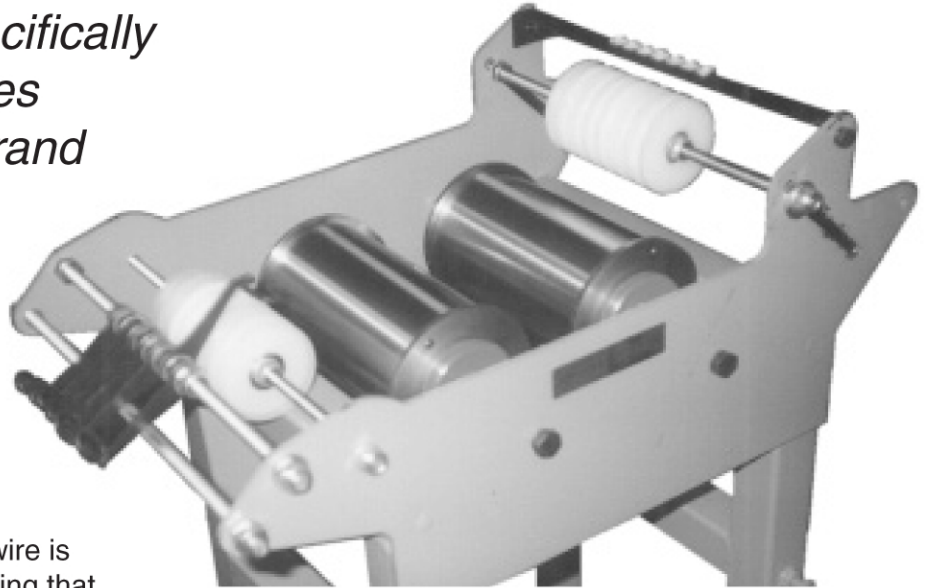


# Double Capstan Wire Strand Tension Equalizer

*This unit is designed specifically for pay off of multiple wires for concentric finished strand*

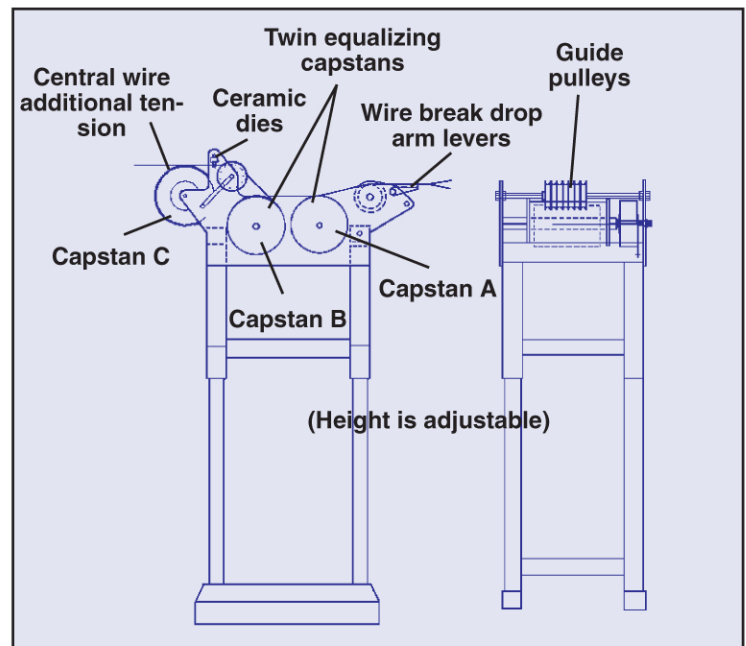


Instead of using individual capstans, each wire is controlled by the same two capstans, ensuring that each wire has exactly the same tension. The wires are wrapped slightly less than one turn around the input and exit capstan rollers with their wire paths set by input and output guide pulleys with ceramic eyes to prevent overlaps. The input capstan A is adjusted to give an input tension to the output capstan B. An electronic digital controller (for repeatable settings) sets the equalizing tension using hysteresis brakes. This insures constant tension during the manufacturing process. This equalizing tension is applied to all wires except the center wire.

The center wire is then wrapped slightly less than one turn around capstan C and adjusted accordingly to add a small additional tension to this center wire. This insures its central position in the strand formation prior to the closing dye of the bunching machine. This then “locks in” the strand tensions insuring quality strand formation during the pass through the bow and at the axis of twist occurring.

Hysteresis control of tension is only normally applied to capstan B with spring adjusted Ferodo brake being applied on capstans A and C.

- 1) Capstan C is not shown in this photograph.
- 2) Electronic digital readout can be added to the final capstan if required.



**WYREPAK INDUSTRIES**

68 Buttonwood St., Bristol, RI 02809 USA  
 Phone: 401-253-5500 • Fax: 401-253-7350  
 e-mail: [hfanher@wyrepak.com](mailto:hfanher@wyrepak.com)  
 web: [wyrepakind.com](http://wyrepakind.com)