

Printed Electronics

Tension Control

EST. 1947

montalvo

Better Web Control®

TENSION CONTROL SPECIALISTS

Achieve More

With printed electronics there is little room for error. Inconsistent or poor tension control can lead to registration errors, stretching, lower print quality, inconsistent production, and more, all adding up to increased scrap rates and lost profits. Montalvo tension control solutions are designed for the unique variables found in Printed Electronics manufacturing utilizing Roll to Roll (R2R) or Roll to Sheet (R2S) processes, giving you greater process control and productivity.

The demand for printed electronics is not slowing down and manufacturers need to be able to expand not just their current production but their ability to innovate through the capabilities of their machines. Montalvo's web tension control products deliver the quality, performance, and reliability you require to achieve more!

Achieve More!

- Tighter Process Control**
- Higher Registration Accuracy**
- Increased Automation**
- Increased Accuracy**
- Higher Repeatability**
- Reduced Waste**
- Superior Web/Film Handling**
- Expanded Machine Capabilities**
- Faster Production Speeds**
- Easier Operator Set Up & Maintenance**

Tighter Process Control

Automation for the Modern Era

High quality tension control plays a vital role in expanding the capabilities of manufacturers to meet the growing demand on process consistency, productivity and end product quality. Print faster, improve print quality, achieve higher layer quality, and open the door for higher resolutions through highly precise, highly accurate, automated tension control of your web(s).

Bring the latest tension control technology to your machines, improving the automation of your process, reducing operator interaction, and decreasing set up time through saved process parameters to make operation easier than ever.



Prevent & Solve Tension Related Problems

- ✓ Registration Variation
- ✓ Stretching/Necking
- ✓ Scrap
- ✓ Dropped Splices
- ✓ Quality Variation at Start & Stop
- ✓ Web Tracking/Wandering
- ✓ Web Breaks

Drop In Solutions

Montalvo's printed electronics tension controls are designed to be drop in solutions for your machine, whether upgrading your existing equipment or building new equipment. Our components can fit within existing applications to UPGRADE or ADD tension control to your machine delivering a quick return on investment.

Built with Quality. Built to Perform.

Printed Electronic manufacturing machines require high quality tension control components to ensure higher accuracy, higher print quality, tighter process control and maximum repeatability, all while being easy to install, set-up and operate. Montalvo manufactures the high quality, high performance tension control components you rely on to achieve more!

Clean Room Compatible

We offer a full range of tension control products ideal for clean room manufacturing.



Open Loop Tension Control

Printed electronic manufacturing processes that require minimal or no roller contact, but still require automatic, precise, and accurate tension control require a Montalvo Open Loop Tension Control System. Montalvo is a pioneer in open loop tension control solutions since inventing the open loop controller and most recently launching the patent pending TSC Torque Sensing Control System.



TSC™ Torque Sensing Control System

For the first time ever in an open loop control system, you get a precise, reliable tension reference that operators can use to ensure consistent, high quality production runs. Automated, precise, high quality tension control without load cells or a dancer.

Features

- ✓ Customizable System Packages
- ✓ Tension Indication - Know More About Your Process
- ✓ Easy Installation, Set Up & Operation
- ✓ Easily Upgrade Existing Machines
- ✓ Reduces Machine Build Cost
- ✓ Smooth, Precise, Repeatable Tension Control from Full Roll to Core
- ✓ Patent Pending Technology
- ✓ Full Range of Functions & Features to Maximize Productivity

Closed Loop Tension Control

Montalvo's Closed Loop Tension Control Systems provide a continuous flow of communication between your load cells, controller and torque device making even the slightest changes to ensure tension is automatically and always, precisely where you set it. Our systems offer some of the most advanced functions and features while still being the easiest to set-up and operate, so you achieve maximum productivity and profitability from full roll to core, every single time.

Load Cells

Provide direct web tension measurement



Tension Brakes & Clutches

Provide torque output & control



Tension Controllers

Provide process control



Web Guides

Provide web edge control



Features

- ✓ Superior Signal Sensitivity
- ✓ Repeatable, Reliable Measurement
- ✓ Tension Indication - Know More About Your Process
- ✓ Direct Web Tension Feedback for Highly Precise, Accurate Control
- ✓ Smooth, Linear Torque from Full Roll to Core
- ✓ Full Range of Functions & Features to Maximize Productivity
- ✓ Multiple Styles, Models, and Packages to Meet Your Specific Requirements
- ✓ Easy to Install, Set-Up and Operate
- ✓ High Quality, High Performance, Long Service Life Products

Exclusive Dancer Control

Controllers and sensors with unique functions designed specifically for applications utilizing dancer or rider arms.

Increase, Expand, Add

Tailored Upgrade Packages

In order to compete with today's new machines, older machines need increased performance, expanded capability, and added functionality. Typically, all the benefits of a new machine can be achieved through a strategic upgrade of the tension control components of your existing machine. For a fraction of the cost of a new machine, Montalvo makes your current machine run like new; giving you the productivity and profitability increases you require.



The Experience You Depend On

Montalvo has designed specific total tension control upgrade packages unique to the requirements of R2R printed electronic manufacturing. With years of experience upgrading various printed electronic machines, Montalvo has both the technical expertise and the knowledge to deliver long term, cost effective, reliable results with a quick return on investment.

Complimentary Upgrade Assessment

Montalvo Applications Specialists are available to assess your application and will let you know what would be involved in completing an upgrade and what type of performance upgrades you can expect to achieve. Contact us today to learn more.



BACK to BETTER WEB CONTROL

Things happen. And when they do, our first priority is to get you back up and running as quickly as possible. We want your machine running.



LOCAL ACCESS

In Person, Phone, E-mail, or Online. With four worldwide offices (USA, Germany, Denmark, China) and an authorized licensee & representative network throughout five continents, we give you the local dependability you rely on.



UNCOMPROMISING SERVICE & SUPPORT

Whether you have a single question, need a tension control consultation, require technical support or service, we are committed to you for the entire life of your Montalvo products and beyond. We are here for you.



EXPERTISE

Since 1947 Montalvo has differentiated itself by offering more than just high quality & high performance tension control products. We are your resource for the tension control expertise required to expand the capabilities of your machinery & production line.

**THE STANDARD FOR
RELIABILITY - DEPENDABILITY - PERFORMANCE**

YOU CAN HAVE IT ALL!

**Reliable, Repeatable, Consistent,
High Quality Results**

These are the pillars of Montalvo's automated tension control systems. Whether it be new printed electronic equipment or upgrading the tension control components of your existing machine, our components give you the productivity increases you require.

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