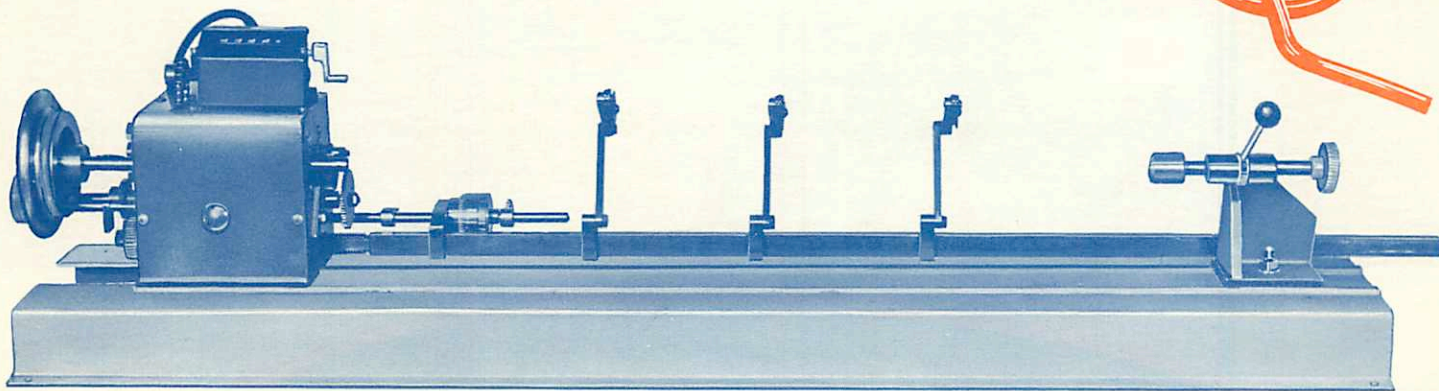


Transformer Winders



MODEL AL

The Model AL coil winding machine is designed for the efficient production of layer wound coils with manual paper insertion. Wire spacing is determined by the proper selection of change gears which drive a heavy bronze nut to move the rugged feed bar. Provision is made to adjust for wear at all points so that the original accuracy of the machine can be maintained at all times. All internal gears are hardened and are of the helical type for long life and quiet operation.

In operation the winding figures traverse the distance determined by the location of easily adjustable stops at which point the motor is stopped and a brake applied. In order to restart the machine the operator must throw a small pointer which engages hardened dogs for driving the feed in the opposite direction. Thus the machine automatically stops when the layer is completed and will not restart until the operator indicates her readiness. In operation the operator restarts the machine slowly by means of a foot

control and does not bring the machine up to speed until the paper is inserted.

A manual feed knob positions the fingers at the start of the coil if this is necessary, and also serves to bring out the taps at any point desired. This same knob engages a spiraling gear convenient for finishing a coil, with a feed of .047" per turn.

The shafts are high carbon or stainless steel, the spindle and intermediate shafts are carried by ball bearings, with ball thrust for the lead screw. Grooves for guiding the wire are ground in the outer races of ball bearings.

Standard equipment includes winding fingers for three coils, gears for one wire size, predetermining counter, tailstock, warning light, ball bearing tailstock center, micrometer adjustment for traverse, solenoid brake, handwheel and pulley. Tensions, paper table, marking knives, motor and speed control are priced separately.

SPECIFICATIONS

Width 10", height 11", length 48" • Maximum distance, spindle to tailstock, 30" • Wire feeds as small as .001"; as great as .050" (may be increased with W-308 & 9) • Maximum Coil diameter 8½" • Maximum traverse 8" (longer traverse available at slight additional cost) • Weight, without motor, 105 lbs.

MODEL**AM**

This machine differs from the Model AL described on the front page only in the manner of control. A foot trip is included to replace the manual shift embodied in the Model AL. Shifting is by solenoids and the operator's hands are free for paper insertion at all times.

Equipment, specifications and accessories are the same as for the Model AL.

