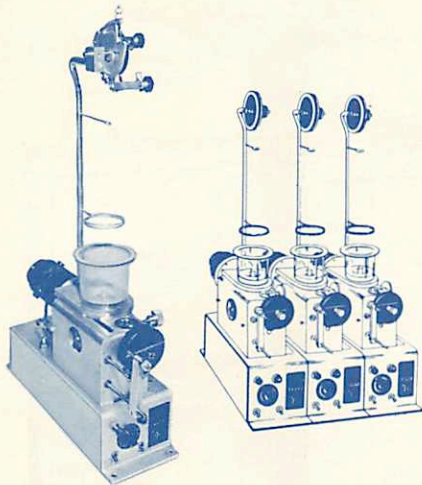
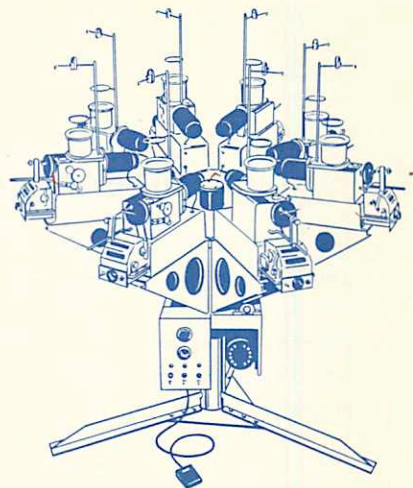


BOBBIN WINDERS

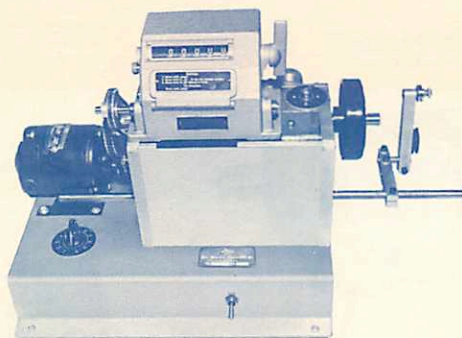


MODEL CHM HIGH SPEED BOBBIN WINDER

Bobbins may be wound at speeds of from 10,000-14,000 RPM on this machine which features direct mounted motor drive. Front loading and a single push button to reset the counter and restart the machine combine to reduce loading time to the minimum. Multiple setups permit spindle centers as close as 6". Predetermining counter automatically compensates for overrun.

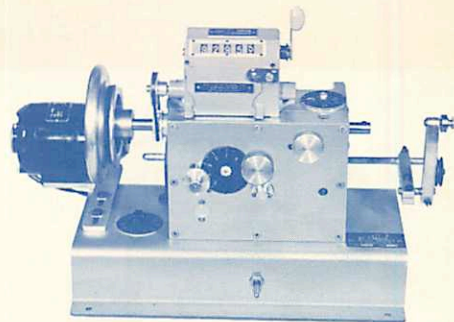


(Other front loading models available)



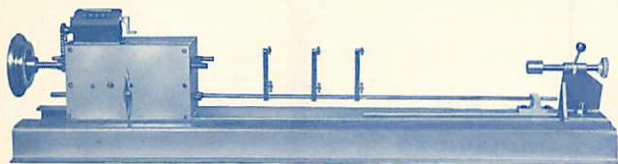
MODEL CS BOBBIN WINDER

Model C head without bed or tailstock. Several machines can be mounted conveniently for a single operator. Greater flexibility than multiple spindle machines without increased cost.



MODEL CXS BOBBIN WINDER

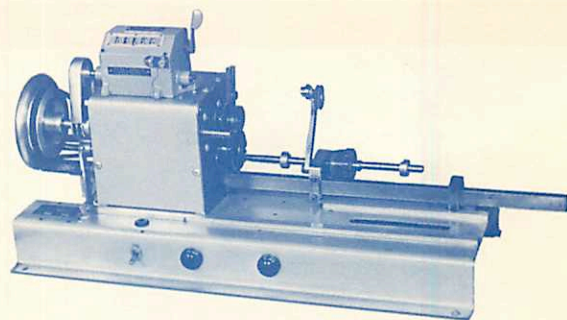
The ultimate in flexibility in a small bobbin winder embodying the adjustable cam traverse feature and a continuously variable transmission to control the traverse rate.



