



Gorman Machine Corp.

7 Burke Drive
Brockton, MA 02301
Tel. 508.588.2900
Fax 508.588.9560

NEW

Technical Data Sheet

Productor M Toroid Winder

Automatic Sector Winding

Instantly Removable Shuttles

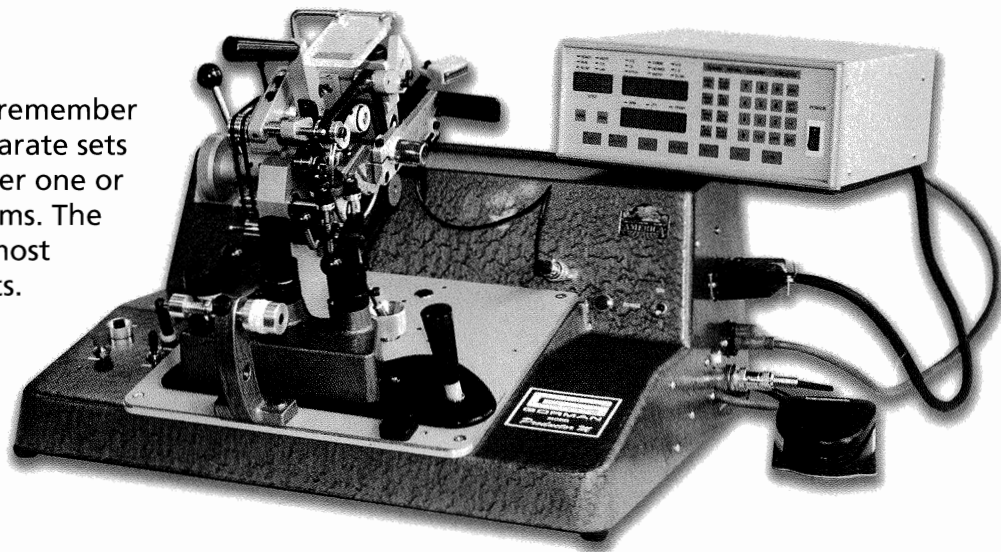
360° Core Rotation

Front Loading or Optional Overhead Dereeler with Wire Cutter

Up to 2000 Turns per Minute

Features

- **Microprocessor** - The ability to remember and store up to a thousand separate sets of winding instructions for either one or many different winding programs. The microprocessor can store an almost infinite number of preset counts. Programmable slow down and stop for each count.
- **Programming** - Ability to simulate a complex winding sequence without actually winding wire.
- **Four Inch and Six Inch Precision Winding Heads** - Accommodates wires from 16 AWG to 44 AWG.
- **Wide Core Size Range** - Using the four winding heads available: core sizes from .055" I.D. to 4" O.D. can be wound.
- **Variable Speed** - Ball bearing four roller drive rotates the shuttle at speeds up to 2000 turns per minute using the 4 inch head.
- **Removable Shuttles** - Thirty-three sizes of easily removable precision shuttles permit a large variety of cores to be wound.
- **Jockey Stick Core Positioning** - The entire holder assembly may be moved back, forward, or sideways while the core is being wound - **a Gorman exclusive.**





The Productor M

The Productor M is a recent addition to the Productor Series of toroidal winders, which have been a standard in the industry for many years.

The winding head has a quick-acting swing-away upper section for quick core removal and insertion while leaving the shuttle on the rollers. When the shuttle must be removed from the head, there is a shuttle release lever on the left side of the head.

The Productor M is available with either a four or six inch winding head and interchangeable light or medium duty 360° core rotators. The light duty rotators will handle cores from .100 to 2" OD.

The medium duty rotators will rigidly hold and rotate cores from 5/8" to 4" diameter. The core is held between three rubber drive rollers and all three rollers are simultaneously driven for positive core rotation, even over irregular prior windings.

Power Core Jog is standard equipment: cw/ccw for quickly indexing the core to a new position.

A belt winding head of new design is available for winding heavy wire through small residual holes which previously have had to be wound by hand. Winding cycles of down to 20 seconds are now possible, eliminating with hand winding with as little as ten turns with this new head. Nine belt shuttles are available from .093 to 3/8" for the 4" belt head, and 5 belt shuttles from 3/16" to 1/2" for the 6" head.

The exclusive Gorman Jockey Stick Core Positioning Device is standard equipment with the Productor M. It can be locked in position.

All Gorman Toroid Winding Machines use the patented Delrin and rubber shuttle driving rollers for long and silent running: a drive which maintains the high polish of shuttles, reducing the likelihood of inside coil damage and shorted turns by accidental rubbing by the shuttle.

The smaller shuttles are of circular rather than angular cross section giving more wire storage per shuttle size.

Machines are available in 115V or 220V versions at no additional cost. All internal electrical components are of bolt-on or plug-in construction assuring years of continuous use and trouble free service.



The Belt Head

The Belt Head is actually a combination winding head which can be used as a belt head or with side slider shuttles or wire slider shuttles. Just the removal of the belt converts it into a side slider or wire slider type.

