Model SMC-1E 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.

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: #26 - #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 - 0.08 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 - #34 AWG (1.4 - 0.16 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 minitor 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 outer circumference. Interchangeable clamping jaws to satisfy all applications. (Only for use with the SMC-1.)
Model SMC-2E 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.: 1.025" (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.: 0.500" (12.7 mm)
Maximum Coil Height: 3.0" (76.2 mm)
Wire Size: #10 - #24 AWG (1.4 - 0.5 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: #10 - #24 AWG (1.4 - 0.5 mm)
Taping and Shielding Heads (SMC–2E)

These taping and shielding heads are used for applying a variety of non-adhesive tapes such as mylar, polyester, paper, varnished silk, fiber glass, cloth, copper shielding, etc. on toroidal coil applications. Gear driven, interchangeable magazines for various widths of tape. Auto matictape cut-off from spool supply. Electronic counter measures supply of tape to magazine and wraps of tape onto core. Separate speed controls for loading and wrapping. Fully adjustable tape overlap on core.

14" Taping and Shielding Head
Maximum Coil O.D.: 10.0" (254.0 mm)
Minimum Coil O.D.: 3.0" (76.2 mm)
Minimum Coil I.D.: 2.0" (50.8 mm)
Maximum Coil Height: 3.5" (88.9 mm)
Tape Widths: 5/16", 3/8", 1/2", 5/8", 3/4", 1" (8 mm, 10 mm, 12 mm, 15 mm, 19 mm, 25 mm)

9" Taping and Shielding Head
Maximum Coil O.D.: 10.0" (254.0 mm)
Minimum Coil O.D.: 2.0" (50.8 mm)
Minimum Coil I.D.: 1.0" (25.4 mm)
Maximum Coil Height: 3.0" (76.2 mm)
Tape Widths: 5/16", 3/8", 1/2", 5/8", 3/4", 1" (8 mm, 10 mm, 12 mm, 15 mm, 19 mm, 25 mm)

9" Sl Taping and Shielding Head
Maximum Coil O.D.: 10.0" (254.0 mm)
Minimum Coil O.D.: 1.5" (38.0 mm)
Minimum Coil I.D.: 0.850" (16.50 mm)
Maximum Coil Height: 3.0" (76.2 mm)
Tape Widths: 1/4", 5/16", 3/8", 1/2" (6 mm, 8 mm, 10 mm, 12 mm)

Core Rotator Assemblies (SMC–2E)

Large Core Rotator
Maximum Core O.D.: 10.0" (254.0 mm) JV200
Minimum Core O.D.: 2.0" (50.8 mm) JV200
Maximum Core O.D.: 12.0" (304.8 mm) SMC-2E
Minimum Core O.D.: 1.75" (44.5 mm) SMC-2E
Maximum Core Height: 3.5" (88.9 mm)

Small Core Rotator
Maximum Core O.D.: 4.5" (114.3 mm)
Minimum Core O.D.: 1.5" (38.0 mm)
Maximum Core Height: 2.5" (63.5 mm)
Model SMC-3 and JV300 Accessories
Layer Winding Gear Heads

16" Gear Head
Maximum Coil O.D.: 17.0" (431.3 mm)
Minimum Coil O.D.: 13.0" (76.1 mm)
Minimum Coil I.D.: 1.750" (44.5 mm)
Maximum Coil Height: 7.0" (177.6 mm)
Wire Size: #7-#20 AWG (3.86 70.81 mm)

12" Gear Head
Maximum Coil O.D.: 15.0" (381.0 mm)
Minimum Coil O.D.: 13.0" (76.1 mm)
Minimum Coil I.D.: 1.625" (41.2 mm)
Maximum Coil Height: 6.0" (152.4 mm)
Wire Size: #8-#20 AWG (3.25 70.81 mm)

9" Gear Head
Maximum Coil O.D.: 10.0" (254.0 mm)
Minimum Coil O.D.: 3.0" (76.1 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 70.5 mm)
Taping and Shielding Heads (SMC-3 and JV300)

These taping and shielding heads are used for applying a variety of non-adhesive tapes such as mylar, polyester, paper, varnished silk, fiber glass, cloth, copper shielding, etc. on toroidal coil applications. Gear driven, interchangeable magazines for various widths of tape. Automatic tape cut-off from spool supply. Electronic counter measures supply of tape to magazine and wraps of tape onto core. Separate speed controls for loading and wrapping. Fully adjustable tape overlap on core.