MODEL C-1

BOBBIN AND TRANSFORMER WINDER

Larger bobbin winder with winding fingers in the rear... making it suitable for paper interleaving as well as bobbin winding. Will wind coils up to 3" in length.



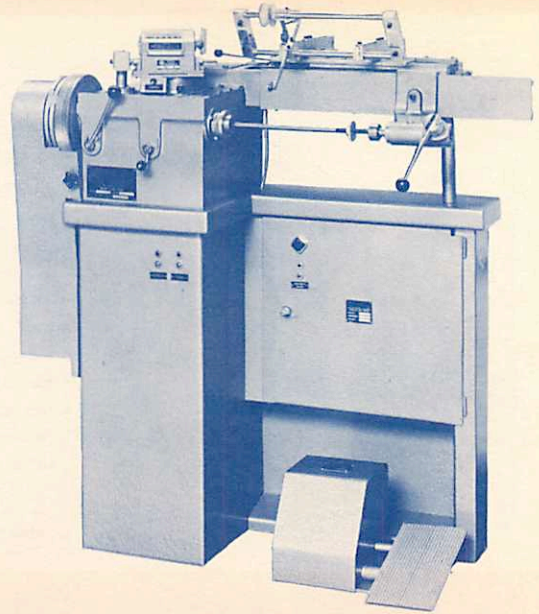
MODEL ABS BOBBIN WINDER

A relatively high speed machine for the larger bobbins. A rugged lead screw permits a long traverse in a small compact unit and micro switches control the reversing mechanism.

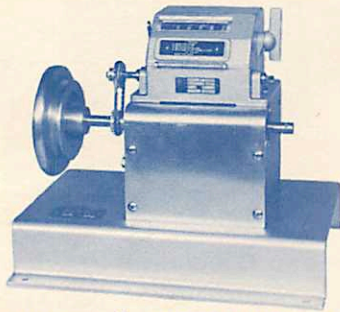
BOBBIN WINDERS (con't)

MODEL OO BOBBIN WINDER

This machine is but one of a full line of larger winding machines manufactured abroad and sold exclusively by us in North America. Among the attractive features are fine design, quality craftsmanship, ease of adjustment, and most competitive pricing.

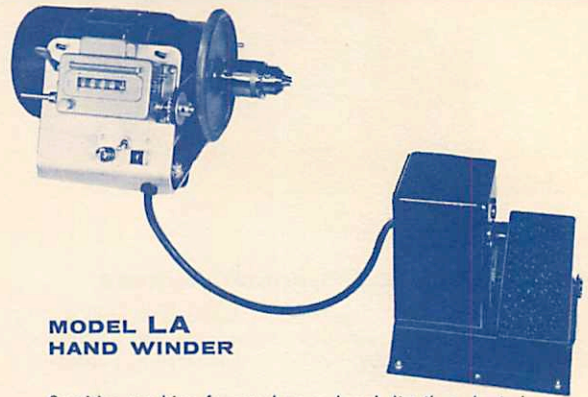


HAND WINDERS



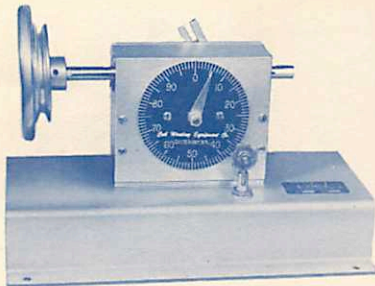
MODEL L HAND WINDER

Economical winder for random wound or hand spaced coils... such as motor fields, TV deflection yokes and other coils of this nature. The predetermining counter stops the machine when the coil is complete. Also available with tailstock designated MODEL LL.



**MODEL LA
HAND WINDER**

Sensitive machine for random or hand distributed windings particularly suited for the smaller coils. A high speed predetermining counter is standard equipment.

