



JOVIL MANUFACTURING COMPANY

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We at Jovil are proud to present the following product catalog containing information on the most comprehensive line of toroidal coil winding equipment offered today.

Our years of dedication have produced the most advanced and user-friendly machines, capable of satisfying the simplest to the most difficult toroidal applications.

Jovil's customer service is just as important to us as the quality of the machines themselves. Our skilled service and engineering staff will never delay technical support. After you have purchased your Jovil winding machine, you will be sure to find our post-sales service second to none.

To be certain that the equipment will produce coils to your satisfaction, we offer free sample winding. Along with the wound samples you will receive a complete winding evaluation including production rates and equipment cost.

Thank you for the opportunity of servicing your toroidal production requirements. If there are any questions regarding the information contained in this catalog, please do not hesitate to call today.

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Microprocessor Controlled Model SMC-1 Toroidal Winding Machine with Programmable Pitch

Model SMC-1

Jovil is proud to present the Model SMC-1, from the SMC line of toroidal winding machines. The Model SMC-1 offers the ease of programming and the technical advances found only in Jovil toroidal winding machines. It includes a stepper motor core rotation control with teach-in functions. Just dial the correct core rotational speed and store it into the programmer for ease of recall. The counter has been specifically designed to make the programming and operation of the SMC-1 simple. It has a 99 program storage capacity with multi sub-levels per program. All JV100BE-2 and Universal 4.5LS and 6LS winding heads will readily fit the SMC-1 base.



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
- Floating drive for centering core during winding – single knob control
- Electronic linear pick-up for loading (feet or meters)
- Controls for operating taping head
- Solid state microprocessor count controller – total of 99 programmable preset levels – 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 heads, core rotators and core clamps
- Automatic core index function
- Push button and/or footswitch control
- Tape head controls

Specifications/Capabilities

Maximum Wire Size: #16 AWG (1.40 mm)
Minimum Wire Size: #46 AWG (0.05 mm)
Maximum Coil O.D.: 4.00" (101.6 mm)
Minimum Coil O.D.: 0.187" (4.70 mm)
Minimum Coil I.D.: 0.040" (1.00 mm)
Maximum Coil Height: 2.00" (50.8 mm)
Winding Speeds: Variable to 2000 TPM
Wire Spacing: Programmable variable
Segment Winding: Programmable with controller
Progressive Winding: Programmable with controller

Deceleration Control: Programmable with controller
Acceleration Control: Programmable with controller
Shuttle Head Motor: 1/2 HP-7600 RPM-DC with dynamic braking
Core Rotation Motor: Hybrid step motor
Power Requirement: 120 V or 220 V, 50 - 60 cycles
Crated Dimensions: 37" x 37" x 42"
(94 x 94 x 107 cm)
Crated Weight: 200 lbs (90 kg)

Jovil's Microprocessor Controlled Model JV100BE-2 Toroidal Winding Machine



Principal and Optional Features

- Separate speed controls for loading and winding
- Power driven core rotation with automatic core reversing – infinitely variable
- Variable wire spacing control
- Floating drive for centering core during winding – single knob operation
- Electronic linear pick-up for loading (feet or meters)
- Solid state microprocessor count controller – total of 99 programmable preset levels – LED read out – built-in fiber optic turns sensor – program storage – production batch counter – utmost accuracy, stability and reliability
- Controls for operating taping head
- Quick change winding heads and core rotators
- Automatic core index switch
- Push button and/or footswitch control
- Positive core rotation with minimum backlash

Specification/Capabilities

Maximum Wire Size: #16 AWG (1.4 mm)
Minimum Wire Size: #46 AWG (0.05 mm)
Maximum Coil O.D.: 4.0" (101.6 mm)
Minimum Coil O.D.: 0.187" (4.7 mm)
Minimum Coil I.D.: 0.040" (1.0 mm)
Maximum Coil Height: 2.0" (50.8 mm)
Winding Speeds: Variable to 2000 TPM
Wire Spacing: Automatic variable
Segment Winding: Automatic with controller

Progressive Winding: Automatic with controller
Deceleration Control: Automatic with controller
Acceleration Control: Automatic with controller
Motor: 1/2 HP – 7600 RPM-DC – with dynamic braking
Power Requirement: 110-120 V, 50-60 cycles (220 V optional)
Crated Dimensions: 37" x 37" x 42"
(94 x 94 x 107 cm)
Crated Weight: 200 lbs (90 kg)

Jovil's 2 Preset Counter Controlled Model JV250 Toroidal Winding Machine



By eliminating some options not needed for the winding of certain applications, Jovil has developed a low-cost machine while retaining the same quality construction as in our microprocessor controlled JV100BE-2.