MODEL**AC**

This model differs from the AM in that a selector switch is supplied which permits continuous operation. This machine may be operated as a bobbin winder, or as a transformer winder, either with or without stopping at the end of each layer. When winding continuously, a light indicates the proper moment to insert the paper.

Equipment and specifications duplicate those of the AL and AM.

MODEL**AB**

This machine is designed primarily for the winding of long and large bobbins, but is also ideal for the continuous winding of paper interleaved coils. No provision is made for stopping the machine automatically at the end of the layer, but indicator lights show the direction of traverse at all times and change at the proper moment for insertion of the paper.

Specifications and standard equipment duplicate those of the Model AL.

Accessories

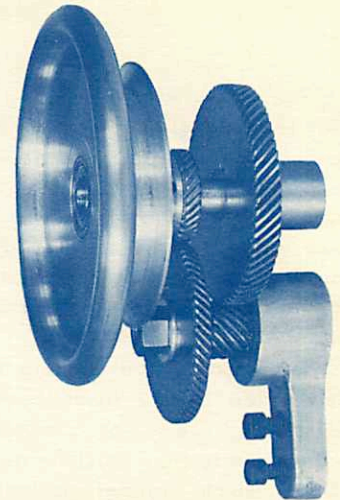
SPEED REDUCTION UNIT

For greater torque and better speed control we can supply our BACK GEAR ATTACHMENT, designed to fit any model we manufacture or similar machines.

This device makes possible the winding of heavier gauge wires and permits the motor to operate at speeds at which it develops its maximum power.

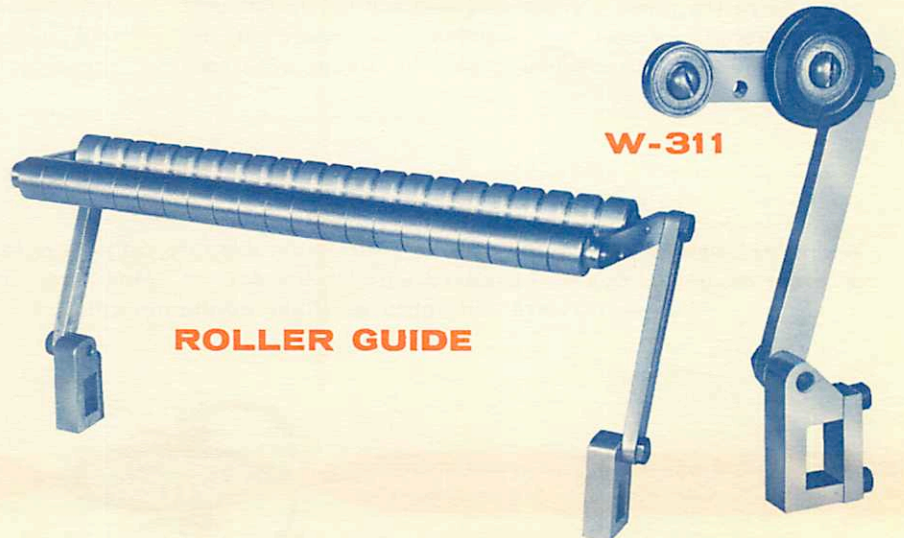
We recommend an 8:1 reduction for most applications which will give regulated speeds up to 300 RPM with back gearing engaged and speeds as high as 2400 RPM in direct drive.

For use with our "B" Series winders, a ratio of 5 to 1 provides regulated speeds up to 50 RPM—250 RPM—500 RPM and 2500 RPM depending on combination of gears.



