

PLC Controlled Toroidal Winding Machine

Model SMC-1E

Jovil Universal is proud to present our Precision Toroidal Winding Machine Model SMC-1E. This new model uses PLC Control System, which is versatile enough to store up to 240 programs. This precision winding machine encompasses a Human Machine Interface Control System which makes it a trouble free, production asset. Designed to be multi-tasked, this user friendly machine is able to display in multiple languages. Demanding least amount of production area, at an affordable price, it has all the functions that come as a standard. An envy of its competitors, this production asset, coupled with unmatched quality standards is priced affordably. With the touch screen display, it is easy to operate and anyone could master it with ease within minutes.



Principle and Optional Features

- Separate speed controls for loading and winding
- Programmable stepper motor driven core rotation in either direction with minimum backlash
- Display language can be done in English and Chinese
- Display the status in a touch screen HMI
- PLC control system can store up to 100 single programs, 40 multiple programs, 100 tape programs
- Built in fiber optic turns sensor; double display, easy adjustable, utmost accurate, stable and reliable
- Quick change winding heads, core rotators
- Compatible to imported Jovil winding heads
- Apply 1/2HP 6000RPM DC brushless motor which supplies more torque and maintenance free.
- Automatic core index function
- Push button and footswitch controls
- Tape head control

Specification / Capabilities

Maximum Wire Size : 1.4mm(#16AWG)

Minimum Wire Size : 0.05mm (#44AWG)

Maximum O.D.: 101.6mm (4.00")

Minimum O.D.: 3.26mm (0.125")

Minimum I.D.: 1.00mm (0.040")

Maximum Height: 50.8mm (2.00")

Winding Speed: Variable to 1600TPM

Wire spacing: Programmable with controller

Segment Winding: Programmable with controller

Progressive Winding: Programmable with controller

Deceleration: Programmable with controller

Acceleration: Programmable with controller

Motor: Hybrid Stepper Motor

Power Requirement: 220V, 50/60Hz

Crated Dimension: 94X94X107cm

Crated Weight: 45kg

PLC Controlled Toroidal Winding Machine

Model SMC-2E

Jovil Universal is proud to present our Precision Toroidal Winding Machine Model SMC-2E. With the ability to accept over 10 types of winding heads, this toroidal winding machine offers the utmost in versatility. The SMC-2E is equipped with the state of the art PLC Control System, which is able to store up to 240 programs. This precision winding machine encompasses a Human Machine Interface Control System which makes it a trouble free, production asset. Designed to be multi-tasked, this user friendly machine is able to display in multiple languages. Demanding least amount of production area, at an affordable price, it has all the functions that come as a standard. All Jovil JV200 accessories and winding heads will fit readily to the SMC-2E base. With the touch screen display, it is easy to operate and anyone could master it with ease within minutes.



Principle and Optional Features

- Separate speed controls for loading and winding
- Programmable stepper motor driven core rotation in either direction with minimum backlash
- Display language can be done in English and Chinese
- X-Y positioning for proper head to rotator alignment
- Display the status in a touch screen HMI
- PLC Control system can store up to 100 single programs, 40 multiple programs, 100 tape programs
- Built in fiber optic turns sensor; double display, easy adjustable, utmost accurate, stable and reliable
- Quick Change Winding heads, core rotators
- Apply 1 KW 2000RPM DC brushless motor which supplies more torque and maintenance free
- Automatic core index function
- Push button and footswitch controls
- Tape head control

Specification/Capabilities

Maximum Wire Size: 3.25mm (#8AWG)

Minimum Wire Size: 0.1mm (#38AWG)

Maximum Coil O.D: 304.8mm (12.00")

Minimum Coil O.D: 44mm (1.750")

Minimum Coil I.D: 12.7mm (0.500")

Maximum Coil Height: 88.9mm (3.500")

Winding Speeds: Variable to 1500 turns per minute

Wire Spacing: Programmable with controller

Segment Winding: Programmable with Controller

Progressive Winding: Programmable with controller

Deceleration: Programmable with controller

Acceleration: Programmable with controller

Shuttle Head Motor: 1KW-2000RPM

Power Requirement: 220V, 50-60Hz

Crated Dimension: 95x95x100cm

Crated Weight: 180 kgs

Model SMC-3

Microprocessor Controlled Toroidal Winding Machine

with Windows Software



Full programmability of all winding functions now available in a floor stand machine. Forget about lengthy set-up times. The famous SMC control now allows all winding functions to be programmed for ease of repeatable recall at any time. The SMC-3 is a medium sized floor stand machine for the winding of medium to large size toroidal coils. The ability to accept 4 types of winding heads along with 3 sizes of taping heads makes this machine the most versatile in its class. Core sizes from 3.0 inch (76.2mm) to 17.0 inch (431.3mm). Wire sizes from #38 awg (0.1mm) to #7 awg (3.66mm).

