to get variable mandrel lengths.
- Mandrel length is part of the recipe setting and travel is limited accordingly.
- Up to 250 process recipes can be stored and shared between the two wind heads.
- Recipe edit menu allows up to 30 repeating combinations of any pitch, angle, direction, speed, tension and length.
- Recipe steps can ramp pitch between set points (plus angle ramp with vision option).
- Displays of parameter set points and actual values.
- Records of mean & 2xSTD deviation of all measured variables on each wind.
- Filament slack control that maintains tension at all wind speeds.
- Brushless servo drives on traverse and both ends of mandrel (no back shaft).
- Alphanumeric color touchscreen display for program entry and status displays.
- Acrylic enclosure panels with light curtain to isolate each winder operation.
- Ethernet communication for remote monitoring & program update capability.
- Color monitor display of B/W vision-based angle measurement (vision option only).
- DIN 80 filament Supply Spool Capable

## SPECIFICATIONS

- Input power: 208-240 VAC, single phase, 50/60 Hz. Full load 16A, 20A service
- Weight: 1,200 lbs (544 Kg)
- Dimensions: L x W x H = 115" x 29" x 76" (292 x 73 x 193 cm) (with monitor)
- Mandrel size: .250" Diameter max
- Travel: adjustable 0" to 70" (177cm) with suitable winding accessories
- Filament size: .001" to .015" round solid or tube, or ribbon, metal or plastic
- Wind speed: up to 75 rps and 10 in/sec traverse speed
- Filament tension: configurable ranges from 5 g min up to 75 g max
- Mandrel tension: configurable ranges from 45 g min up to 32 Kg max
- Mandrel length: adjustable from 21" to 74" (54 to 188 cm)
- Optional angle control: +10° / -30° with +/- 0.02° resolution
- Compliance: built to CE and NFPA 79 standards



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