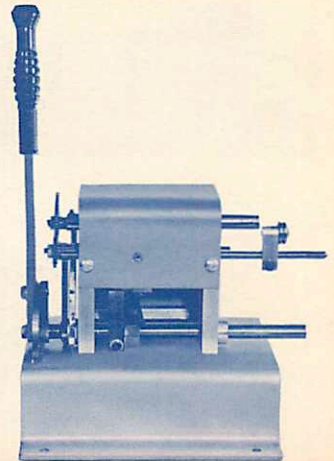


MODEL H HAND WINDER

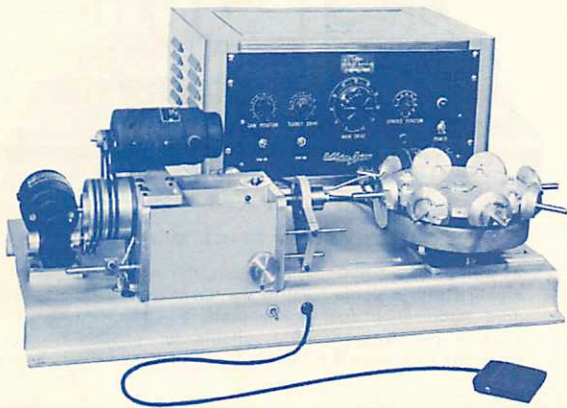
This unit incorporates built-in count control with automatic compensation for overrun. It is ideal for random wound coils when the number of turns must be accurately controlled; coils in sequence having a differing number of turns may be programmed.

**MODEL MP
HAND WINDER**

For the most rapid production of hand wound or space wound coils of relatively few turns. One stroke of the lever winds the exact number of turns pre-set on the machine. Traverse is easily adjusted, and non-linear windings may be produced.

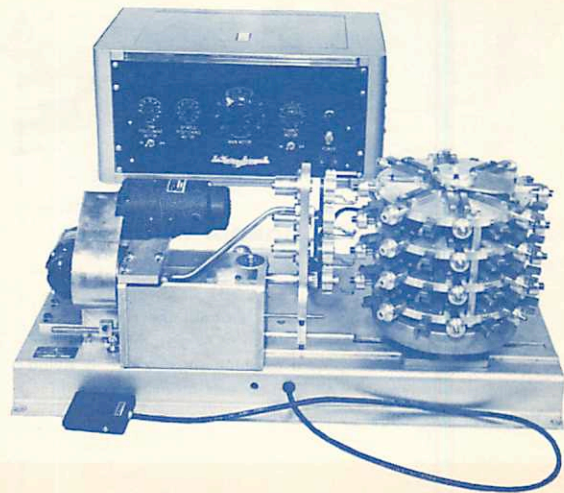


TURRET TRANSFER MACHINES



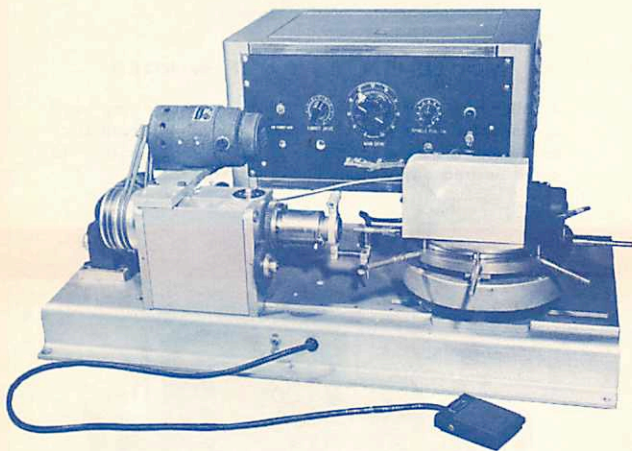
MODEL CK AND MODEL CK-CP
AUTOMATIC BOBBIN WINDERS

These models produce complete bobbin-type coils without operator attention when equipped with suitable tooling and accessories. The basic models permit an unskilled operator to produce coils of consistently good quality at rates otherwise unattainable.



