Belvac now designs and engineers new parts in five hours—instead of five days.

The Organization

Each year, an estimated 198 billion beverage cans are processed by the world’s largest beverage companies using equipment manufactured by Belvac Production Machinery, Inc. Headquartered in Lynchburg, Virginia, the company has been the industry leader for over 40 years.

The Challenge

Beverage makers redesign their can shapes and sizes frequently to keep pace with their markets—and they need Belvac to design new parts to make different cans on existing machinery. A highly skilled Belvac engineer could spend up to five days designing new parts and getting them drawn, modeled, and into the system.

The Solution

Belvac engaged Avatech Solutions [now IMAGINiT Technologies] to implement a 3D parametric drawing approach to streamline the design of new parts to fit new customer requirements. Now engineering can quickly create a single model that allows everyone involved to see how changed parts affect the path of the can through the machine. “Now that we’re quickly generating a consistent and standardized set of drawings, we can rapidly move a customer request through manufacturing, QA, and assembly, creating huge efficiencies,” says Joe Schill, Director, Can Machinery Engineering. This single improvement has dramatically slashed the engineering time needed to accommodate customer changes from five days down to five hours.

Results

Overall, this solution has yielded faster throughput, design efficiency, and happier customers for Belvac. “Cutting engineering time from days to hours provides many benefits, which all positively impact the bottom line,” says Schill. Increasing engineering throughput means Belvac can not only respond much more quickly to customer requests, but also process more customer jobs in the same amount of time. Now engineers are freed up for higher value work. Being able to better manage the workflow on the shop floor also minimizes expensive staff overtime. “This solution is making happy customers, and happy customers stay with you,” Schill concludes.