The two main features eliminated are:

- 1) the microprocessor
- 2) the ability to rotate the core in the C.W. direction

The JV250 is available with a choice of two different counters:

- A) JV45: dual preset with no deceleration
- B) LGM: four preset with deceleration

The JV250 base will accept all winding heads, core rotators, taping heads and shuttles currently used on the model JV100BE-2 and listed on pages 4 and 5 of this catalog.



Specification/Capabilities

Maximum Wire Size: #16 AWG (1.4 mm)
Minimum Wire Size: #46 AWG (0.05 mm)
Maximum Coil O.D.: 4.0" (101.6 mm)
Minimum Coil O.D.: 0.187" (4.7 mm)
Minimum Coil I.D.: 0.040" (1.0 mm)
Maximum Coil Height: 2.0" (50.8 mm)
Winding Speeds: Variable to 2000 TPM
Wire Spacing: Automatic variable

Deceleration Control: Only with LGM type counter
Motor: 1/2 HP – 7600 RPM-DC – with dynamic braking
Power Requirement: 110-120 V, 50-60 cycles
(220 V optional)
Crated Dimensions: 37" x 37" x 42"
(94 x 94 x 107 cm)
Crated Weight: 200 lbs (90 kg)

Model SMC-1, JV100BE-2 and JV250 Accessories

Combination Slider/Round Belt Winding Heads



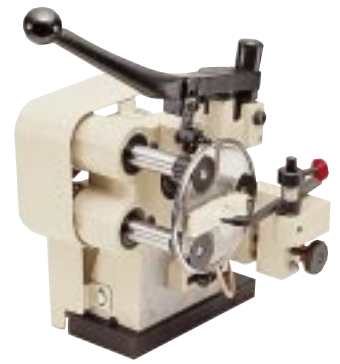
4" QA
Maximum Coil O.D.: 1.5"
 (38.0 mm)
Minimum Coil O.D.: 0.375"
 (10.0 mm)
Minimum Coil I.D.: 0.150"
 (3.8 mm)
Maximum Coil Height: 1.0"
 (25.4 mm)
Wire Size: #18 – #42 AWG
 (1.0 – 0.06 mm)



6" QA
Maximum Coil O.D.: 2.5"
 (63.5 mm)
Minimum Coil O.D.: 0.625"
 (15.8 mm)
Minimum Coil I.D.: 0.375"
 (10.0 mm)
Maximum Coil Height: 1.5"
 (38.0 mm)
Wire Size: #18 – #42 AWG
 (1.0 – 0.06 mm)



7" QA (slider only)
Maximum Coil O.D.: 3.0"
 (76.0 mm)
Minimum Coil O.D.: 1.0"
 (25.4 mm)
Minimum Coil I.D.: 0.500"
 (12.7 mm)
Maximum Coil Height: 2.0"
 (50.8 mm)
Wire Size: #22 – #40 AWG
 (0.6 – 0.08 mm)



4" Standard
Maximum Coil O.D.: 1.0"
 (25.4 mm)
Minimum Coil O.D.: 0.375"
 (10.0 mm)
Minimum Coil I.D.: 0.150"
 (3.8 mm)
Maximum Coil height: 0.500"
 (12.7 mm)
Wire Size: #22 – #42 AWG
 (0.6 – 0.06 mm)

Flat Belt Winding Heads

New FB Belt Winding Heads From Jovil

Are you winding the majority of your toroidal cores with a pull winder or by hand? Wouldn't it be fantastic if up to 80% of that work could be transferred to an automatic machine? If so, then these new FB Belt Winding Heads from Jovil can help.

