

MACHINE BUILDING CAPABILITIES

GENERATOR WINDING MACHINES

Generator Winding Machines

- Winders and tooling dedicated to winding generators
- Wire guide systems that reduce hand work and lay wire flat
- Constant wire tension for better balanced rotors
- Controls that work with shaded or skewed stacks



MOTOR WINDING MACHINES

Many models to choose from:

- Form coil stator windings
- Multi-slot fixture winding
- Pole winding
- Specialty motor winding
- Basic headstock winders or with automatic precision wire guiding
- Up to 60 station multiple wire payoff systems



ARMATURE BANDING MACHINES

High tension banding

- Various sizes and models to choose from
- Digital live tension readout
- Multiple speed and torque options
- Material heating and sensing option



TRICKLE MACHINES

For armatures and stators

- Many standard models provide for up to 9.0" (228mm) diameter armatures and stators
- Applies resins and coatings to armatures and stators
- Programmable multi-zone oven for preheat and cure
- PLC control
- Part temperature sensing
- Accurate resin application



COIL FORMING MACHINES

Many models to choose from:

- Fanuc 8 axis high speed programmable machine control
- Programmable servo axes for coil shape and size
- Hydraulic axes for clamping coil Handwheel self-centering screw axis for side clamp position
- Two hand safety control push buttons to spread coil
- Heavy welded steel construction



Constant Tensioner Dereelers

- Requires no integration with a winding machine
- Constant wire tension
- Accommodates winding machine acceleration and deceleration
- Dancer carriage accumulates wire and reduces negative effects from high-speed winding on rectangular coils

BUILDING MORE MACHINE OPTIONS



John Broomfield
Company Founder



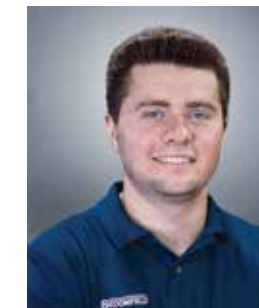
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BUILDING MORE MACHINE OPTIONS

WIRE WINDING MACHINES

100 Wire Winding Machine

- For coils up to 10" (254 mm) diameter
- Wire size range 38 AWG –15 AWG (.1 mm – 1.5 mm)
- Four speed ranges with variable speed within each range (Max. speed 5,250 RPM)
- Electronic wire guide system
- Easily adaptable for winding single or multiple coils

200 Wire Winding Machine

- For coils up to 18" (457 mm) diameter
- Wire size range 30 AWG – 7 AWG (.25 mm – 3.6 mm)
- Six speed ranges with variable speed within each range. (Max. speed 600 RPM)
- Electronic wire guide system with reverse bend pulleys
- Easily adaptable for winding single or multiple coils

350 Wire Winding Machine

- For coils up to 28" (711 mm) diameter
- Wire size range 22 AWG – 4 AWG (.64 mm – 5.2 mm)
- Four speed ranges with variable speed within each range (Max. speed 535 RPM)
- Electronic wire guide system with reverse bend pulleys
- Easily adaptable for winding single or multiple coils

400 Wire Winding Machine

- Three models – manual or automatic winding
- For coils up to 63" (1,600 mm) diameter (Model 400B)
- Wire size range 22 AWG – 4 AWG (.64 mm – 5.2 mm)
- Eight speed ranges with variable speed within each range (Max. speed 590 RPM)
- Electronic wire guide system with reverse bend pulleys (model 400C)

450 Wire Winding Machine

- Built for manual winding
- Handles coils up to 63" (1,600 mm) diameter
- Custom speed ranges and torques available
- Optional programmable touch-screen counter

500 Wire Winding Machine

- Three models – manual or automatic winding
- For coils up to 63" (1,600 mm) diameter (Model 500B & C)
- Wire size range 10 AWG – 1 AWG (2.6 mm – 7.3 mm)
- Three, variable speed ranges (Max. speed 85 RPM)
- Handles coils up to 8,000 lbs (3,600 Kg)



WIRE WINDING MACHINES (CONTINUED)

