Rockwell Automation | PLEX

COLLEGE PARK INDUSTRIES

College Park Industries, based in Fraser, Michigan, is a leader in prosthetic foot manufacturing. The company markets the most anatomically correct prosthetic feet available today. College Park Industries was founded on the completion of the first TruStep Foot prototype, and it is committed to research and development of advanced prosthetic products.

Industry:
Medical Devices

Location:
Fraser, MI

Results

Accurately manage production records for up to 450,000 potential builds.

Meets regulatory requirements for traceability and internal controls.

Automated software manages complex customization, ordering, and production tracking process.

Integrated system enables all employees to make decisions based on real-time, accurate information anytime.

With products distributed by an extensive global network of independent dealers, College Park's customers include independent orthotic and prosthetic facilities worldwide. End-users of College Park products are lower-limb amputees of all ages. The company specializes in prosthetic products to accommodate low- and high-impact activities, such as extreme sports.

The company meets precise requirements to give amputees the most anatomically correct prosthetic feet on the market. The product design is based on the anatomy of a foot — forefoot, heel bones, ankle bone, and articulating joints. Softer components mimic the function of ligaments and muscle. Engineering integrates all of the components so they accomplish the smooth motions that must occur in a prosthetic foot.

Plex ERP Brings Accuracy and Efficiency

The tasks for designing, producing, testing, and delivering the prosthetic feet are complex. With five prosthetic foot product lines, there are hundreds of thousands of possible configurations for a finished product. TruStep, the company's signature product, is one of the most complicated to configure, with about 450,000 potential builds.

College Park Industries quickly realized that in order to serve its diverse patient populations, it needed a manufacturing system to achieve the highest level of accuracy and efficiency. So it called upon Plex to implement ERP from the Plex Smart Manufacturing Platform, its award-winning on-demand software solution for the manufacturing enterprise.

Plex combines the capabilities of enterprise resource planning (ERP), manufacturing execution systems (MES), supply chain management (SCM), customer relationship management (CRM), shop floor integration, and quality management. Based on a cloud model, Plex enables users to closely track and manage the most critical aspects of business and manufacturing operations — anytime, anywhere.

"Plex provides the flexibility and customization to accommodate all variables required for every prosthetic foot."

Customized Products

First, Plex helps College Park Industries determine which product configuration best meets the needs of each patient. The process begins when a prosthetist orders a foot. Customer service professionals gather the information required to determine the correct build. Using Plex, they work with end-user profiles — existing or new ones — to view the history or start a new order. The software takes the customer service representatives through a series of screens with questions and answers about the patient. How much does the patient weigh? What types of activities is the patient involved in? Is he/she going to be content walking around the grocery store, or is he/she jumping out of planes and doing flips on a wakeboard?

Streamlined Information

In addition to capturing patient information, Plex ERP provides serial numbers to fulfill regulatory requirements, sales analyses, and warranty information. With 1,500 customers, College Park Industries utilizes Plex to sort through complex pricing schemes, including discount structures and individual customer price lists.

Once all the required questions are answered, the information is run through an Option Configurator to generate a build sheet, which tells Production everything needed to manufacture the foot. College Park builds, inspects, and ships feet and components the same day they are ordered.

Plex provides College Park Industries with flexibility and customization to accommodate all variables required for every prosthetic foot. Customer service representatives no longer need to remember all the exceptions and special cases for each patient.

Improved Decision Making

Plex also integrated all of College Park Industries' departments, so they can function within the same software system and make decisions based on current, accurate information. The company can monitor sales strategies and customer activity without waiting for month-end reports. They can access information from international distributors. And Plex helps medical device manufacturers fulfill the regulatory requirements they must meet for traceability and internal controls.

A True Partnership

In the truest partnership, Plex has served as a sponsor of the O & P Extremity Games, launched by College Park Industries to showcase their patients' successes. This sports competition helps raise awareness of the abilities of amputees. It gives athletes ages 13 and older the opportunity to demonstrate skill, persistence, and passion. The games include skateboarding, rock climbing, wakeboarding, BMX biking, kayaking, surfing, skydiving, and inline skating.