



# Tension Controllers

TENSION CONTROLLERS				
Model	Capstan Sheave Diameter	Speed Range FPM / MPM	Tension Range	Wire Size Range
TC-12-HS	12" (305 mm)	1000-4000 fpm (305 - 1220 mpm)	0 - 15 lbs (0 - 6.8 kg)	10 - 28 AWG
TC-12-LS	12" (305 mm)	150 - 1750 fpm (46 - 533 mpm)	0 - 30 lbs (0 - 13.6 kg)	10 - 28 AWG
TC-16	16" (420mm)	200 - 2500 fpm (61 - 762 mpm)	0 - 45 lbs (0 - 20 kg)	6 - 14 AWG

Tension Controllers are designed to maintain constant tension throughout a vast range of applications and process speeds. The system includes a mini belt wrap capstan, a tension transducer, an AC Drive, AC Motor, and a self-tuning closed-loop Digital PID control system.

The Controller provides user access to set the desired tension and displays the actual running tension of the wire. The tension transducer measures the actual running tension of the wire or cable while the controller adjusts the AC motor in order to achieve desired tensions.

The progressive multi-stage dampening system reduces tension spikes without inducing secondary oscillations to the wire exiting the capstan wheel. These features all contribute to the elimination of the tension variation due to whipping fluctuations common to dual flyer payoffs.



## Features

- Isolates tension fluctuations common to dual flyer payoffs
- Digital led displays the actual tension
- RS232 serial communications port
- Polycarbonate window for operator visibility and protection
- Bonded and grounded rubber liner on capstan wheel
- Regulated pneumatic cylinder for belt tensioning
- Special composite endless belt
- Wire entry height 30' (760mm)
- Wire exit height 42-1/4" (1070mm)
- Automatic PID tuning
- Door interlock to prevent access while in run mode