

Application Report Carpet Fiber Winder

Process Brief:

In the carpet yarn business, fiber is extruded using many different raw materials. This material is then cooled, stretched, treated and wound up in rolls. A major Carpet manufacture had several different vintage winders as well as many different drive brands. They wanted to retrofit these machines with a single drive model of latest technology. They approached their local Yaskawa Authorized Drive Distributor looking for help with retrofitting the drives. After a great deal of investigation and research, the Distributor decided to look deeper into the retrofit possibility.

The Solution:

Instead of just replacing the drives, Yaskawa's Distributor asked the customer what worked and what didn't work on the winders. They spent weeks in the plant watching the controls, and asking the quality control people what they wanted to see in the roll "package". After weeks of research and learning how to make carpet yarn, the Distributor proposed a more extensive overhaul.

Using new controls and Yaskawa drives, Yaskawa's Distributor proposed to replace the PLC controls for the winder in order to improve the yarn "package" quality. Because the customer uses their yarn internally, they view the finishing plants as their customer.

With the new control retrofit, the customer is now able to produce a more even roll, thus increasing roll capacity. This improvement in package quality helps the tufting machine to produce an even higher quality carpet

The several hundred Yaskawa drives continue to run without interruption and the customer couldn't be happier. Thanks to a quality product and a value-add Distributor who never says never, this customer received a retrofit with optimal and tangible cost benefits.