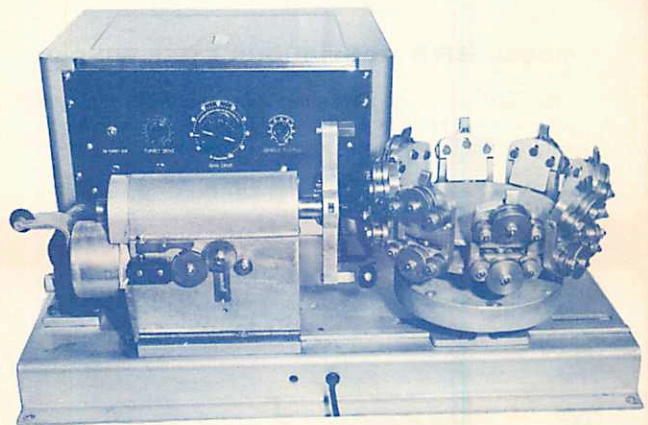
MODEL CK-T4
MULTIPLE LEVEL BOBBIN WINDER

Many of our turret-type machines can be increased in capacity by the adding of one or more levels to the turret along with suitable slave winding spindles. The machine illustrated here is particularly suitable for coils having a relatively high number of turns, and in such applications its capacity is four times as great as the conventional machine.



MODEL WK AUTOMATIC LATTICE WINDER

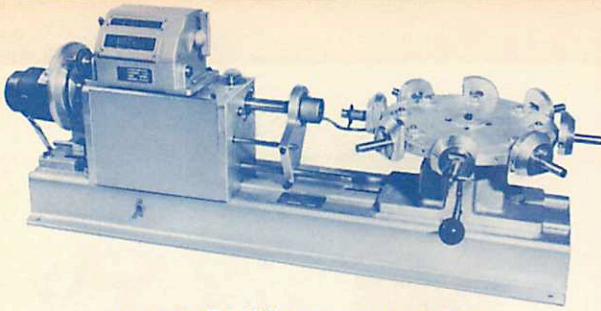
All types of lattice-wound coils can be produced on a machine of this type, and in addition, the unit pictured has an attachment for winding progressive universal patterns. The same feature makes it possible to wind multiple-pi coils on a very high production basis.



MODEL GHK AUTOMATIC COIL WINDER

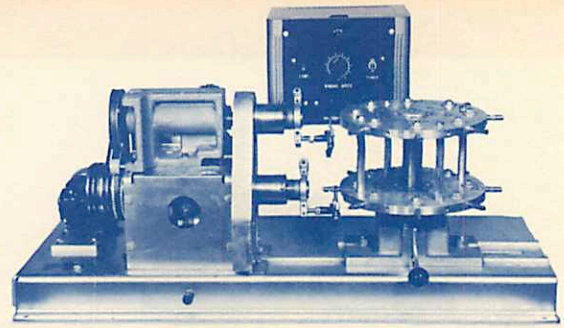
This machine is of unusually rugged construction and is designed for the production of random wound coils such as might be used in electric motors. A heavy spindle carried in rugged bearings permits winding of heavy wire and the turret has been modified to permit the winding of coils having an unusually large overall measurement.

TURRET TRANSFER MACHINES WITH MANUAL INDEX



MODEL GKM BOBBIN WINDER

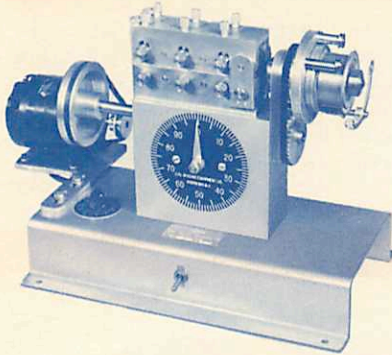
This relatively inexpensive machine provides most of the benefits of the more sophisticated motor-driven turret-transfer machines. While its cost is about the same as conventional units, its operation is such as to give the production equivalent of a dual spindle machine since a coil is being wound simultaneously with loading and other operator functions at a different station.