ROLLER GUIDE

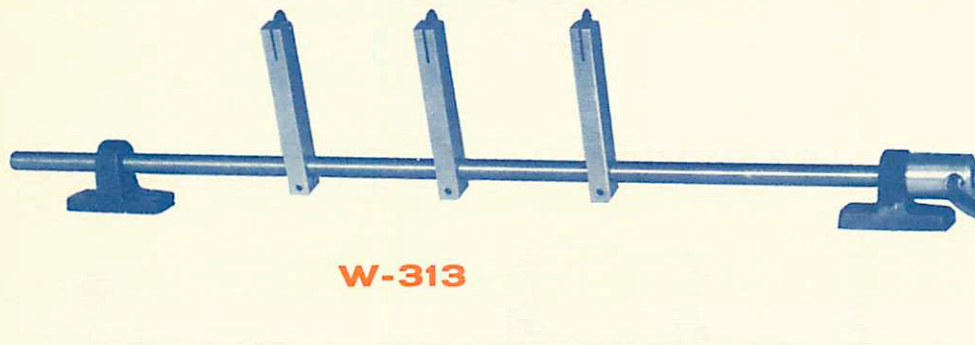
For quick and accurate set up for a large number of coils on each stick, roller type guides often prove more economical than the use of a large number of the standard adjustable guides W-311. These rollers may be made by the customer or will be supplied by us on receipt of full information regarding coil length, number of coils, and wire size. Rollers are mounted on two standard wire guide brackets as shown. Prices on request.



ROLLER GUIDE

W-311

W-313 Marking device which mounts on the base of any transformer winder of the "A" series. Rotating hardened steel serrating knives clearly mark the length of the coils in proper relationship to the winding. Knife brackets are shaped to provide maximum operator safety. This attachment is supplied without the three knives shown in the illustration. Order Item W-314 in the quantities required for your application. One less knife is required than the number of coils being wound. While this device is intended primarily for marking purposes, there is a substantial number of coils, particularly those wound on round cores with which the entire cutting operation may be performed in the machine using this attachment.



W-313



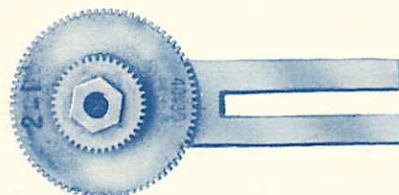
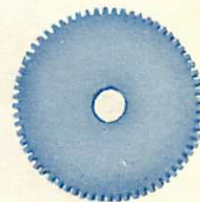
W-314



W-312

W-312 Improved type adjustable paper table insures the accurate positioning of the interleaving material. During the traverse of the wire guide, precut paper is placed on the table against the adjustable stops. At the desired moment the lightweight aluminum shelf is easily tipped toward the coil and the paper is drawn into the winding. Since the paper is not actually held by the operator's hands a minimum amount of skill is required to produce straight insertions. In the loading position the table is tipped toward the operator to provide positive placement against the stops. Limit adjustments are provided for the loading and inserting positions so that the table cannot come in contact with the coil at any time. A quick release feature is provided for tipping the table completely out of the way when changing sticks. In addition, the table provides an effective additional guard for the cutting knives which are often mounted beneath it. Available for "A" series only.

GEARS: Standard equipment includes set up for any specified feed. In addition, a fixed spiralling feed is incorporated in all machines. For general work we recommend the Layer Winding Set of Gears & Idlers to provide over 450 different feeds between 11 to 960 turns per inch on the "A" series winder and from 1¼ to 960 turns per inch on the "B" series.



W-308

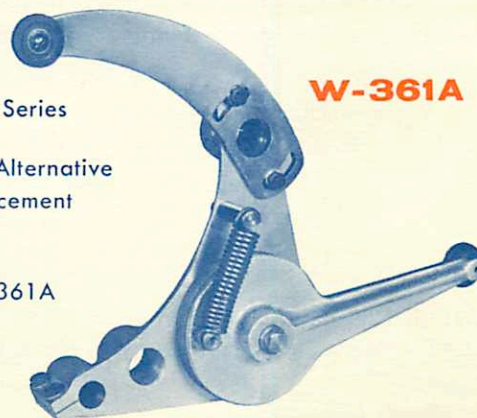
W-309

W-308 (2:1 ratio) W-309 (3:1 ratio) Idlers for increasing range of gear ratios. These gears included in the Layer Winding Set above.

W-361A Wire Guide with built in tension for "B" Series

W-361B (not shown) Alternative design to provide closer placement of guides

W-361C Same as W-361A but fitted for micrometer (micrometer not included)



W-361A