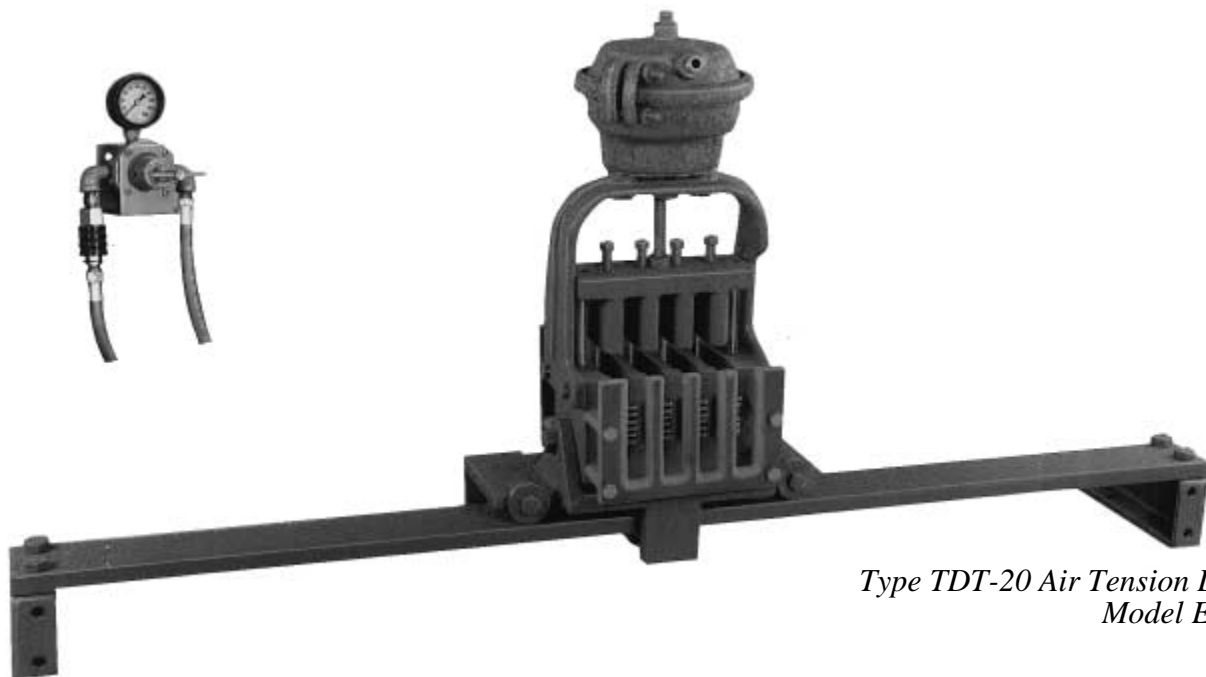


Type TDT-20 Air Tension Device



*Type TDT-20 Air Tension Device
Model E-2326*

Pressure Regulated Control of Winding Tension.

Provides:

- **More compact windings**
- **Mechanically stronger coils**
- **Less space for air and moisture**

Accommodating Design

The TDT-20 Air Tension Device is designed for multiple flat wire winding accommodating up to 20 conductors in an arrangement four wide by five deep and may be used with glass, dacron glass, paper and various types of magnet wire insulating films. The base of the tension device has four slots which retain the highly polished, hardened steel pressure plates each 5/8" wide by 5" long which apply pressure to the conductors. The upper part of the tension device has four projections extending downward which exert force against the pressure plates when air pressure is applied. This upper part is attached to the piston rod of a diaphragm air cylinder mounted on a steel yoke attached to the tension device base.

Adjustable Plates Prevent Damage

Eight compression springs are located below the pressure plates. These allow some slight movement, whenever the insulation on the conductor is more than the normal thickness, thereby preventing damage to the wire. Four adjusting screws in the upper part provide a means of equalizing tension between the four stacks of conductors. Slotted wire guides are mounted in front of and behind the tension device preventing the wires from contacting the sides of the slots. This entire assembly is pivot mounted in a roller carriage supported on a 5/8" x 3" x 45-1/2" bar providing approximately 30" travel in front of a power transformer or other type coil. End mounting brackets are provided.

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Uniform Coil Production

More uniform coil production results from pressure regulated tension control. It affords supervision the opportunity to control the way coils are wound — the night shift winds the same as the day shift. Once the pressure regulator setting which develops the desired tension is determined, it should be added to a data card, thereby simplifying set-up and ensuring that the same winding tension will be applied the next time this coil is wound. Presetting of wire tension is possible based on experience with various numbers and sizes of conductors for different types of transformers, or other coils. Eliminate makeshift arrangements and increase coil winding efficiency.

Easy Tension Adjustment

Uniform tension is maintained despite variations in conductor size and insulation thickness. The operator easily controls winding tension by adjustment of the pressure regulator mounted conveniently on the wind-

ing machine. At the completion of winding, by actuating the sleeve valve adjacent to the regulator, all tension is relieved making it easily possible to pull all the conductors through the tension device for the starting lead length of the next coil. Returning the sleeve valve to its original position re-establishes the desired winding tensions.

Transformer Winding Applications

Primarily designed for transformer winding, the unit is normally equipped with pressure plates to accommodate 20 conductors. The unit has been utilized in field coil winding and loop winding operations and it can be furnished with a stationary mounting bracket. In a number of instances, the unit has been utilized in multiple random wire winding operations. Special wire guides with two holes aligned in front of each pair of pressure plates accommodate up to 40 wires in hand. These wire guides (part number 2325-18) are available at additional cost.

As illustrated, Model E-2326 Type TDT-20 Air Tension Device includes the roller carriage and bar with mounting brackets. For fixed mounting, Item 2330 Type TDT-20 Air Tension Device includes a stationary mounting bracket. Pressure regulator, gauge, sleeve valve and 20 feet of air hose are furnished.

Shipping Data

| Item No. | Net Weight | Crated Weight | Boxed for Export | Dimensions (inches) | | | Cubic Feet |
|----------|------------|---------------|------------------|---------------------|-----|-----|------------|
| | | | | L | W | H | |
| E-2326 | 95 lbs. | 155 lbs. | 205 lbs. | 54" | 16" | 21" | 11 |
| E-2330 | 53 lbs. | 70 lbs. | 70 lbs. | 22" | 12" | 8" | 2 |

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