600 Wire Winding Machine

- Three models – great versatility heavy and fine wire
- For coils up to 63" (1,600 mm) diameter (Model 600B & C)
- Wire size range 10 AWG – 1 AWG (2.6 mm – 7.3 mm)
- Four speed ranges in gearbox (Max. speed 390 RPM)
- Handles coils up to 8,000 lbs (3,600 Kg)

700 Wire Winding Machine

- Three models – manual or automatic winding
- For coils up to 63" (1,600 mm) diameter (Model 700B & 700C)
- Wire size range 6 AWG – (4) x 1 AWG (4 mm – 7.3 mm x 29 mm)
- Custom speed ranges and torques available, up to 3,500 ft-lbs (5,400 Nm)
- Handles coils up to 6,800 Kg (15,000 lbs)

800 Wire Winding Machine

- Three models – versatility for power and speed
- For coils up to 74" (1,880 mm) diameter (Model 800B & 800C)
- Wire size range 12 AWG – (4) x 1 AWG (2 mm – 7.3 mm x 29 mm)
- Four (4) speed ranges in gearbox (Max. speed 120 RPM), torque to 5,200 ft-lbs (7,100 Nm)
- Handles coils up to 30,000 lbs (13,600 Kg)

900 Wire Winding Machine

- Three models – manual or automatic winding
- For coils up to 74" (1,880 mm) diameter (Model 900B & 900C)
- Handles coils up to 30,000 lbs (13,600 Kg)
- Up to 144" (3,600 mm) between head and tailstock
- Custom speed ranges and torques available, up to 15,000 ft-lbs (20,300 Nm)

MRI WINDING MACHINES

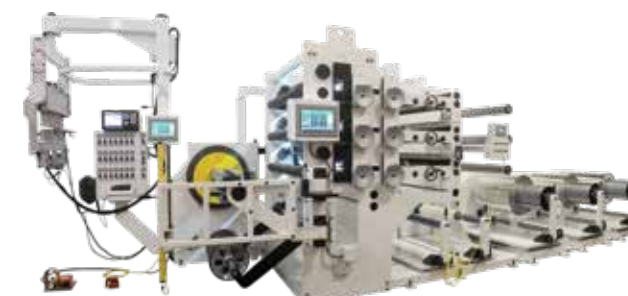
A variety of models to choose from:

- Constant tension with load cell readout
- Quick change-out tooling for coil removal
- Automatic traversing dereeler
- Data collection for machine and coil runtime

FOIL/STRIP WINDING MACHINES

Many models to choose from:

- Foils from narrowest to 60" (1524 mm) wide
- Single and multiple foils
- Layer insulation, cuffed/pleated edge and end fill strips
- Lead attachment by TIG or cold press welding systems
- Many speed/torque options
- Wire winding option with auto layering
- Custom configured for your application



DEREELERS/TENSIONERS

DT-124 & DT-224 Series Wire Tensioners

- For wire spools up to 24" (610 mm) diameter and 8" – 12" (203 mm – 305 mm) wide
- Tension controlled by air regulator with manual shut off switch to allow the spool to free wheel or tension
- Designed to provide years of low maintenance and trouble free service

Round Wire Tensioners

- Many models to choose from
- Mechanical, magnetic hysteresis or pneumatic tensioning
- For tensioning round wire from 42 AWG 0.064 mm (0.0025") to 10 AWG 2.6 mm (0.11")
- Wire from over the end of the spool or from a barrel

EXPANDABLE MANDRELS

Winding Mandrels

- Expandable winding mandrels are available in round, oval, or rectangular types
- Designs include mandrels that are removable from the winding machine or swing out from the headstock
- Custom designed sizes and styles to meet your requirements

WIRE FLATTENING MACHINES

WF-50 & WF-100 Wire Flattener:

- Used to flatten round insulated wire to rectangular shape for more compact efficient transformers
- These units are totally self contained and can be installed behind your existing winding machine
- Provide consistent wire tension with multiple pulley dancer
- Single, dual, triple, and quad head models



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