

Customer: **Multi-Pak**

Application: **Foil Pouch Filling Machines**

Products Used: **PositionServo, MCS Motors, G-Motion Gearboxes, SMVector**



Smooth Packaging with Servo and AC Drives Solution

Multi-Pak is renowned for designing, engineering, developing and supporting its own packaging machines. These particular machines are typically used for cosmetic samples. Having developed robust and reliable foil pouch filling machines using mechanical web tensioning and liquid filling processes, the electronically controlled alternative solution from **Lenze-AC Tech** had to show significant benefits.

The **Lenze-AC Tech** solution uses **PositionServo** drives as master and slave to provide web tension, **PositionServo** drives with **Lenze servo gearboxes** and **MCS motors** for pump control, and **SMVectors** running the main unwinding reel. The **PositionServos** control the rollers that “draw” the material into the area where the bottom is heat sealed, then the liquid is pumped into it and the material indexes down to the next area where the sides and top are heat sealed.

The **SMVector** controls the main shaft, which also functions as the timing for the sealing dies. Both processes use mechanical cams and/or stepper motors to achieve the moves. Changing products or moves is very time consuming for each set up. Multi-Pak saw a significant increase in machine speed and a significant reduction in set up time by running many different products sequentially.

Multi-Pak liked the flexibility of adjusting the move distance easily for different products. Multi-Pak employs a Maple touchscreen with serial comms connected to the servo to adjust for different lengths of packages. Multi-pak also uses a simple operator station with selector switches to adjust the index degrees.

Product Benefits

- Replacement of mechanical control
- Improved speed and accuracy
- Integrated servo and inverter solution
- HMI used as a controller

PositionServo

SMVector

