Transcript for Automated Batch Weighing System

To create a batch the user selects or creates a recipe using the HMI and hits the start button.

The linear stepper moves the cup to the first material station. The agitator begins to spin preventing the material from bridging inside the PVC.

An auger spins to push material through. A motorized ball valve opens so the material can be dispensed. A load cell continuously reads the weight and the controller will stop the motors and close the valve. Once the weight set point is reached then the cup is moved to the next station and the process is started again.

Once the batch is completed the cup will be moved back to the starting position.

This particular batch was 50 grams of each material for a total of 150 grams. As you can see the resulting weight is 148 grams just 2 grams off from the target.