

PROJECT HIGHLIGHT

HYGENIC DAIRY FILLING

PROJECT OVERVIEW

Bag and Super Sack filling of Dairy Products. Super sack filler capable of filling and transferring full sack via servo-motion enabled lift arms.

PROJECT HIGHLIGHTS

- ✓ Rockwell 5380 Series Controller
- ✓ 5094 Flex 5000 Remote IO
- ✓ Powerflex VFDs
- ✓ Kinetix 5300 Servo Drives
- ✓ PlantPAX DCS Environment with ViewME



PROJECT BRIEF

This project required Design and Integration of a control system to operate two filler stations at a Powdered Dairy Production facility. Both fill units are coupled to a continuous powder dryer thus requiring robust and continuous operation. Arrington Automation was responsible for the electrical design of the system including design and fabrication of the Main PLC/Drive enclosure as well as Remote IO and HMI enclosure for the individual fill units that were manufactured by a process design partner.

Operation of the bag fill unit was achieved with SMC pneumatic valve blocks via Ethernet I/P as well as fully integrated Powerflex 525 Ethernet drives. Operation of the Super Sack Filler cycle was similarly controlled and also utilized a pneumatically controlled vertical bag carriage that could raise and lower the super sack during fill.

After fill is completed, the use of servo-driven vertical support arms allowed the super sack to be lowered from the fill platform onto a conveyor feeding downstream packaging without the use of a forklift.

Hardy instruments HI6500 weight controllers via Ethernet I/P were used for precise fill response and indication.

