PATTI ENGINEERING

Project Experience Study



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"I'm pleased to say that in the two years of our partnership there has not been one mismatch on a label. Now that's what I call 100% verification!"

DAVID BARTKOWIAK, Ancor Executive Director

Problem

For 18 years every night, Troy, Michigan-based Ancor had been printing all of Ford Motor Company's vehicle window label packages, matching vehicle identification numbers (VINs) and then hand stuffing and overnighting them to 19 plants nationwide. Ancor's Executive Director David Bartkowiak knew there had to be a better and more efficient way to manage the label packaging process – which had a 10-hour or less nightly production timeframe and a client-mandated 100% verification process.

Product

Custom machinery such as the Ancor project often goes through many stages of development. Once the hardware is developed and the actual product is loaded into the process, an evolution begins taking place. In this case, a cooperative effort involving the staff from Ancor, Patti and KEPES (the hardware vendor) worked their way through a variety of challenges that came to the surface. Issues with products, speeds, tracking and insertion were overcome one-by-one.

What Patti and KEPES ended up with were eight feeders that each held one of the required, preprinted labels and a scanning and conveyer system for the large envelope and vehicle sticker. "We had to do a lot of coordination," explains Steve Buffmyer, Patti's Project Engineer. "We had the physical limitation of the label so it didn't get airborne and caught on something. Then the settling time of the newly-stacked labels before they reached the envelope coming down the conveyor. Then to aim at the physical target of the envelope with one, big and final shove of the contents in 1/3 of a second. That process doesn't even include the feeding, scanning and sweeping of the vehicle sticker and envelope just amazingly and insanely fast so it meets its appropriate label pile at the right point on the conveyor."

Patti's Solution

The run on Patti's machine also had to coordinate with the external printer. A visual basic application controls the sequence of feed, scan, and verify. The server fires all the bar code scans, compares that to the numbers in the database and matches and interfaces with the PLC that



actually controls the machine – it's like a hand shaking between the server and PLC. It's tried and true technology being used in a new, innovative way.

Customer Savings

Ancor's Bartkowiak surpassed his labor savings and beat the ROI expectations in 30 months versus the projected 36 month.