Open Gear Design

14" Taping and Shielding Head
Maximum Coil O.D.: 17.0" (431.3 mm)
Minimum Coil O.D.: 3.0" (76.2 mm)
Minimum Coil I.D.: 2.0" (50.8 mm)
Maximum Coil Height: 6.0" (152.4 mm)
Tape Widths: 5/16", 3/8", 1/2", 5/8", 3/4", 1" (8 mm, 10 mm, 12 mm, 15 mm, 19 mm, 25 mm)

9" Taping and Shielding Head
Maximum Coil O.D.: 10.0" (254.0 mm)
Minimum Coil O.D.: 2.5" (63.5 mm)
Minimum Coil I.D.: 2.0" (50.8 mm)
Maximum Coil Height: 3.0" (76.2 mm)
Tape Widths: 5/16", 3/8", 1/2", 5/8", 3/4", 1" (8 mm, 10 mm, 12 mm, 15 mm, 19 mm, 25 mm)

Solid Gear Design

9" SG Taping and Shielding Head
Maximum Coil O.D.: 10.0" (254.0 mm)
Minimum Coil O.D.: 3.0" (76.2 mm)
Minimum Coil I.D.: 1.5" (38.1 mm)
Maximum Coil Height: 4.0" (101.6 mm)
Tape Widths: 5/16", 3/8", 1/2", 5/8", 3/4", 1" (8 mm, 10 mm, 12 mm, 15 mm, 19 mm, 25 mm)

12" SG Taping and Shielding Head
Maximum Coil O.D.: 10.0" (254.0 mm)
Minimum Coil O.D.: 3.0" (76.2 mm)
Minimum Coil I.D.: 2.0" (50.8 mm)
Maximum Coil Height: 6.0" (152.4 mm)
Tape Widths: 5/16", 3/8", 1/2", 5/8", 3/4", 1" (8 mm, 10 mm, 12 mm, 15 mm, 19 mm, 25 mm)

16" SG Taping and Shielding Head
Maximum Coil O.D.: 17.0" (431.3 mm)
Minimum Coil O.D.: 3.0" (76.2 mm)
Minimum Coil I.D.: 2.0" (50.8 mm)
Maximum Coil Height: 6.0" (152.4 mm)
Tape Widths: 1/4", 5/16", 3/8", 1/2" (6 mm, 8 mm, 10 mm, 12 mm)
Model SMC-4 Offers These Outstanding Features:

Interchangeable heads - 3 series
(U-winding, TP-taping, S-fine wire)
#14U 14" diameter geared layer winding head
#14TP 14" diameter taping head
#16S 16" diameter slider-type random winding head
#18U 18" diameter geared layer winding head
#18TP 18" diameter taping head
#20U 20" diameter geared layer winding head
#20TP 20" diameter taping head

0 - 360 continuous winding in either direction
0 - 270 segmental winding in either direction; lateral traverse winding from 0.250" (6.35 mm) to 8.50" (216 mm)
Automatic 360 reversal of winding direction using progressive wind feature
Servo motor controlled core feed mechanism infinitely variable with potentiometer and manual or automatic reversal of core rotation with push button controlled feature to rotate the core when not winding
Proximity sensor counting mechanism
Electronic meter counter assembly
Footswitch with safety cover
Motor controls with solid state circuitry
Multifilar winding applications
Winding and taping functions

Choice of 3 different roller tables
Separate potentiometer controlled settings for wind and load speeds

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Model SMC-4 Winding Accessories