**MODEL WKM-T2
TWO-LEVEL LATTICE WINDER**

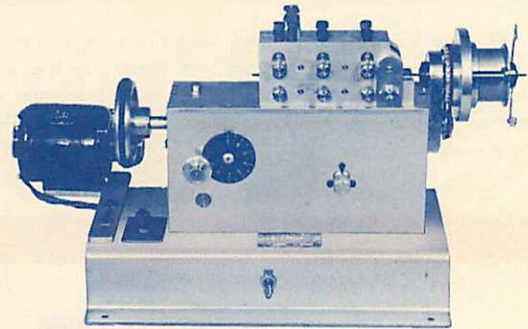
As with other machines in this group, this model is normally supplied with a single level in the turret tooling. This standard modification doubles the production capacity of the machine and is particularly suitable for applications in which the coils have a relatively high number of turns.

SINGLE-LAYER WINDERS



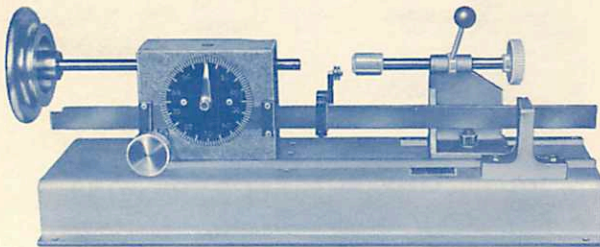
MODEL BRS CONTINUOUS STRIP WINDER

This machine feeds a mandrel or strip continuously through the winding head to produce windings of unusually high accuracy at relatively high rates of production.



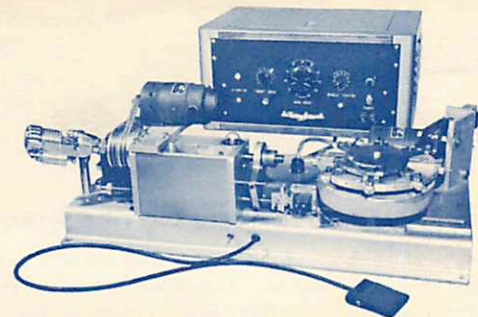
MODEL BXRS STRIP WINDER

A roller type feed box and a suitable strip winding head are mounted on a special gear box combining features of our Model B with a continuously variable transmission to make desired adjustments in the traverse rate.



MODEL P SPACE WINDER

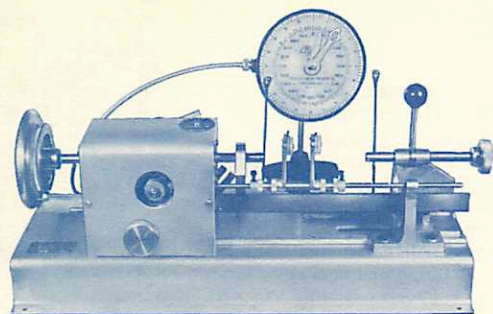
Model B head with bed and tailstock for winding long coils and flexible forms. Change gears provide thousands of feeds of extreme accuracy from 7 to 1500 turns per inch. Feed reverse available for limited production of transformer type windings.



**MODEL CK-SL SINGLE-LAYER
TURRET-TRANSFER WINDER**

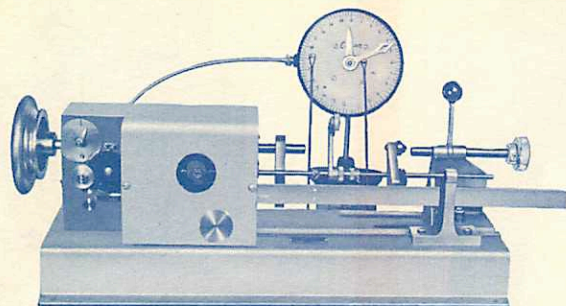
This machine is a development of our popular automatic winders suitable especially for the winding of single-layer coils. Linear or non-linear turns distribution is possible. Fifteen or twenty coils a minute are often produced on such equipment. Similar models are available for unusually long windings or with manually-indexed turrets.

