

Hamer, LLC Increases Control and Fill Rate with Exlar's Tritex II® AC Rotary Actuator

APPLICATION

Gate valve control on an automated bagging machine

CUSTOMER

Hamer, located in Plymouth, Minnesota, manufactures packaging equipment for landscape and agricultural products. They offer a wide variety of equipment from hand bagging systems to fully automated bagging machines that include the most advanced, robust and productive turn-key solutions in the industry.

CUSTOMER CHALLENGE

Hamer is using a pneumatic actuator to control the gate valve on their net weigh scale. This gate valve regulates the flow of landscape products such as fertilizer, salt, and sand from a hopper into the scale below. The pneumatic system works, but the cylinder needs to be manually adjusted in order to get an accurate fill weight. This is both time consuming for Hamer's customers, as well as problematic for consistent accuracy. Hamer wanted to offer their customers a superior control solution to increase productivity while maintaining weight accuracy, so they began looking for alternatives to their pneumatic system.

SOLUTION

Exlar's Tritex II® AC electric rotary actuator offered the perfect motion control solution for Hamer's net weigh scale. Hamer chose to use Exlar's actuator because it offered a 4-20mA analog I/O option tied to position which allows for automatic positioning of the gate valve. The Tritex II actuator also has a built-in position feedback sensor providing very high accuracy. These features allowed Hamer to easily control the gate valve and enhance their capability to meter the flow of granular products from the hopper into the scale below. With the increased metering capability provided by the Tritex II actuator, Hamer's net weigh scale was able to fill bags at a faster, more accurate rate and eliminated the need for manual adjustment of a pneumatic cylinder.



Hamer's Model 600NW Net Weigh Scale with Exlar's Tritex II AC rotary actuator.

RESULTS

- Increased control and responsiveness of the gate valve
- Greater accuracy metering the products from the hopper into the scale
- Faster fill rate of bags