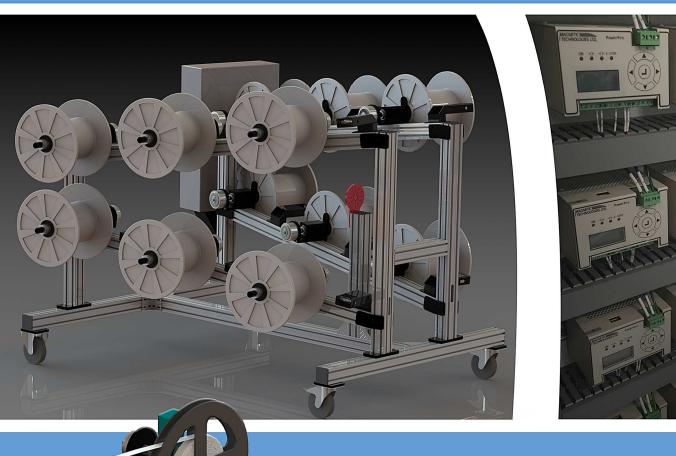


Constant Tension Payoffs







How it works.

As a reel of material pays off, its diameter decreases. With a typical payoff brake this means the tension will gradually rise. To avoid this, an operator is required to manually adjust the brake periodically to avoid stretching or breaking the material.

Our new PowerPro tension control system fully automates the payoff process in one of two ways.

- 1) By measuring the spool diameter thousands of times every second, the PowerPro can continuously adjust the electric hysteresis brake to ensure perfectly constant tension at all times. An ultrasonic measuring probe is used to measure the spool diameter without any contact on the material itself. This method uses pre-programmed brake performance curves to quickly and accurately calculate what torque is required from the brake at any given time.
- 2) By using an in-line roller load cell, the tension in the material can be directly measured and the torque of the brake is automatically adjusted thousands of times every second to achieve consistent and precise tension control. Using an in-line roller load cell is our most precise offering as it measures tension directly and adjusts using a "closed-loop" PID controller.

The PowerPro tension control system allows for "set-and-forget" operation, after initial setup the system can run from a full to an empty spool without any change in tension or operator input. The system can detect and accommodate partially full spools and adjust itself automatically. Tension can also be changed on the fly, without stopping material payoff. Simply use the keypad to select the new tension value and you are done. The PowerPro will do what it needs to adjust to that new tension value and maintain it throughout the payoff process.

The PowerPro can also control multiple position payoff systems either by using one spool as a reference to control all of the spools, or with a dedicated sensor and controller for each spool.

MPP24 Power-Pro Power Supply

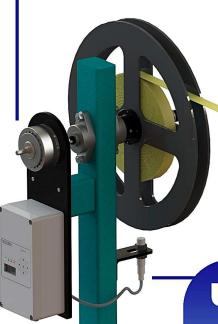
- Din Rail (left) & NEMA 4 (right) versions
- Real-time display of brake current, torque, & payoff spool diameter.
- Supports multiple brakes in parallel up to a max. of 2 Amps.
- Emergency Stop & Brake Free contacts
- 2 line, 8 character backlit LCD display
- Internal voltage supply for probe
- Strain gage amplifier option
- 0-10 VDC follower mode





Electric Hysteresis Brakes

- Infinitely Adjustable for precise tension control
- Units available from 3 3500 oz-in. of torque
- long life & superior torque repeatability



Ultrasonic Sensor

Measures spool diameter for real-time torque adjustment.

Custom Payoff Frames

- Turn-key, ready to use Payoff assemblies
- Single or multiple spool positions
- Welded steel or aluminum framing construction

Required Design Criteria:

- Quantity of payoff positions
- Spool dimensions & weight
- Desired tension
- Line speed
- Applicable package dimensions

Questions?

508-987-3303 www.magnetictech.com



Other Constant Tension Assemblies