We all know that the most difficult job for an automatic toroidal winding machine has been the winding of heavy wire sizes through small core inside diameters. With these new heads, Jovil is capable of winding the heaviest wire sizes through the smallest core inside diameter.

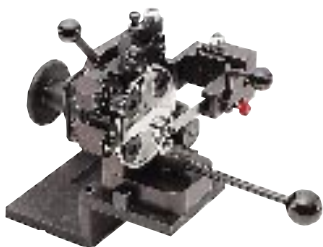


6" F.B. Head
Maximum Coil O.D.: 2.5"
 (63.5 mm)
Minimum Coil O.D.: 0.625"
 (15.8 mm)
Minimum Coil I.D.: 0.375"
 (10.0 mm)
Maximum Coil Height: 1.5"
 (38.0 mm)
Wire Size: #16 – #26 AWG
 (1.4 – 0.4 mm)

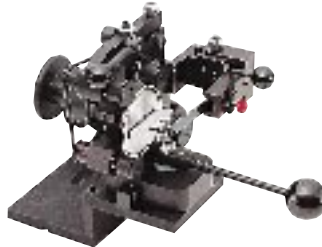


4" F.B. Head
Maximum Coil O.D.: 1.5"
 (38.0 mm)
Minimum Coil O.D.: 0.375"
 (10.0 mm)
Minimum Coil I.D.: 0.250"
 (6.0 mm)
Maximum Coil Height: 1.0"
 (25.4 mm)
Wire Size: #16 – #30 AWG
 (1.4 – 0.25 mm)

Miniature Winding Heads



S.M. Head (round belt type only)
Maximum Coil O.D.: 0.500"
 (12.7 mm)
Minimum Coil O.D.: 0.250"
 (6.0 mm)
Minimum Coil I.D.: 0.100"
 (2.54 mm)
Maximum Coil Height: 0.375"
 (10.0 mm)
Wire Size: #28 – #40 AWG
 (0.3 – 0.08 mm)



Minitor Head
Maximum Coil O.D.: 0.375"
 (10.0 mm)
Minimum Coil O.D.: 0.187"
 (4.7 mm)
Minimum Coil I.D.: 0.040"
 (1.0 mm)
Maximum Coil Height: 0.250"
 (6.0 mm)
Wire Size: #34 – #46 AWG
 (0.16 – 0.05 mm)



Minitor Preloader
 For the loading of minitor shuttles. Needed when using the minitor head.





Principal Features

- ¥ Interchangeable magazines with removable sector to accommodate tape widths of 1/4", 5/16", and 3/8" (6 mm, 8 mm, 10 mm)
- ¥ No need to change magazine drive pulleys when changing from one size magazine to another
- ¥ Counter controls measure of tape supply to magazine and number of wraps on core
- ¥ Automatic tape cut-off from spool supply
- ¥ Dereeler handles up to 12" diameter tape spools
- ¥ Core rotation speed control allows tape overlap on core to be adjusted while taping
- ¥ Footswitch controlled
- ¥ Will tape all non-adhesive materials (mylar, glass, copper shielding, etc.)



7" Gear Head
 For perfect layer winding of wire onto the core.
 Maximum Coil O.D.: 4.0" (101.6 mm)
 Minimum Coil O.D.: 1.0" (25.4 mm)
 Minimum Coil I.D.: 0.500" (12.7 mm)
 Maximum Coil Height: 2.0" (50.8 mm)
 Wire Size: #16 Φ #34 AWG (1.4 Φ 0.16 mm)



7" Tape Head
 Toroidal Taping and Shielding Head fits models JV100BE and JV250.
 Maximum coil O.D.: 4.0" (101.6 mm)
 Minimum coil O.D.: 0.750" (19.0 mm)
 Minimum coil I.D.: 0.625" (16.0 mm)
 Maximum coil height: 2.0" (50.8 mm)

Core Rotators and Clamp



HC Rotator
 Maximum Coil O.D.: 4.0" (101.6 mm)
 Minimum Coil O.D.: 0.625" (15.8 mm)
 Maximum Coil Height: 2.0" (50.8 mm)

MC Rotator
 Maximum Coil O.D.: 1.0" (25.4 mm)
 Minimum Coil O.D.: 0.250" (6.0 mm)
 Maximum Coil Height: 0.500" (12.7 mm)

