



Omron enables easy canning machine customization for microbrewery industry and helps leading manufacturer achieve 1,000% growth with consolidated control platform

Twin Monkeys Beverage Systems, a company that builds canning machines for the microbrewery industry, needed to increase the flexibility of its products for customers while ensuring that they would be able to expand from 1-10 fill heads and seam 10-100+ cans per minute. The company has created six canning machine models with a variety of customizable options to accommodate the unique needs of each customer.

The company's microbrew canning machine expertise doesn't stop at filling and seaming, however. Twin Monkeys also assists its customers with implementing a fully

integrated packaging line from the exit of their beverage tanks to the finished pallets of cans. Omron helped the company implement a reliable control platform based on Sysmac Studio that can be supported worldwide. Thanks to these improvements, Twin Monkeys' sales expectations for the next 12 months have increased to more than 40% growth.

Twin Monkeys Beverage Systems: A unique automation customer

While Twin Monkey's sells machines to microbreweries for static placement in their production lines, it also sells to independent companies that take the machines from microbrewery to microbrewery using a mobile unit. This business model allows several companies producing small amounts of product to "share" the machines and minimize their capital investment.

Twin Monkeys has tapped into this niche, offering several flexible and scalable "canning as a service" models in which mobile service providers that own these machines can bring machines direct to microbreweries' doors. Microbreweries can then hire canning services and benefit from the added capabilities without the full investment of purchasing a machine.

The solution

A consolidated control platform



The need

To ensure maximum throughput while enabling on-the-fly adjustments according to customer requirements, the controls for the upgraded system needed to be flexible and robust. Twin Monkeys had a series of mismatched control products from other providers that hampered communication between components and increased programming needs when a machine was commissioned.

The Omron team was able to replace the varied assortment of automation technologies with an all-in-one control platform based on the Sysmac Studio machine automation software suite. This platform standardized the controls so that Twin Monkeys only needs to cut and paste code and make minimal adjustments when commissioning a new machine. The Sysmac automation platform also allowed the company to support its products wherever they are shipped around the world.



The technology

Omron's solution increased the ease of commissioning and distribution on several equipment configurations by using Sysmac Studio's "Derive Device" feature, which enables the reuse of primary machine code on several different hardware layouts. Additionally, Omron helped Twin Monkeys convert its original machine codes from multiple platforms over to Sysmac Studio while training the customer to program future machines. During several hands-on training sessions, Twin Monkeys and Omron brainstormed design changes for future machine upgrades, such as moving all field I/O to EtherCAT.

The hardware that Omron chose for the redesign enabled the best pricing and optimal function for the new system. Omron chose the NX1P2 advanced motion controller because it has a similar footprint and allows for additional slices of I/O. Several design meetings and testing led to the choice of the G5 EtherCAT servo drive to conserve cabinet space.



The outcome

Over the last five years, Twin Monkeys has experienced more than 1,000% growth in sales and has added five new product lines. Now a prominent machine builder in the microbrewery industry, the company is rapidly becoming an industry leader with a reputation for manufacturing reliable, high-quality and customizable microbrew canning machines.

Because Omron's consolidated control platform promotes flexibility and supports on-the-fly customizations, Twin Monkeys was able to readily develop new machines and new customizable features. Due to the reliability of Omron's products, such as precise motion control with the G5 servo drive, it became easier to commission new machines. The ease of programming and communication amongst components allowed the company to easily replicate for speedy uptime.