Principal and Optional Features

- Separate speed controls for loading and winding
- Programmable stepper motor driven core rotation in either direction with minimum backlash
- Programmable wire spacing, from coarse to fine micro-step resolution
- Electronic linear pick-up for loading (feet or meters)
- Tape head controls
- Solid-state microprocessor count controller - total of 99 programmable presets - LED readout - built-in fiber optic turns sensor-program storage- production batch counter - utmost accuracy, stability and reliability
- RS-232 with interface software
- Quick change winding and taping heads
- Automatic core index function
- Push button, on-off footswitch or variable footpedal operation
- Optional SMC programming software to pre-calculate and download all winding parameters from your PC to the machine

Specification/Capabilities

Maximum Wire Size: #7 AWG (3.66 mm)
Minimum Wire Size: #38 AWG (0.1 mm)
Maximum Coil O.D.: 17.0" (431.3 mm)
Minimum Coil O.D.: 3.0" (76.2 mm)
Minimum Coil I.D.: 0.5" (12.7 mm)
Maximum Coil Height: 7.0" (177.6 mm)
Maximum Coil Weight: 80 lbd (36.4 kg)
Winding Speeds: Variable depending on head
Wire Spacing: Programmable variable
Segment Winding: Programmable

Progressive Winding: Programmable with controller
Deceleration Control: Programmable with controller
Acceleration Control: Programmable with controller
Shuttle Head Motor: 1 HP ?1750 RPM-DC
Core Rotation Motor: Hybrid step motor
Power Requirement: 120 V or 220 V, 50-60 cycles
Crated Dimensions: 48" x 48" x 60"
 (121.4 x 121.4 x 151.8 cm)
Crated Weight: 750 lbs (340 kg)

Microprocessor Controlled Model SMC-4 Toroidal Winding Machine with Windows Software



Full programmability of all winding functions now available in a heavy duty floor stand machine. Forget about lengthy set-up times. The famous SMC control now allows all winding functions to be programmed for ease of repeatable recall at any time. The SMC-4 is a heavy sized floor stand machine for the winding of large size toroidal coils and is unmatched by any competitor for general winding and taping applications. The ability to accept 4 types of winding heads along with 3 sizes of taping heads makes this machine the most versatile in its class. Core sizes from 3.5 inch (89.0mm) to 46.0 inch (1169 mm). Wire sizes from #38 awg (0.1mm) to #4 awg (5.4 mm).

Principal and Optional Features

- Separate speed controls for loading and winding
- Programmable servo motor driven core rotation in either direction with minimum backlash
- Programmable wire spacing, from coarse to fine micro-step resolution
- Electronic linear pick-up for loading (feet or meters)
- Tape head controls
- Solid-state microprocessor count controller with a total of 99 programmable presets/LED readout/built-in fiber optic turns sensor/program storage/production batch counter and the utmost accuracy, stability and reliability
- RS-232 with interface software
- Quick change winding and taping heads
- Automatic core index function
- Push button, on-off footswitch or variable speed footpedal operation
- Optional SMC programming software to pre-calculate and download all winding parameters from your PC to the machine

Specifications/Capabilities

Maximum Wire Size:#4 AWG (5.4 mm)
Minimum Wire Size:#38 AWG (0.1 mm)
Maximum Coil O.D.:46.0" (1169 mm)
Minimum Coil O.D.:3.5" (89 mm)
Minimum Coil I.D.:0.5" (12.7 mm)
Maximum Coil Height:12.0" (305 mm)
Maximum Coil Weight:500 lbd (227 kg)
Winding Speeds:Variable depending on head
Wire Spacing:Programmable variable
Segment Winding:Programmable

Progressive Winding:Programmable with controller
Deceleration Control:Programmable with controller
Acceleration Control:Programmable with controller
Shuttle Head Motor: 3 HP DC
Core Rotation Motor: Servo motor
Power Requirement:220 V AC single phase, 50 - 60 cycles
Crated Dimensions: 48" x 60" x 84" (121.4 x 153 x 213 cm)
Crated Weight: 1095 lbs (497 kg)