

# 500

# **BROOMFIELD**

Advanced Coil Winding Systems

## Heavy-Duty Coil Winding Machine

The **Broomfield 500 Series** is a three-speed coil winding machine that is often used for winding larger diameter coils at lower speeds. In its headstock only configuration, the 500A is a very rugged and economical choice for hand winding.



### Features & Benefits:

- Three models available:
  - 500A:** Winding headstock
  - 500B:** Winding headstock with tailstock mounted on precision ways
  - 500C:** Winding headstock, tailstock on precision ways, and automatic wire traversing mechanism
- Three speed ranges with variable speed within each range (maximum speed of 85 RPM)
- Electrically actuated disc brake for positive stopping.
- Electronic wire guide traverse. Two precision layering styles are provided, parallel and spiral (500C).
- Set-up time is minimized by the use of electronic controls for precisely setting wire pitch and stopping at the desired turns count (500C). The operator only needs to enter this data and set the winding width stops.
- Reverse bend system eliminates need for pounding wire or pressing coils into shape, producing tighter coils and using less wire (500C).
- Easily adaptable for coil winding single or multiple coils.

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# Heavy-Duty Coil Winding Machine

**Motor Equipment:** 2HP (1.5Kw) AC Vector motor and drive with foot controlled variable speed.

**Faceplate:** 14" (356mm) diameter

**Primary Reduction:** Belt and pulley

**Secondary Reduction:** Gear reducer

**Spindle Speeds & Corresponding Torques:**

0-14 rpm 750 ft-lbs 1017 Nm

0-50 rpm 210 ft-lbs 285 Nm

0-85 rpm 121 ft-lbs 164 Nm

**Power Requirement:** 220 Volt, three-phase, 20 amps

*Other voltages are available*

**Spindle Rotation:** Either direction can be selected by a switch on the control panel

**Spindle Center Height:** 43" (1092mm) from the floor.

**Brake:** Electromagnetic spring-set disc brake operated by removing foot from variable speed control, by total turns counter, or by emergency stop button

**Tailstock:** Mounted on precision ways to allow positioning anywhere along winding axis. 4" (102mm) quill travel and 60° live center in number 3 morse taper.

**Maximum Distance Between Centers (500B and 500C):** 42" (1066mm)

**Maximum Swing Diameter:**

**500A:** 83" (2107mm)

**500B and 500C:** 63" (1599mm)

**Weight:**

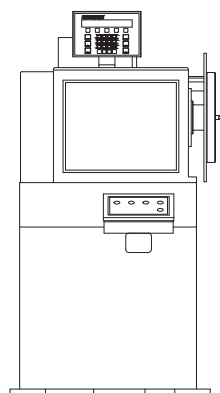
**500A:** 1500 lbs. (682Kg)

**500B:** 2500 lbs. (1136Kg)

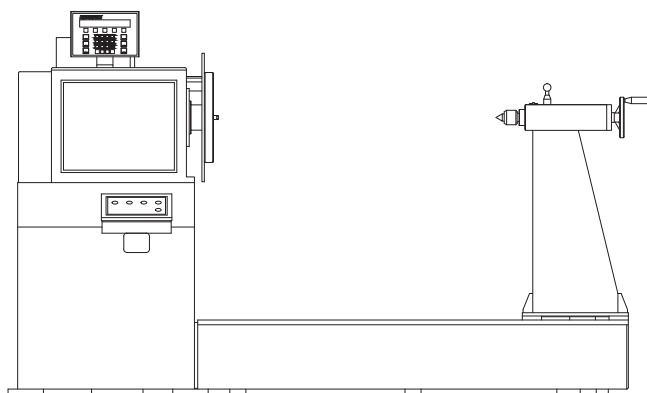
**500C:** 3900 lbs. (1773Kg)

**Options:**

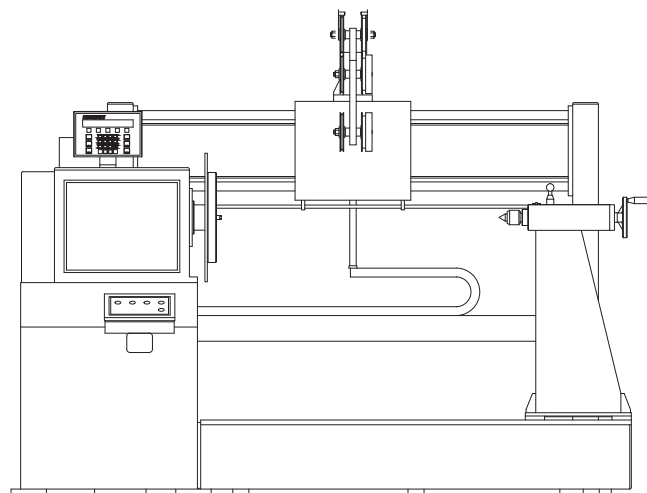
- Broomfield MP-5S controller automatically coordinates coil winding functions and provides for program storage
- 3HP (2.24Kw) or 5HP (3.7Kw) spindle motor
- Multi-wire guide assembly
- Pulleys for square and rectangular wire
- Winding area guard
- Paper insulation dereelers/tensioners
- Multiple coil winding



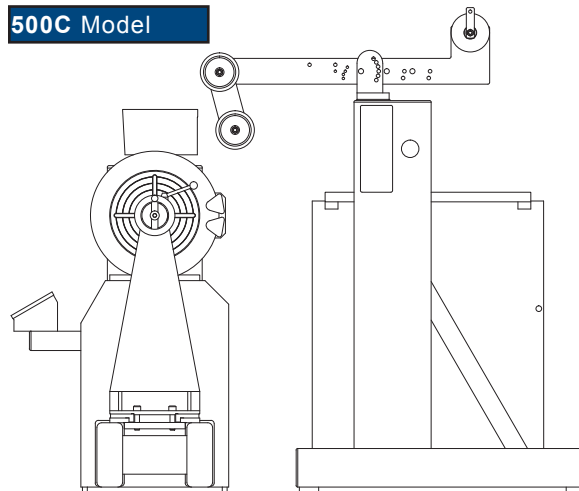
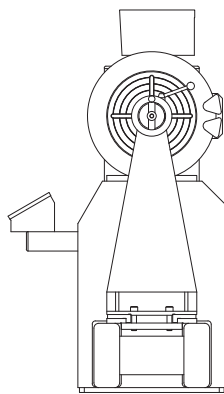
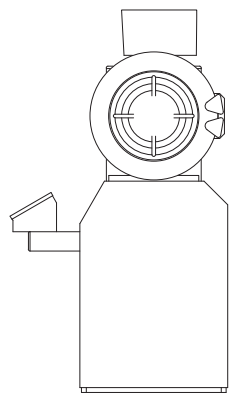
**500A Model**



**500B Model**



**500C Model**



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