When used as a belt head this new development makes it possible to wind a relatively heavy magnet wire through a small residual hole. The tension principle is entirely different in concept from the familiar wire sliders and side sliders commonly used.

A shuttle is used which is very similar to the wire slider type, but with a heavier wall thickness. A wire tensioning belt is used in conjunction with the shuttle with the smooth side in contact with the shuttle for a little more than half of the circumference.

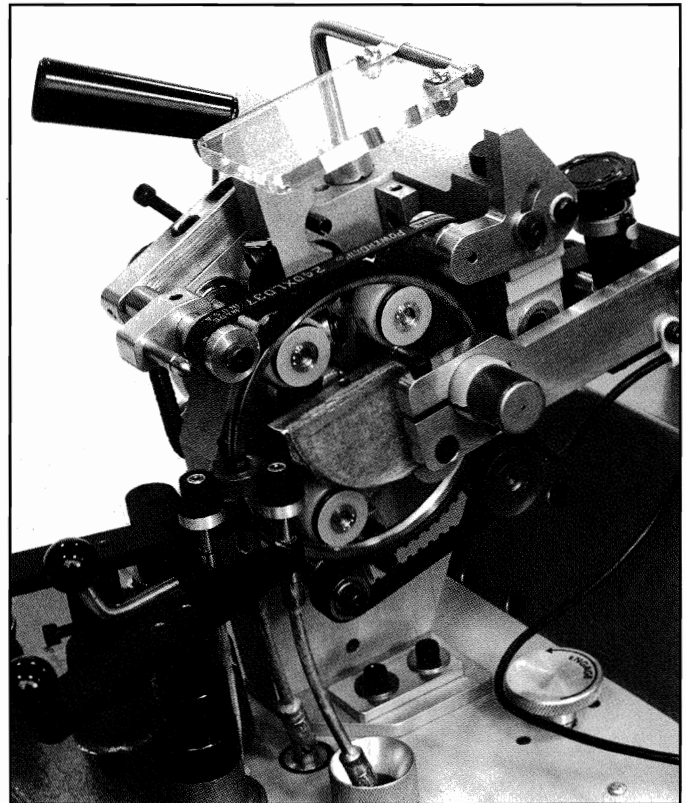
The shuttle is driven by four internal rollers in the usual manner and the toothed belt is driven by a toothed pulley so that its motion will coincide with that of the shuttle.

The magnet wire being pulled from the shuttle, down through the toroid is pulled tightly about the toroid by its sliding between the shuttle and the tensioning belt riding on top of the shuttle. The shuttle is loaded and winds the toroid in the same direction.

The wire size range of the Belt Head is normally from #16 to #35 AWG with shuttle as small as .093" cross section at present with a 4" belt head. **A new 2-1/2" belt shuttle winding head is about to be released for even smaller belt wound cores.**

Due to the simplicity of operations, complete bench to bench cycles of up to 3 per minute are now possible, greatly reducing the once high cost of winding toroids.

Wires as heavy as #16 AWG can be wound with the new 6 x 1/2" belt shuttle.





Specifications

- Choice of Winding Heads:** 4" or 6" Heads (plus a new to be released 2-1/2" diameter shuttle head for smaller toroids.)
- Shuttle Sizes:**
 - 4" Wire slider shuttles - .055", .062", .075", .100", .115", .135"
 - 4" Side slider shuttles - 3/16", 1/4", 5/16", 3/8"
 - 4" Belt head shuttles - .093", .100", .115", .125", .135", 3/16", 1/4", 5/16", 3/8"
 - 6" Side slider shuttles - 3/16", 1/4", 5/16", 3/8", 1/2", 5/8"
 - 6" Belt shuttles - 3/16", 1/4", 5/16", 3/8", 1/2"
 - (These are the finished hole sizes through which the shuttle will fit.)
- Wire Sizes:**
 - #20 AWG to #44 AWG with the 4" head
 - #16 AWG to #39 AWG with the 6" head
 - #16 AWG can be wound with the 6" x 1/2" belt shuttle
- Core Sizes:**
 - .062" ID to 2" OD with 4" head.
 - 3/16" ID to 4" OD with 6" head.
- Core Rotation:** Programmable clockwise or counter clockwise winding direction.
- Core:** Clockwise or counter clockwise core jog.
- Core Holding Assemblies:** Light duty and medium duty rotator assemblies. Both have three drive rollers, (all driving). Core rotator assembly can be moved in any direction by the jockey stick for final centering of the shuttle in the toroid while winding.
- Shuttle Speed Control:** By Push Button Start and Stop, or by Foot Pedal from 0 to 2000 TPM with the 4" head.
- Motor:** 3/4 HP Permanent magnet DC motor with microprocessor speed control.
- Power:** 115V 50/60 HZ, or 220V 50/60 HZ, single phase.
- Dimensions:** 21" W x 20" D x 22" H with overhead Dereeler - 15" H without.
- Weight:** 80 lbs.; crated shipping weight 150 lbs.

Gorman Machine Corp. (Main Office - Sales and Manufacturing)
7 Burke Drive, Brockton, MA 02301 • Tel. 508.588.2900 • Fax 508.588.9560

Visit our web site at www.gormanmachine.com

