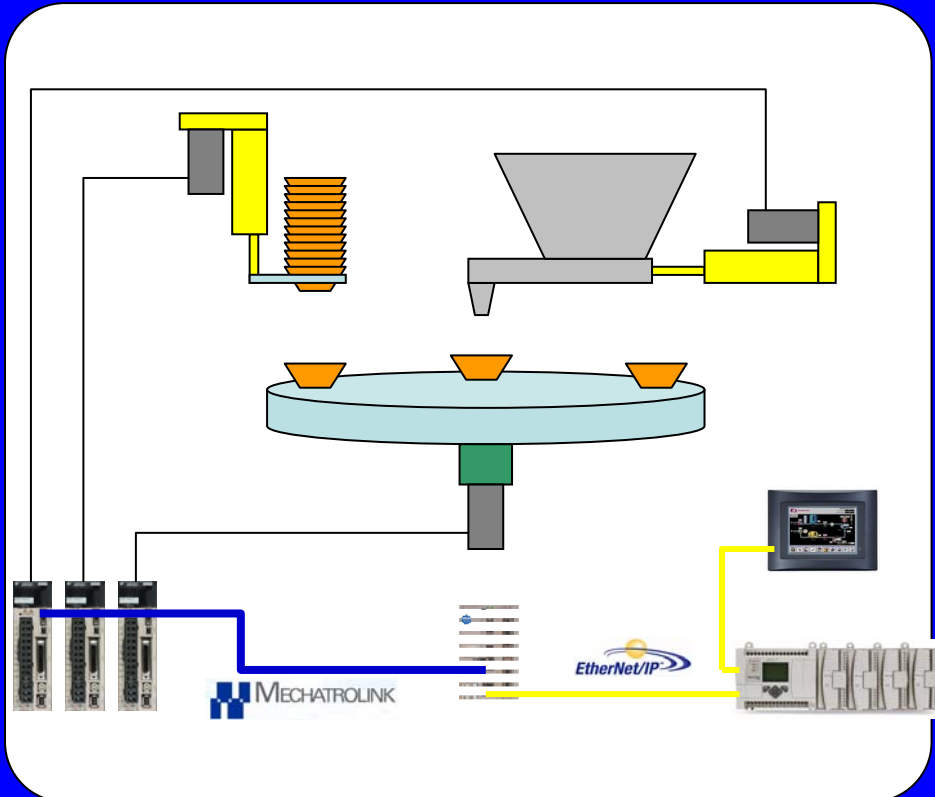


Food Dispenser and Packager

November 3, 2008

Issues / Problems / Challenges	Solution	Performance Achieved
<ul style="list-style-type: none"> - Mechanical cam indexer limits production throughput - Quick changeover for different container dimensions and volumes - Must interface motion control with specified PLC - Machine safety, e-stop recovery, small size 	Controller: MP2300Siec Controller Software: MotionWorks IEC Solution Code: Custom + E/IP Indexer Servo: Sigma-5 Power Level: 750 w Voltage Level: 230 VAC, 3 Ph.	Throughput: (40) 2-lb fills/min (25) 5-lb fills/min Index Speed: 0.5 sec, <= 7 arcmin Auxillary Functions: Interface to MicroLogix PLC

Customer Information	
Industry:	Packaging
Application:	Rotary Dial Indexer Dispensing



Application Description

This OEM makes a variety of equipment to serve the packaging industry. This application requires 3 axes of servo to perform a filling operation of food into either 2 or 5-lb containers. The containers are then sealed with an ultrasonic welder. The main benefit of the solution is to gain 3 axes of motion control while keeping the original Micrologix PLC platform as a logic and HMI interface device. The MP2300Siec features Ethernet/IP protocol support that allows this connection. By using a servo to drive the dial plate, the relationship between index/dwell can be infinitely variable, and therefore maximizes the throughput of the machine even when changing container sizes. Additional servo control via linear actuators on the container de-nester and product dispenser essentially allows instant changeover with a minimum of mechanical parts. Programmable volume, speed and drawback on the dispense pump improves fill accuracy and machine throughput.

Differentiating Solution Features	Resulting Solution Benefits
- Prewritten Solution for communication to Allen Bradley Micrologix PLC	- Proven Core Code reduced commissioning time, reduced project risk, and improved performance
- Programmable Fill settings	- Product size flexibility, improved fill accuracy
- Variable index/dwell ratio of servo driven dial plate	- Improved throughput when switching to larger container size (increased dwell time)
	- Flexible number of stops, Reversing possible