Web Guiding Fundamentals - Rewind Web Guide Structure

Blog Post

Rewind Web Guide Structure

In a previous blog we discussed the unwind web guide structure. Typically, these are made up of a shifting stand, an actuator to move the shifting stand, a fixed sensor mounted on the fixed base of the machine between the last shifting idler roll and a fixed roll, a controller, and of course, the web. Today we look at the rewind web guide structure.

Rewind web guiding systems act differently than unwind web guiding systems.

Rewind web guide sturcture

A rewind web guiding system is not really a web guide. Unlike the unwind web guide, the shifting stand is actually chasing the web. As opposed to the unwind system, the sensor is attached to the shifting stand of the rewind, and both idler rollers are fixed to the ground frame. The sensor, therefore, detects the variation in the position of the web. It sends this signal to the controller. The controller in turn, takes this input and converts it into an output that instructs the actuator to move the shifting stand so the web roll is positioned correctly to the incoming web.

Rewind web guide systems operate on the premise of maintaining the relative position of the web and the rewind roll.

If the sensor is fixed on the machine frame instead of moving with the shifting stand, we would not know the relative position between the sensor and the rewind roll on the shifting stand. That is why on a rewind web guide system the web position sensor is attached to the shifting stand.

Position of Sensor on Rewind Web Guide System

The sensor gives us indirectly the position of the rewind stand. The objective is to make sure that we move the rewind stand so the guide point of the sensor matches the location of the travelling web. This would help in placing the rewind roll at the location of the web so we achieve a properly wound roll.

The difference between unwind and rewind web guide systems: the position of the sensor in relation to the shifting stand

Terminal web guides have a shifting stand, a web position sensor, an actuator to move the shifting stand laterally, and a controller to process the input from the web position sensor and provide the output for the actuator.

SCU5 Controller in contrast teaching mode
WPS Sensor FamilyFixed Mount Actuators

Follow our weekly blogs on Web Guiding Fundamentals and get more information by contacting us The main difference between an unwind web guide and a rewind web guide is the sensor position in relation to the sifting stand. In an unwind web guide, the sensor is fixed to the machine frame, while on the rewind web guide, the sensor is attached to the shifting stand. In summary, unwind web guide systems guide the web, rewind web guide systems chase the web and position the shifting stand to the location of the web.