



Customer Success Story

Improving Accessibility and Accuracy of Engineering Documents Via a Cloud-Based SolidWorks™ to MasterControl™ Connector

How SPK successfully improved a client's engineering productivity and quality by creating a connected business system, leveraging separate, complementary platforms.

Bridging Technologies

Medical device manufacturing is a highly regulated industry. Even the slightest deviation or oversight can result in quality issues, a decline in engineering productivity, and lengthy product release cycles. To eliminate these risks, a leading medical device manufacturer uses MasterControl for its [quality management system \(QMS\)](#). The organization enjoys the benefits of automation, fewer documentation errors, easier regulatory compliance, and faster time to market. The company also uses SolidWorks PDM for its CAD design data management, which houses its CAD documentation. Both systems helped the organization achieve specific needs. However, it needed the ability to upload its documentation from SolidWorks PDM to MasterControl. The company was eager to find a way to bridge the gap between the two different systems.

The client was confident that by connecting the two platforms and having a central data repository would create a single source of truth where its data would be more complete, secure, and easily accessible. The organization was also interested in automating the CAD document uploads, freeing its engineers for innovation and other revenue-generating efforts. The manufacturer discussed the situation with MasterControl and SolidWorks — and both companies highly recommended SPK for developing a solution.

Options

Initially, the idea of a connective solution seemed costly. To implement any technology solution a company must allocate funds and resources. Many companies feel it's more economical to do nothing and continue to function with their legacy processes and systems. However, relying on a disconnected system and manual processes ultimately costs the company more in time and expenses. In evaluating its options, the medical device manufacturer conducted a cost factor analysis, which revealed that implementing an automated solution would both save money as well as significantly improve productivity and employee morale.

More Efficient Operations

At SPK, we do not create one-size-fits-all solutions. It's essential that the solution satisfies the organization's specific needs and operational preferences. Throughout the project, we collaborated with the company to ensure we achieved this objective with a solution that reflected the company's requirements, input, and values. SPK has had a long-standing business relationship with this medical device manufacturer, so this project deepened our partnership.

The project also solidified our connection with MasterControl. Their API programming expertise satisfied both our goals and the client's needs. In addition, with 20+ years of experience with various API programming systems, we were able to ensure quality, time-efficient work.



Significant decrease in Operational Expenses



Improved engineer job satisfaction



Faster Product Release Cycle

We applied our smart engineering technology expertise to develop an automated connector — MasterManager™ — between the two systems. This connector addressed the

concerns of cost and time savings with its documentation needs as well as employee productivity. The software compares and copies designated data between the services, which also prevents human error and missing documents. It automatically uploads an engineering PDF drawing sourced from SolidWorks PDM to the appropriate record in MasterControl. The connector is configurable, allowing the user to determine the parameters of the comparisons and data updates.

This automated solution eliminates the need for manual processes and ultimately establishes a single source of truth for reference. Creating a single source of truth not only ensures the quality of the data, it also creates a point of reference for easier tracking. It boosts productivity by automating the painstaking tasks of copywriting and comparing [documents and files](#).

Profitable Outcome

Companies primarily recognize return on investments (ROIs) in one or more of the following ways:

Cost Avoidance

Cost avoidance enables companies to improve results without spending more.

Before implementing MasterControl and MasterManager, the company inadvertently sent the wrong drawing to their manufacturing facility, which included an unintended change. Due to using incorrect specifications, the manufacturer produced an unusable batch of product, resulting in a costly [corrective action](#). Using MasterControl to reduce review times and eliminate human errors and MasterManager to reconcile engineering changes with SolidWorks PDM will eliminate these costly errors.

Cost Reduction

Cost reduction prioritizes the same, current output at a lower price.

Upon implementing MasterManager, the medical device manufacturer immediately saved \$42,000 per year in operational engineering expenses. As the company grows, this savings will continue to grow exponentially. Moreover, with our solution, this company can manufacture their products at a faster rate, creating a stronger stream of revenue. This connector enhanced the quality of their products, increased their ROI, and established a new, connected system that drastically decreased future errors and costs.

Increased Satisfaction and Efficiency

Increasing satisfaction and efficiency elevates quality, saves time, and reduces costs.

The process of manually correcting or checking for errors erodes employee morale and organizational efficiency. Our solution prioritizes efficiency and cost savings, which boosts productivity and morale. By creating a single source of truth between the two systems, MasterManager created a functional improvement by eliminating time-consuming cross-checks between the two systems — giving engineers more time and resources to innovate and move the company forward.

“We are so pleased with the improvement in our engineering release process with the addition of the MasterManager™. We deeply value our partnership with SPK -- they are constantly looking for ways to improve our business and product release cycle!” - Jay DiToro, Ximedica.

No-Obligation Initial Assessment

No matter the size or scope of your business needs, we are committed to save you time and money, and ultimately enhance the quality and efficiency of your product development output.

If you're looking to dissolve data silos, integrate workflows, or simply offload the support and management of your engineering systems, look no further than SPK and Associates.

Contact us today at **(888) 310-4540** or info@spkaa.com.