LATTICE/LABORATORY WINDERS



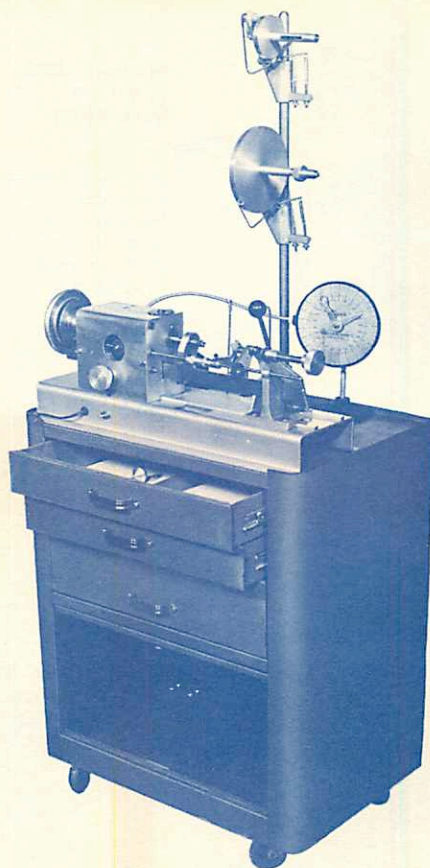
MODEL W PROGRESSIVE UNIVERSAL WINDER

Extremely versatile winder ideal for laboratory use or production uses. Combines the lattice winding mechanism of our Model U with a progressive feed. Available with adjustable cam traverse for bank windings, improved progressive universal windings, and simplified universal winding setups.



MODEL WX VARIABLE GAIN WINDER

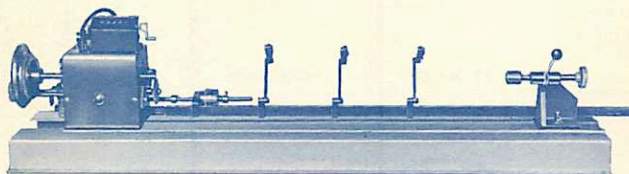
This is a Model W with a continuously variable feed or gain control. Indicator shows exact gearing to duplicate sample. The perfect machine to cut experimental coil winding costs and still provide exact setup gear ratios for standard production machines. Wire spacing for bobbin winding also continuously variable without gear changing.



COMPLETE LABORATORY UNIT

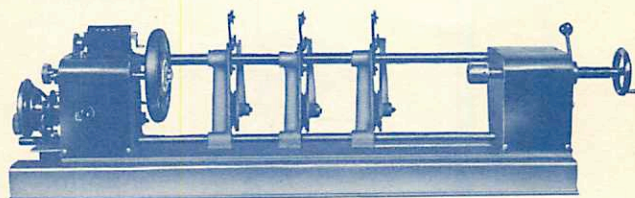
The Models WX and W are suitable for winding virtually every type of coil in common use as well as many special types. As a result they are ideally suited for use in the laboratory and for this reason we offer a special laboratory package which includes the most useful accessories and a cabinet (optional) which serves as a workstand for the machine and a suitable storage place for the accessories and the materials used with the machine.

TRANSFORMER WINDERS



MODEL AL TRANSFORMER WINDER

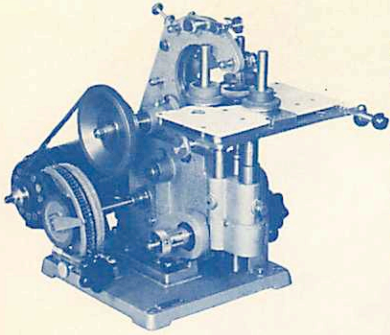
Rugged, dependable machine for the production of coils in which the paper may be inserted manually. Adjustable traverse distance... automatic stop at the end of the layer. Adjustments at wear points for absolute accuracy. Adjustable turn spacing.



MODEL BM HEAVY COIL WINDER

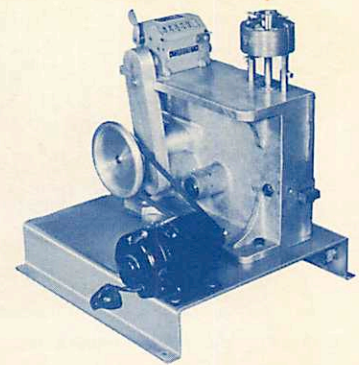
For winding heavy coils... in single or multiple. Heavy wire tension built into winding fingers eliminates separate tensions and permits the use of 12" and larger supply spools. Shift lever provides choice of 10 to 1 gear reduction or direct drive.

