Parata Systems LLC

INTRODUCING THE FASTEST AUTOMATED PRESCRIPTION DISPENSING SYSTEM, WITH THE SMALLEST FOOTPRINT

- Accelerated time-to-market
- Improved handling of large assemblies
- Enhanced data compatibility with vendors
- Introduced top-performing product in its market

Parata Systems LLC manufactures Parata RDS (Robotic Dispensing System), the fastest retail pharmacy robotic dispensing system, which chain, community, government, and institutional pharmacies use to enhance prescription-filling efficiency and capacity.

As one of the company’s cofounders, Vice President of Research Jeffrey Williams faced the decision in 2001 of choosing a CAD system to support Parata’s aggressive product development objectives. Williams had used Autodesk Inventor® 3D CAD software in a previous position but became dissatisfied with the software’s assembly modeling capabilities and stability. “We experienced performance issues with Inventor and made the decision to reevaluate which CAD platform we would use,” Williams recalls. “Assembly modeling had become more important, and we needed a better CAD system for handling large assemblies.”

Williams evaluated Inventor software as well as the Pro/ENGINEER® and SolidWorks® CAD software packages. He chose the SolidWorks mechanical design system for its ease of use, value, assembly modeling capabilities, and performance. The superior training and support from TriMech Solutions LLC, the SolidWorks reseller, was also a consideration. Parata implemented SolidWorks software as its design platform, initially installing five seats.

“At Parata, we were attempting to become a major player in an established market by developing the fastest automated prescription dispensing system with the smallest footprint,” Williams explains. “To be successful, we needed to leapfrog the competition by developing the top-performing product on the market in a short period of time. The decision to deploy SolidWorks as our CAD platform was an important part of our strategy.”
“Agility and time-to-market are everything to a startup company. SolidWorks software was essential in enabling us to meet our aggressive product development objectives.”

Jeffrey Williams, Vice President of Research

**Speeding time-to-market**

Using SolidWorks software, the company developed Parata RDS, a sophisticated robotic system comprising an assembly of roughly 1,200 components, in just one year. By meeting its ambitious product development goals, the company was able to introduce a new product in an existing market that outperformed the competition.

“Rapid time-to-market was critically important for us to quickly establish market position and presence,” Williams notes. “We had to go from dust to a machine, involving two robotic systems and a new counting technology, all in less than a year. Agility and time-to-market are everything to a startup company. SolidWorks software was essential in enabling us to meet our aggressive product development objectives.”

**Better assemblies, moldable parts**

The product developers at Parata relied heavily on SolidWorks assembly and mold design tools to develop Parata RDS under an accelerated design schedule. “Our CAD software had to have some basic kinematics capabilities so we could simulate movement of our components and subassemblies, and detect potential areas of interference,” Williams stresses. “Another design objective was to become the first in the industry to cap vials, a capability that is essential in ensuring the integrity of completed prescriptions. SolidWorks enabled us to make design changes quickly and easily, which helped to keep the project on track.

“We also leveraged SolidWorks heavily in developing injection-molded parts,” he adds. “SolidWorks has tools to help you make a part moldable, such as draft analysis, wall thicknesses, and shelling. We developed 14 injection-molded part designs and progressed from machined prototypes to qualified tooling in just four months.”

**Supporting rapid growth**

SolidWorks software continues to support Parata’s drive to lead the pharmacy auto-mation market. Parata RDS is the fastest retail robotic dispensing system by far and it has the smallest footprint with the capacity to handle more than half of a pharmacy’s total prescription volume. To date, Parata has garnered the second-highest number of system installations in its industry, quickly closing in on a competitor with nearly a five-year head start.

Today, Parata utilizes 37 seats of SolidWorks Professional software and has added SolidWorks product data management software to its roster.

Williams notes that in addition to supporting Parata’s expanding product development efforts, SolidWorks software makes it easy to work with various partners and vendors. “SolidWorks has all the tools and file formats we need to work with different vendors. We believe we made the right decision in choosing SolidWorks as our design platform. SolidWorks continues to be an important factor in helping us meet our research and product development goals.”