



**Gorman Machine Corp.**

122 East Grove St.  
P.O. Box 512  
Middleboro, MA 02346  
Tel. 508-588-2900  
Fax 508-588-9560

[www.gormanmachine.com](http://www.gormanmachine.com)  
[sales@gormanmachine.com](mailto:sales@gormanmachine.com)

## 900A Toroid Winder

**Heavy Duty Drive**

**Dual Preset Counters Available**

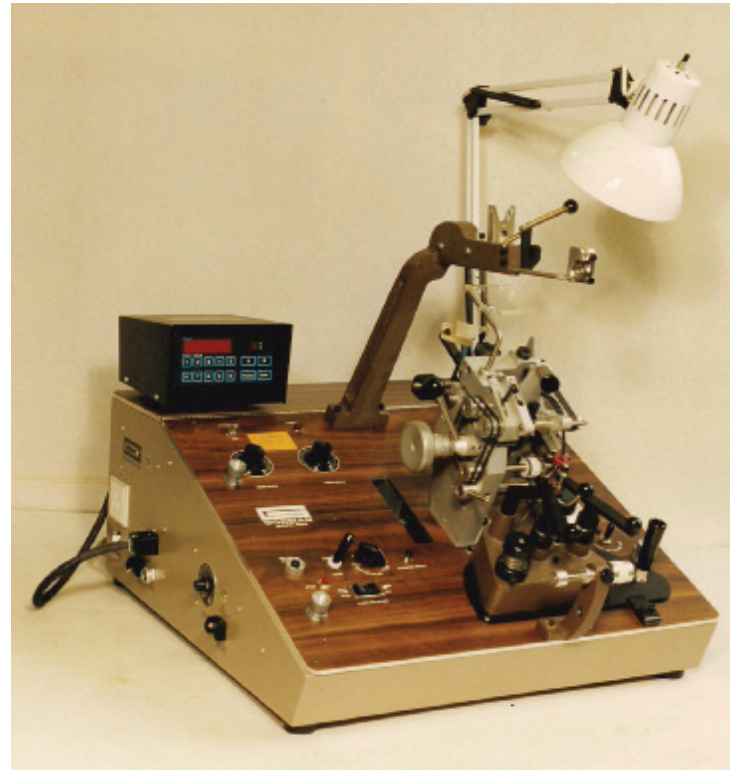
**Instantly Removable Shuttles**

**Automatic Sector Winding or**

**Manually Controlled 360° CW or  
CCW Core Rotation**

**Front Loading or Optional Overhead  
Dereeler with Wire Cutter**

**Up to 2000 Turns per Minute**



### FEATURES

- **Four" and Six" Precision Winding Heads**  
Accommodates wires from 18 AWG to 42 AWG.
- **Wide Core Size Range**  
Using the four winding heads available, core sizes from .055" I.D. (1.40 mm) to 4" O.D. (101.6mm) can be wound.
- **Variable Speed**  
Ball bearing four roller drive rotates the shuttle at speeds up to 2000 turns per minute using the 4" 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 core holder assembly may be moved back, forward, or sideways while the core is being wound — a Gorman Exclusive.
- **Predetermined Counters**  
Electronic counters guarantee accurate counting. Dual preset electronic counter — standard equipment (one for loading, one for counting turns).
- **Core Rotation**  
Three powered driving rollers insure positive rotation of the core through a variable speed range.





## THE 900A

The **900A** is a recent addition to the 900 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 insertion and removal 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 **900A** is available with either a four or six inch winding head and interchangeable light or medium duty 360 degree core rotators. The **light duty** rotators will handle cores from .100" (2.54mm) to 2.0" (50.8mm) O.D.

The **medium duty** rotators will rigidly hold and rotate cores from .625" (15.88mm) to 4.0" (101.6mm) O.D. 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 now available 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, competing with hand winding with as little as ten turns with this new head. Nine belt shuttles are available for the 4" (101.6mm) belt head and 5 belt shuttles for the 6" (127mm) head.

The exclusive Gorman Jockey Stick Core Positioning Device is standard equipment with the **900A**. 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 the 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 can be equipped at factory for 220V 50/60 cycle operation at a small additional charge. 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 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.

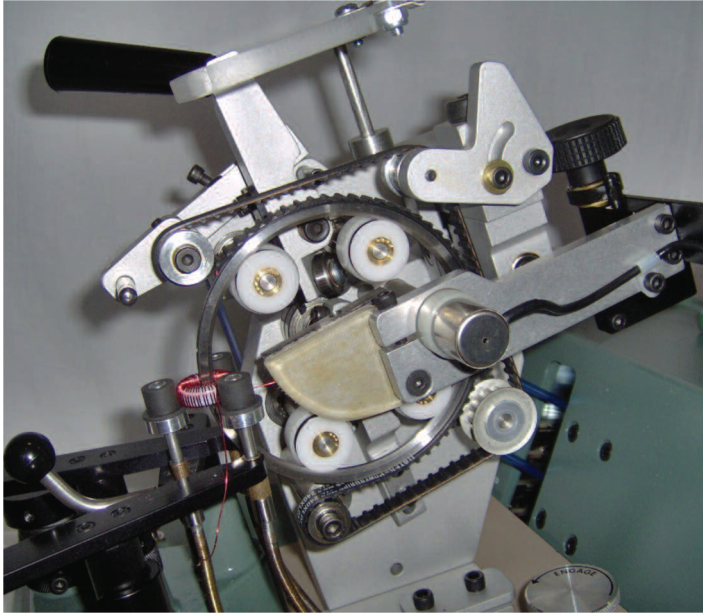
The shuttle is driven by four internal rollers in the usual manner and the toothed belt is driven by a toothed pulley so that its motion will coincide with that of the shuttle.

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 #18 to #35 AWG with a shuttle as small as .093" (2.36mm) cross section at present.

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 #18 AWG can be wound with the new 6.0" (152.4mm) x .500" (127mm) belt shuttle.





## SPECIFICATIONS

**Multiply all standard inch numbers by 25.4 for metric conversion.**

<b>Choice of Winding Heads:</b>	4" or 6" heads complete with one shuttle and associated accessories.
<b>Shuttle Sizes:</b>	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)
<b>Wire Sizes:</b>	#18 AWG to #42 AWG with the 4" or 6" heads and to #18 AWG with the new 6" x 1/2" belt shuttle.
<b>Core Sizes:</b>	.055" I.D. to center of 2" O.D. with 4" head.  3/16" I.D. to center of 4" O.D. with 6" head.
<b>Core Rotation:</b>	Probably the most important feature over our Productor II Toroid Winder is the choice of Automatic Sector Winding up to 360° or manually controlled CW or CCW core rotation by rocker switch.
<b>Core Holding:</b>	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.
<b>Shuttle Speed Control:</b>	By Push Button Start or Stop, by Foot Switch or by Variable Speed Foot Pedal from 0 to 2000 TPM with a 4" head.
<b>Motor:</b>	3/4" H.P. permanent magnet DC motor.
<b>Power:</b>	115 volts 50/60 HZ or 220V 50/60HZ, single phase.
<b>Weight:</b>	110 lbs, crated shipping weight 200 lbs.