SPECIAL PURPOSE MACHINES



MODEL DB TOROID WINDERS

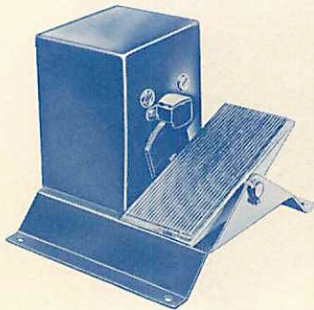
The two-ring design of these machines permits the winding of heavier wire with accurate machine spacing. A full range of machine sizes is available.



MODEL S-2 STATOR WINDER

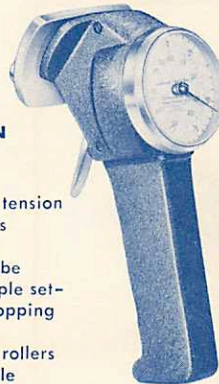
A larger unit particularly suited for shaded pole or DC motor fields. Machine winding assures uniformity and eliminates need of skilled personnel. Larger and smaller models available.

ACCESSORIES



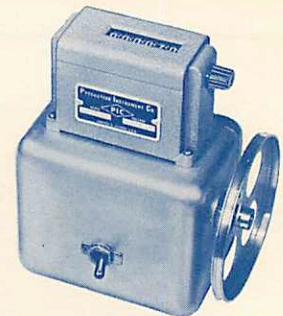
FOOT CONTROL

A rugged steel case houses a standard rheostat or auto-transformer to permit virtually stepless speed control by the foot pedal. Three sizes accommodate units to control up to 1/2 HP.



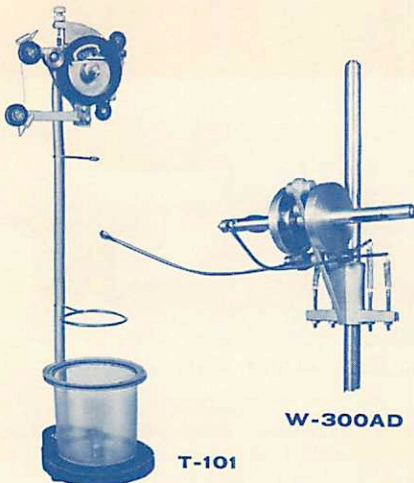
W-327 PRECISION TENSION METER

Measures wire tension while the coil is being wound. Readings may be taken on multiple set-ups without stopping the machine. Trigger opens rollers to permit simple application to the very smallest wire.



FOOTAGE COUNTER

An extremely sensitive measuring device permitting accurate readings on the very finest wire. Adds only one gram to wire tension.



T-101

W-300AD

WIRE TENSION DEVICES

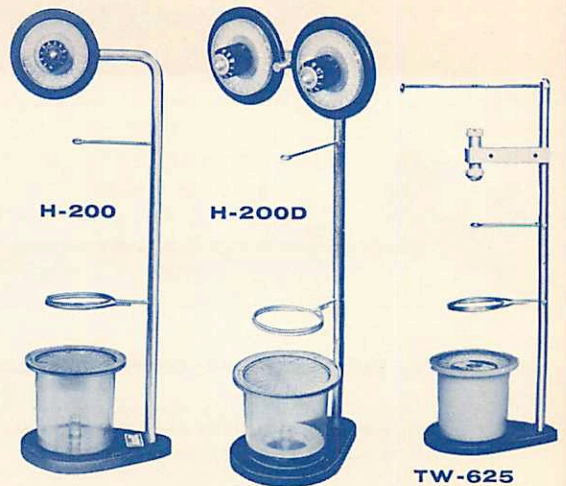
T-101—for high speed over-end dereeling of medium and fine wires.

W-300AD—A double spool version of our standard 3" tension.

H-200—A low inertia hysteresis type device for most accurate regulation with the very finest wire.

H-200D—Double hysteresis tension. Two units in tandem give twice the range of the single head.

TW-625—Over-end dereeler with zero inertia for maximum winding speeds.



H-200

H-200D

TW-625