

VTC-Series

Multi-Tow Tension Controller





Montalvo VTC Multi-Tow Tension Controller

The Vanguard Multi-Tow Tension Controller - VTC (a component of the Montalvo Vanguard System works in conjunction with VLC Load Cells and VCB Creel Brakes). It provides precise, repeatable tension control of individual Tows. Capable of controlling each position in your process from an easy to utilize interface including Multi-Tow Tension indication capability.

Offering a robust line up of features and functions (ex: soft start, break detection, inertia compensation, etc.) to maintain high quality production from start to finish, the VTC is easy to set up and operate, providing consistent results. Achieve precise tension control from start to finish for higher quality end product and less scrap.

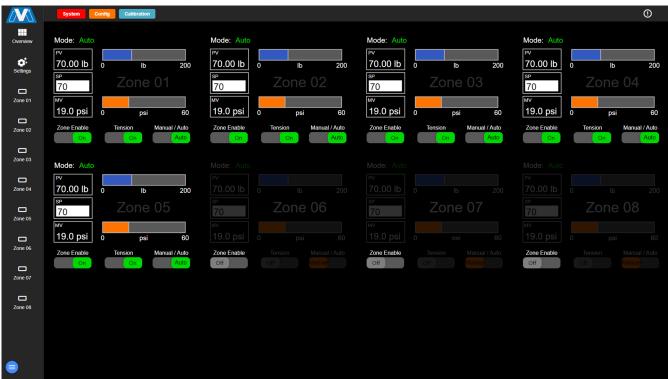
Features and Benefits

- ► High Tow Count Capacity
- Selectable Simultaneous Multi-Tow Tension Indication and Control
- ► Individual, Group and/or Global Settings
- Single Interface for Managing Every Tow in Your Process
- Alarms for High Tension, Low Tension and No Signal (Break Detection)
- ► Use as a drop in replacement system or new. Vanguard components work seemlessly with existing equipment



The Interface

(example shown with 4 Zones of multiple tows enabled)



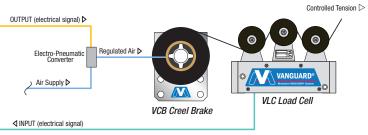
Interface	
Display Size (inch.)	15.6"
Brightness (NIT)	500 NIT
Contrast Ratio	800:1
Viewing Angle	Horizontal:170°/ Vertical: 160°
Resolution	1920*1080
IP rating	IP65 front panel IP54 Chassis
Waterproof	Touch surfaces will not be affected by water droplets or steam



How It Works

VTC Tension Controller







Specifications	
Supply Voltage	110
Load Cell Supply	24 V
Load Cell Input	0.5 V
Operating Temperature	32 to 122°F (0 to 50°C)
Storage Temperature	14 to 176°F (-10 to 80°C)
Degree of Protection (non-enclosed pcb version)	IP54

Functions

Manual / Auto Tension On / Off Auto Setpoint Manual PSI Setpoint Soft Start Anti Coast

Controller Port Ethernet



The Montalvo VANGUARD® System (MVS)

The patented **VANGUARD®** System is Montalvo's flagship closed loop tow and tape tension control technology system, leading the way in precise, uniform, consistent, automated tension control.

Tension Measurement (input)

Continuous, precise tension measurement directly from your tow. The VANGUARD Load Cells (VLC) feature Montalvo's industry-leading load cell technology for sensitivity, reliability, and repeatability.

- Beam sensitivity ranges from 20g to 10kg
- Pre-Calibrated (Just Install & Go)
- Built-In Amplifier for Easy Connection to Existing I/O
- High Overload Protection
- Precise Tension Measurement



Tension Control (process)

A single interface for automated control, and indication of every tow in your process. Montalvo's VANGUARD Tension Controller (VTC) is easy to set up and operate, automatically and precisely maintaining set tension from start to finish.

- Low/High Tension and Tow Break Alarms
- Single Interface for Managing Every Tow in Your Process
- Adjustable and Expandable Tow Counts



Torque Control (output)

Smooth, consistent, precise torque control for maximum process capability. Montalvo's VANGUARD Torque Control offers three different torque control options depending on the requirements of your application.

- Wide Torque Ranges and Tension Profiles Capable of a Wide Variety of Materials and Tensions
- Easy, Hassle-Free Installation
- Long-Lasting, High-Quality Performance
- Retrofit Capable Upgrade Your Existing Creels