Mini Core Rotator
 Used with minor winding head
 Maximum Coil O.D.: 0.500" (12.7 mm)
 Minimum Coil O.D.: 0.187" (4.7 mm)
 Maximum Coil Height: 0.250" (6.0 mm)



Quick Release HC Rotator
 To be used in conjunction with 7" gear head. The Quick Release HC is designed for tighter core clamping during precise layer winding.
 Maximum Coil O.D.: 4.0" (101.6 mm)
 Minimum Coil O.D.: 0.625" (15.8 mm)
 Maximum Coil Height: 2.0" (50.8 mm)



SW Core Clamp
 Used for the clamping of special toroids having obstructions located on the outercircumference. Interchangeable clamping jaws to satisfy all applications. (Only for use with the SMC-1.)



Microprocessor Controlled Model SMC-2 Toroidal Winding Machine with Programmable Pitch

Model SMC-2



Jovil is proud to introduce the newest member of the SMC line of toroidal coil winding machines – the new Model SMC-2. With the ability to accept over 30 types of winding heads, the new Model SMC-2 toroidal winding machine offers the utmost in versatility. Included is stepper motor rotation control with teach in core pitch functions. All Universal LS, Jovil JV100 and Jovil JV200 accessories and winding heads will fit readily to the SMC-2 base giving winding parameters never before available from one single machine. Core outside diameters from 0.200 to 12.000 inches (5.08 to 304.8 mm). Wire range from #46 AWG to #8 AWG (0.05 mm to 3.25 mm). It has a 99 program storage capacity. All functions, including winding pitch, are fully programmable with RS-232 for PC downloading.

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
- X-Y positioning for proper head to rotator alignment
- 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 heads, core rotators and core clamps
- Automatic core index function
- Push button, on-off footswitch or variable footpedal operation



Pictured with 6" Belt Head

Specifications/Capabilities

Maximum Wire Size: #8 AWG (3.25 mm)
Minimum Wire Size: #46 AWG (0.05 mm)
Maximum Coil O.D.: 12.00" (304.8 mm)
Minimum Coil O.D.: 0.200" (5.08 mm)
Minimum Coil I.D.: 0.048" (1.22 mm)
Maximum Coil Height: 3.500" (88.9 mm)
Winding Speeds: Variable to 2000 TPM
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: 3/4 HP 1725 RPM
Core Rotation Motor: Hybrid step motor
Power Requirement: 120 V or 220 V, 50 - 60 cycles
Crated Dimensions: 37" x 37" x 42" (94 x 94 x 107 cm)
Crated Weight: 300 lbs (136 kg)

Model SMC-2 and Model JV200 Accessories

Layer Winding Gear Heads



12" Gear Head
Maximum Coil O.D.: 10.0" (254.0 mm)
Minimum Coil O.D.: 2.5" (63.5 mm)
Minimum Coil I.D.: 1.625" (41.2 mm)
Maximum Coil Height: 3.5" (88.9 mm)
Wire Size: #8 – #20 AWG (3.25 – 0.81 mm)



9" Gear Head
Maximum Coil O.D.: 10.0" (254.0 mm)
Minimum Coil O.D.: 1.5" (38.0 mm)
Minimum Coil I.D.: 1.0" (25.4 mm)
Maximum Coil Height: 3.5" (88.9 mm)
Wire Size: #12 – #24 AWG (2.1 – 0.5 mm)

9" Combination Slider/Belt Head



With Slider System
Maximum Coil O.D.: 5.0" (127.0 mm)
Minimum Coil O.D.: 1.5" (38.0 mm)
Minimum Coil I.D.: 0.625" (15.8 mm)
Maximum Coil Height: 3.0" (76.2 mm)
Wire Size: #22 – #38 AWG (0.64 – 0.1 mm)



With Belt System
Maximum Coil O.D.: 5.0" (127.0 mm)
Minimum Coil O.D.: 1.5" (38.0 mm)
Minimum Coil I.D.: 0.500" (12.7 mm)
Maximum Coil Height: 3.0" (76.2 mm)
Wire Size: #16 – #24 AWG (1.4 – 0.5 mm)

