

CHEESE TOWER AREA:

Stoelting Downline Conveyor System and 40-pound Packaging Line

This includes the two reversible direction discharge conveyors in front of the block formers, as well as all conveyors and equipment shown "downstream" on the 40-pound block line.

One new Betavac BV Super Vacuum Chamber Machine has been included. All controls, sensors, programming and system integration for monitoring and controlling the movement of the blocks through the sealer, metal detection, casepacker, scale system, and palletizer is also included.

40# Block Packaging Line Installation

Turnkey installation of downstream 40# block packaging line from the discharge conveyors in front of the block formers through the palletizer. All equipment will be moved into the building; erected, set, leveled, and anchored to the building structure as required. Compressed air will be connected to the various pieces of equipment as required. Also includes the installation of a vacuum line from the vacuum pump to the Beta Vac vacuum sealer.

Block Former Installation Package

Turnkey installation of (5) Stoelting High Capacity Block Formers, (5) interceptor vessels, (5) vacuum pumps, vacuum pump water recirc system, curd distributor, (1) balance tanks w/ return pumps, block discharge conveyors and all system control stations and panels. Includes moving the equipment into the building; erecting, setting, leveling, and anchoring the equipment to the building structure as required.

Also includes the installation of all sanitary process and CIP piping. Sanitary valves, hoses, and pumps will be re-used from Fergus Falls. Includes installation of all required polyflo air lines. All polyflo lines will be contained within sanitary stainless steel conduits with gasketed junction boxes located as required.

Fairbanks 40-lb Block Scale System includes the following:

- (1) 5280 Series Fairbanks In-motion Scale
 - * 20 boxes per minute capacity
 - * 5200A Weight Indicator with photocell and RS-232 gross box weight output to controller
 - * Stainless steel construction

- (1) Fairbanks Scales In-Motion Scale Controller
 - * Capable of storing 1000 products
 - * Serial inputs for label scanner, scale, and net weight label scanner
 - * The controller will have serial outputs to label printer applicator, and RS-232 output of each box weighed (to system by others). The controller will provide an output to control bad box reject.

1 - Stoelting Block Breaker

Blocks will be received from the discharge conveyor in front of the block formers. The blocks are "broken apart" and crumbled in the Stoelting Block Breaker. The Block Breaker is equipped with a NU-Con Rotary air lock so the curd can be air conveyed to the 640/Barrel filling line.

Block Breaker Control System

Allen Bradley PLC5 based control system designed to control the Stoelting Block Breaker. System will control all aspects of operation during both production and CIP. System will be controlled by the PLC5 located in the Block Former System panel. Operator interface will be provided via an Allen Bradley PV550 Panelview Plus communicating via RIO communications. All programming, testing, field start-up & commissioning is included.

Block Breaker Installation Package

Turnkey installation of the Stoelting provided Block Breaker. Includes moving the equipment into the building; erecting, setting, leveling, and anchoring to the building structure as required.

Includes the installation of all sanitary process and CIP piping from the curd blower to the block breaker to the cyclone separator above the barrel line.

BELTS/CHEESE TOWERS AREA:

Stoelting Block Former Line

The block former line will consist of five Stoelting high capacity block formers in a single row. The five block formers from the DFA plant in Fergus Falls, MN will be refurbished and upgraded to include enhancements from current technology that will improve performance and reliability.

Block Former Control System

Components from the existing control system currently at Fergus Falls will be incorporated into a new control system designed to control and operate the new Block Former system. Control system will interface with other systems within the plant (ie: Salting Belt / DMC control system, CIP system, barrel fill line) via Ethernet to provide total process control.

5 - Vacuum Pump Modifications

The existing 5 vacuum pumps from Fergus Falls will be tested and re-furbished to adapt to the water recirculation system. The existing frames will be shortened and the local recirc tanks & air / water separators removed. New stainless steel separators with removable CIP spray balls will be installed with stainless steel piping between the pump discharge and separators. All non-stainless steel parts will be cleaned and painted with stainless match paint. Does not include repairs needed to correct deficiencies found while testing. Any repairs found to be required will be quoted separately. The vacuum pumps will be utilized to supply vacuum for both the deep tower vacuum and the curd transfer vacuum.