Layer Winding Heads

20U Layer Head
Maximum Coil O.D.: 6.00" (152.4 mm)
Minimum Coil O.D.: 6.00" (152.4 mm)
Minimum Coil I.D.: 2.562" (65.0 mm)
Maximum Coil Ht.: 12.0" (304.8 mm)
Wire Size: #4 - #14 AWG
(5.4 mm - 1.63 mm)

18U Standard Layer Head
Maximum Coil O.D.: 30.0" (762 mm)
Minimum Coil O.D.: 3.50" (89.0 mm)
Minimum Coil I.D.: 2.00" (50.8 mm)
Maximum Coil Ht.: 8.00" (203.2 mm)
Wire Size: #5 - #20 AWG
(4.73 mm - 0.81 mm)

14U Standard Layer Head
Maximum Coil O.D.: 20.0" (508 mm)
Minimum Coil O.D.: 3.50" (89.0 mm)
Minimum Coil I.D.: 1.562" (39.6 mm)
Maximum Coil Ht.: 6.00" (152.4 mm)
Wire Size: #7 - #20 AWG
(3.66 mm - 0.81 mm)

18U Light Layer Head
Maximum Coil O.D.: 30.0"
(762 mm)
Minimum Coil O.D.: 3.50"
(89.0 mm)
Minimum Coil I.D.: 1.625"
(41.2 mm)
Maximum Coil Ht.: 8.00"
(203.2 mm)
Wire Size: #10 - #28 AWG
(2.58 mm - 0.32 mm)

14U Light Layer Head
Maximum Coil O.D.: 20.0"
(508 mm)
Minimum Coil O.D.: 3.50"
(89.0 mm)
Minimum Coil I.D.: 1.25"
(31.7 mm)
Maximum Coil Ht.: 6.00"
(152.4 mm)
Wire Size: #16 - #28 AWG
(1.29 mm - 0.32 mm)
Model SMC-4 Winding Accessories
Slider Head, Core Clamp, Roller Tables and Tape Heads

Tape Heads

20 TP Tape Head
Maximum Coil Ht: 12.0" (304.8 mm)
Tape Widths: 1.00" and 1.50"
(25 mm and 38 mm)

18 TP Tape Head
Maximum Coil Ht: 8.00" (203.2 mm)
Tape Widths: 0.50", 0.75" and 1.00"
(12 mm, 19 mm and 25 mm)

14 TP Tape Head
Maximum Coil Ht: 6.00" (152.4 mm)
Tape Widths: 0.50", 0.75" and 1.00"
(12 mm, 19 mm and 38 mm)

Will tape most non-adhesive materials (Mylar, Kapton, Cotton, etc.)
Interchangeable magazines for different tape widths
Core reeler holds 3/4" (355.6 mm) diameter spools with 3" (76.2 mm) hole
Programmed tape measure with automatic cut-off

16S Slider Head
Maximum Coil O.D.: 11.0" (279.4 mm)
Minimum Coil O.D.: 3.50" (89.0 mm)
Minimum Coil I.D.: 0.50" (12.7 mm)
Maximum Coil Ht.: 6.00" (152.4 mm)
Wire Size: #20 - #40 AWG
(0.812 mm - 0.073 mm)

Core Clamp
Used for the clamping of special toroids having obstructions located on the outer circumference. Interchangeable clamping jaws to satisfy all applications.

Roller Tables

#40 Roller Table
Minimum Core O.D.: 4.00" (101.6 mm)
Maximum Core O.D.: 46.0" (1169 mm)
Maximum Core Ht.: 12.0" (305 mm)
Maximum Core Wt.: 500 lbs (227 kg)

#30 Roller Table
Minimum Core O.D.: 4.50" (114 mm)
Maximum Core O.D.: 30.0" (762 mm)
Maximum Core Ht.: 2.0" (305 mm)
Maximum Core Wt.: 350 lbs (158 kg)

#20 Roller Table
Minimum Core O.D.: 3.50" (89.0 mm)
Maximum Core O.D.: 20.0" (508 mm)
Maximum Core Ht.: 8.00" (203 mm)
Maximum Core Wt.: 200 lbs (90 kg)