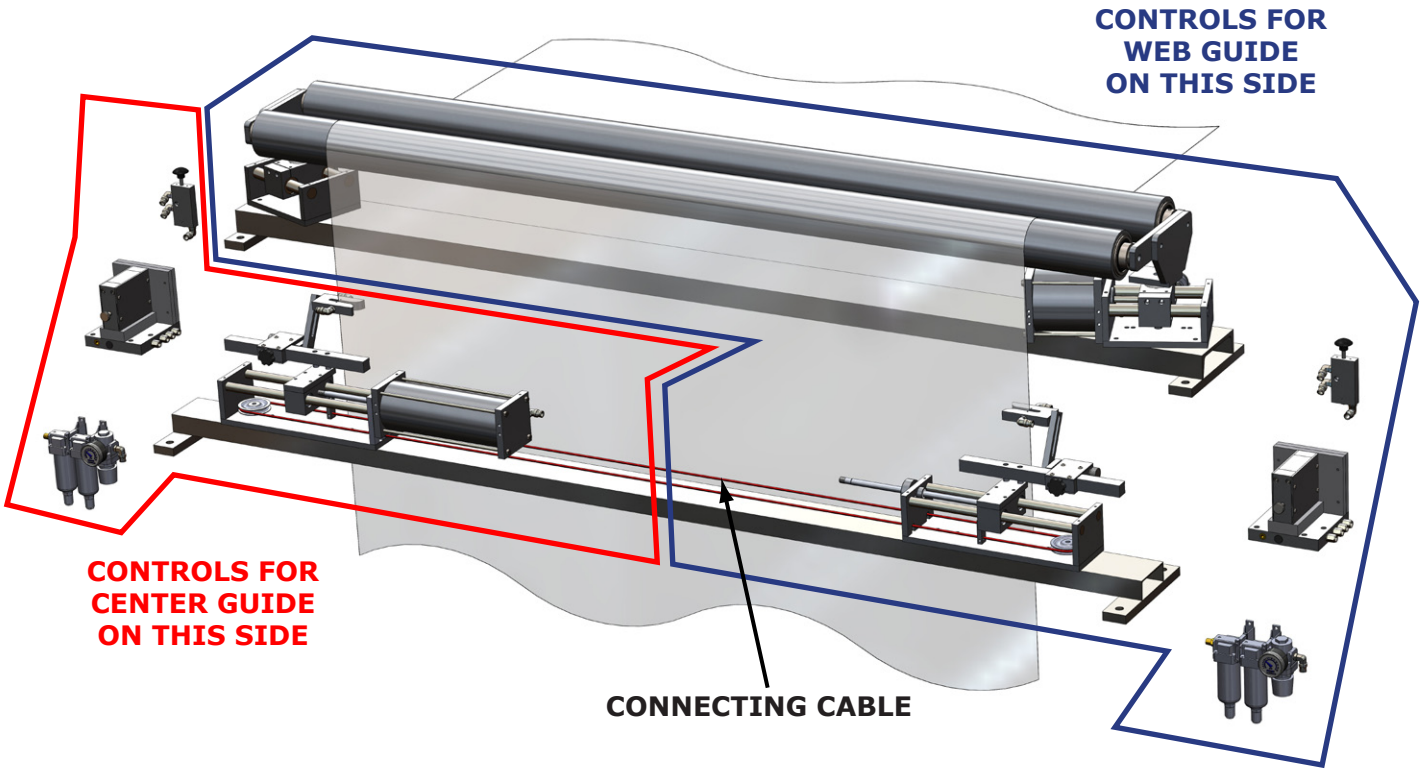
Center Guiding

Center Guiding is primarily used on converting production lines having or producing webs with varying web widths. The objective is to "divide" the web variance between both edges and guide to an imaginary center line.

The Coast Controls center guide system is actually two systems working together as one. The "Center Guide System" controls the "in and outward" movement and speed of both edge sensors while the "Web Guide System" controls the web guide itself. When the center guide sensor detects misalignment, the actuator moves the sensor to keep it aligned with the web edge on the center guide side.

Installation for both Web Guide and Center Guide System
(Steering guide with center guide shown. Guide type & web path will vary depending upon application)



The *Controls for the Center Guide* outlined in **RED**, and the *Controls for the Web Guide* outlined in **BLUE**, are actually two separate control systems acting as one due to both edge sensors being connected together via the cable in the middle.

