

CASE STUDY – ON-SITE PRODUCT DECORATION – SCREEN PRINTING OF PACKAGING

In 2013, a growing consumer-packaged goods company came to Flow-Eze Company to assist with their silk-screen bottle decorating needs. Known for their line of environmentally friendly products – including plant-based hand washes packaged in uniquely shaped PET bottles – the client was in the planning stages of building their first manufacturing facility with the goal to have bottles blow-molded, printed, filled, and warehoused all on-site and under one roof. This approach allowed for the reduction of over 300 truckloads of empty bottles from the road every year – saving money and further aligning with the client’s ethos of sustainability.

By 2017, with the new facility built and coming on-line, Flow-Eze joined the likes of Amcor Rigid Plastics at this South Side Chicago facility bringing over 70 years of product decorating expertise – including decorating staff and equipment. In a mere 2,000 sq ft, Flow-Eze decorates well over 1,000,000 bottles per month, running 24 hours per day.

However, before the first bottle was to be printed on-site it required thinking through the logistics of coordinating multiple businesses and their processes to ensure inventory was accurately being pulled and received (to ensure that the appropriate cost centers would be utilized) or that printed bottles wouldn’t simply be pulled without being accounted for. Custom processes and systems had to be designed and built to handle an operation that runs 24 hours a day - under someone else’s roof – nearly 100 miles away from Flow-Eze’s nearest facility.

Starting with client’s forecasts and purchase orders, Flow-Eze plans their production schedule with a cadence that each party understands – with the ability for the client to move SKU’s up or down in priority to respond to changes in demand or in product filling needs. A huge benefit to the client is that instead of sitting on inventory that may not be needed, they, with the help of Flow-Eze can deliver just-in-time and respond to changes in consumer demand for a particular “flavor” or SKU, or perhaps a delay in the arrival of an ingredient that would prevent filling on the intended date – both requiring a change to ensure the clients production lines keep running.

Flow-Eze’s ERP and MRP systems calculate things such as ink and silk-screen usage. Screens are produced by Flow-Eze at its offsite main facility, where all the customer service and operations coordination efforts are also performed. A dedicated operations coordinator works with the on-site production managers to ensure all paperwork and processes are moving smoothly, and visits one or more times per week. Consumables are kept in stock on-site, as are spare parts for all equipment.

For Flow-Eze to maintain excellent visibility of their production processes, it required some thinking as to how to capture production data. To do so, Flow-Eze’s in-house software



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design team-built production line software that allows for each order line to be called up, indicating what is to be running - the artwork, quantity, and much more. As boxes or totes are filled and scale counted, an operator selects “box complete” on a line-mounted touch-screen – resulting in a box label being printed, as boxes accumulate a “pallet complete” button is selected – resulting in 4 labels for each side of a pallet. As each label is created, data is being generated that gives Flow-Eze visibility as to how production is progressing – down to the box level of detail. All this data, including scrap, downtime, what is running next, is made available as an online dashboard hosted by Flow-Eze securely to the client or easily visible as the clients’ staff walks through the Flow-Eze production area.

To date Flow-Eze has printed over 50,000,000 bottles for the client at this site and hopes to repeat this on-site model with other companies in North America and elsewhere who have demand for product decoration – be it packaging in plastic or glass; or other components – that may need pad printing, hot stamping or a digital print for a functional or branding mark.

If a particular customer has demand that does not necessarily fit the on-site model, Flow-Eze is happy to work with these customers and offers its services at its company owned facilities.

Should you have an application or a project, you may contact Flow-Eze at (815) 965-1062.



Customer’s South-Side Chicago – Leed Platinum Facility

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In-Process Quality Checks

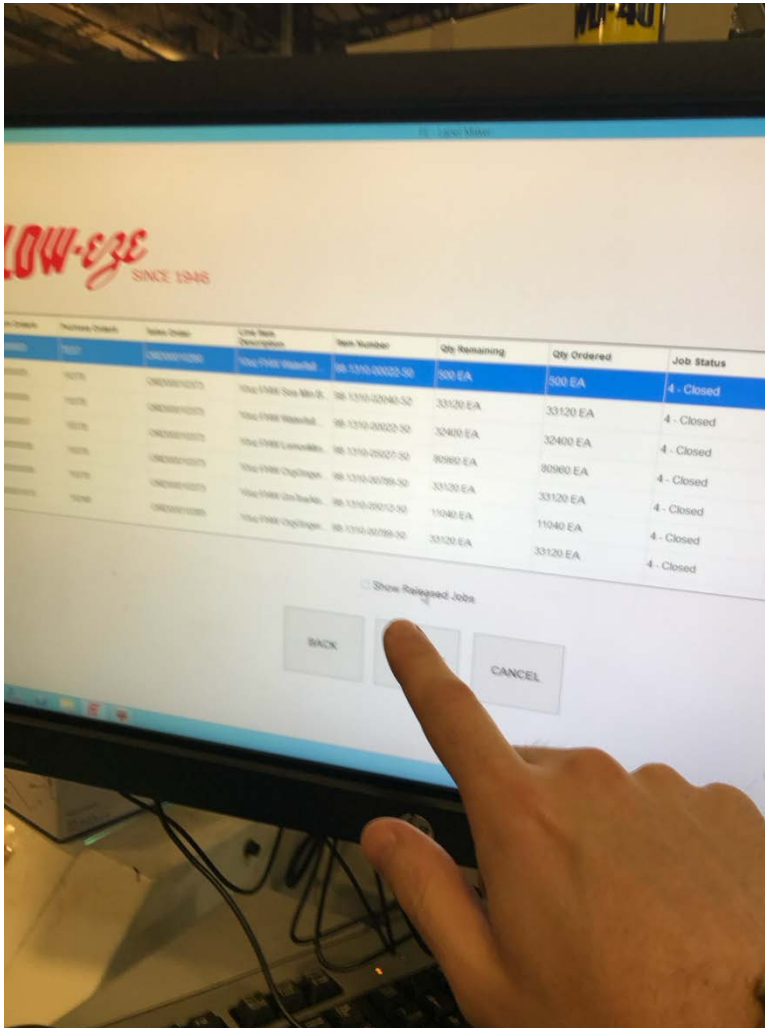


Two-Production Lines for Silk-Screen PET Bottles

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Dense Storage of Blank and Printed Bottles



Custom software built-in house for data generation, capture and customer visibility.