

Success Story

Servostar CD Drive Customization for Fiber Handling Machine



The Fiber-Handling Machine

The fiber-handling machine is used for drawing cotton sliver. Drawing, or drafting, is the reduction in weight to length or linear density of the fiber stream or sliver. It is achieved on the fiber-handling by passing the sliver through the nip points of two sets of rolls. The sliver is elongated, or “drawn”, by a factor equivalent to the ratio of the speeds, of the two set of rolls.

The Fiber-handling machine is 2-axis machine controlled by a fiber-handling controller.

CD drive Customization

The goal of customization was reduction of machine cost by. This was achieved by porting the fiber-handling controller’s algorithm from the machine control box to the CD drive. By eliminating the need for a separate machine fiber-handling control box the customer could save \$400 per machine.

For this purpose the customer's engineering team worked in close cooperation with the Danaher Motion SEP engineering team, working together on the specification, implementation and testing of the proprietary fiber-handling algorithm embeded inside the Servostar CD Series 5 drive. The change was done only in CD drive firmware.

Key customer requirements	Cost effective design	Field proven products
Corresponding technical requirements	Customer algorithm embedded in the drive	Solution based on the Servostar CD

Why a Danaher Motion system ?

- Existing field-proven drive
- Easy integration of motor, drive, control system
- Reliable and stable software
- Strong systems integration support from Danaher Motion China

Products Used

- CD Series 5 with 480AC input
- AKM motors

Lessons Learned

- Fast firmware customization of existing product for customer needs.
- Better understanding of Textile application requirements.

Contact Information

To learn more about this application, the products used, and the integration process, please write to Eyal Zilker at

ezilker@stx.kollmorgen.com

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