When installing the system controls for both guide assemblies, it is suggested to install all the components for the *Center Guide* on the same side as the center guide actuator and all the components for the *Web Guide* on the same side of the Web Guide actuator. Doing so will keep the air lines as short as possible for both systems, ensuring the best signal response for both systems.

Initial Setup for both Web and Center Guides

After installing the Web and Center Guide assemblies and making sure all air lines and guide components are securely fastened, proceed with the initial Control Settings setup for both the Web Guide and Center Guide.

Center Guide Setup:

1. Set the incoming regulator air pressure for the Center Guide to 6 psi.

2. Position both the *Web Guide* and *Center Guide* systems in *Auto Center* by pulling both of the *3-Way Valve* knobs out. You should notice the Web Guide go to servo center and the Center Guide Sensors retract all the way outward.

3. Starting with the Center Guide Assembly first, push the 3-Way Valve inward. You should notice both of the sensors track inward.

Coast Controls 3-Way Valve (Part #ACA3W)

4. Place a "flag", such as a piece of paper, in the Center Guide sensor for approximately 3 to 5 seconds and then remove it from the sensor. Repeat this process to observe the sensor's travel speed in and out. Sensor travel speed can be increased or decreased by turning the needle valve in small increments (⅛ of a turn), clockwise (decrease) or counterclockwise (increase) on the Center Guide's Servo Controller.

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Center Guiding Continued

5. The objective is to have a smooth and balanced travel speed in both directions. To balance the travel speed, turn the "knurled" Bias Knob on the Servo Controller one way or the other while positioning the "flag" in and out of the sensor. **NOTE:** Once you have sensor movement, it won't take much turning of the Bias Knob to finalize a satisfactory balanced result.

Our experience shows, most operators prefer slower sensor travel speeds. The Center Guide correction speed should be slower than the Web Guide correction, so that the web Guide can keep up with the Center Guide.

6. Once you have the sensor's travel speed smoothed out and balanced. The Center Guide is now ready for operation.

7. Place the Center Guide back in Auto center (sensors retracted) until ready for operation.

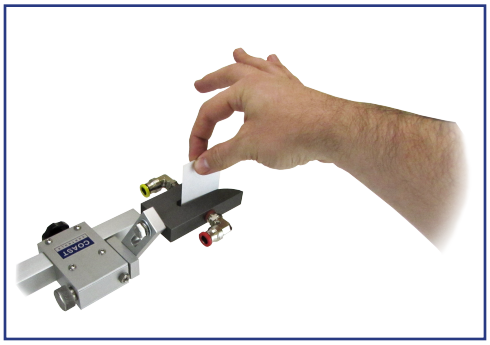
Web Guide Setup:

Proceed with initial Control Setting adjustments for the Web Guide following the same procedure as with the Center Guide above.

1. Set the incoming regulator air pressure for the Web Guide to 6 psi.

2. Using the Web Guide controls, push the 3-Way Valve inward. You should notice the Web Guide move towards the edge sensor.

3. Place a "flag" such as a piece of paper, in the Web Guide sensor for approximately 3 to 5 seconds and then remove the flag from the sensor. Repeat this process to observe the Web Guide's travel speed back and forth. Web Guide's shifting speed can be increased or decreased by turning the needle valve in small increments (⅛ of a turn), clockwise (decrease) or counterclockwise (increase) on the Web Guide's Servo Controller.



Put A "Flag" In & Out Of The Sensor

4. The objective is to have a smooth and balanced shifting speed in both directions. To balance the shifting speed, turn the "knurled" Bias Knob on the Servo Controller one way or the other while positioning the "flag" in and out of the sensor. **NOTE:** Once you have Web Guide movement, it won't take much turning of the Bias Knob to finalize a satisfactory balanced result.

5. Once you have the Web Guide's shifting speed smoothed out and balanced. The Web Guide is now ready for operation.

6. Place the Web Guide back in Auto center (Web Guide back in servo center) and until ready for operation.

Operational Procedure for both Web and Center Guides

When the production line is ready to go operational, you want to:

1. Push the Center Guide's 3-Way valve in to allow both sensors to come in and engage the web's edges.

2. Once the sensors are in place, push the Web Guide's 3-Way valve in to allow the Web Guide to start guiding.

3. You will notice the sensor's in and out movements as it tracks web width variance in the web material.

When shutting down the line, you want to:

1. Reverse the startup procedure by pulling the 3-Way valve on the web guide side thus putting the Web Guide back in servo center.

2. Next, pull the 3-Way valve on the Center Guide side to allow the sensors to retract. The line is now ready to be shut down.