Customer Success Story: P3 Medical

Learn how PLM helped P3 Medical identify a manufacturing process improvement equating to a recurring £9,000 a year cost saving in a single project.

Summary
Initially driven by the need to modernize its new product introduction and engineering change processes to pass future ISO audits, P3 Medical®, a designer and manufacturer of medical devices for the global healthcare market, discovered Autodesk’s Fusion Lifecycle® could provide the company with the process control and visibility it desperately needed.

After Fusion Lifecycle was implemented in only eight weeks, they easily passed their next ISO audit with flying colors. In addition to solving their immediate needs, P3 Medical has also reduced the workload to prepare for an audit by 50%. Today, Fusion Lifecycle helps P3 Medical better evaluate engineering changes. In one particular case, they identified a manufacturing process improvement equating to a recurring £9,000 a year cost saving.

Challenges
Conducting business the same way was no longer a viable option for P3 Medical. A looming ISO audit was a major cause for concern. “Failing an ISO audit can prove catastrophic, as the auditors have the power to halt production and sales,” said Ian McEvoy, Director and Co-Owner. “P3 Medical operates under ISO 9001 quality standards and the stringent ISO 13485, the standard for the design and manufacture of medical devices.”

As a company philosophy, P3 Medical utilizes only Cloud-based software. For ERP, the company successfully uses NetSuite®. “ERP systems are very good for handling transactions, but not so good at engineering processes,” said McEvoy. “I was extremely nervous about explaining our new product introduction process to an ISO auditor as all of the information was maintained on paper files and spreadsheets. There are many steps to validating a medical device. Any chemical or component that goes into a medical device must have its components and biocompatibility traceability clearly displayed to an auditor. That’s very difficult when that data is on paper, files, and spreadsheets. When an auditor asks to see the biocompatibility report for a specific molding compound on a component of the device, what normally happened was a bit of panic as our employees rushed around trying to find the information.”

Search for a Solution
The upcoming ISO audit became a catalyst for P3 Medical to look for a solution. With just eight weeks to go, time was a critical factor. “I knew from my previous experience that PLM (product lifecycle management) software could help address...”

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IAN MCEVOY
DIRECTOR AT P3 MEDICAL
our issues,” said McEvoy. “Not only did we have to select, but also implement the solution and set up a major project in 8 weeks. It was obvious that we didn’t have much time.”

In any product selection it’s not just about functionality. Feeling comfortable with the company behind the product is also a key decision factor. “Our requirements were quite straightforward. The PLM solution had to be Cloud-based, integrate with NetSuite, and be relatively easy to use. I looked at NetSuite’s SuiteApp.com and found Autodesk’s Fusion Lifecycle listed. Autodesk is a NetSuite Alliance Partner, the product is Cloud-based, and I recognized and trusted the brand name,” said McEvoy.

A key criterion for P3 Medical was that the PLM solution had to fit in to the company’s philosophy of being Cloud-based. “This was the number one criteria,” said McEvoy. “We have two locations in the UK and representatives worldwide. Accessibility and security were of paramount importance. It’s vitally important that I can access the system from anywhere in the world, and know the data is secure. Cloud-based software allows me to do just that.”

Implementation

P3 Medical went live with Autodesk’s Fusion Lifecycle in just 8 weeks. “We got up and running very quickly,” said McEvoy. “The product is very intuitive and easy to use. Fusion Lifecycle met our requirements right out of the box. There were a couple of minor changes we needed to make to fit our environment, but the product’s configurability easily allowed us to make those changes. The final step in the implementation was to upload all our data. This procedure only took four weeks to complete and was very straightforward. I think it’s a testament to Autodesk that we managed to successfully implement Fusion Lifecycle with very little external assistance.”

Benefits of Cloud-Based Software

P3 Medical uses Fusion Lifecycle for bills of material, engineering change control, and new product introduction. “Before Fusion Lifecycle, I was very nervous about our ability to explain to an ISO auditor exactly where we were in our new product introduction process. Today, we have all the documentation contained in Fusion Lifecycle. Now, when an auditor asks to see the traceability of a component, we can drill-down and show all the documentation and biocompatibility reports. Another area worth noting is engineering change. This is where we exchange one component for another. By utilizing Fusion Lifecycle, it shows why we made the change, and that it was authorized and validated.

Many small companies lose out to larger competitors, due to their size. Fusion Lifecycle helped level the playing field for P3 Medical. “Even though we are a small company, Fusion Lifecycle provides us with the capability to conduct ourselves as a large company. In addition, the ability to show potential customers how we manage and control our processes is a huge competitive advantage. We could not display that in a professional way without Fusion Lifecycle. It certainly adds a lot of credibility to a small company,” said McEvoy.
Fusion Lifecycle's engineering change control has helped P3 Medical transform its engineering and development processes. "Engineering change control has had a big impact on the entire organization," said McEvoy. "It forces us to obey the rules. Prior to Fusion Lifecycle, we would authorize changes without the ability to really think through all the implications. Today, we can really evaluate what a change means and the impact it can have on a project. To illustrate, this year we had three projects, and we completed all of them much quicker. Last year, we had significantly more projects, but we didn't finish any of them. I was surprised how much of an impact Fusion Lifecycle has had on our business. We now have everything under control. Engineering and development work is being justified in a much more cost effective fashion."

By using engineering change control, P3 Medical recouped the entire cost of Fusion Lifecycle in one instance. McEvoy explained:

“A Canadian customer requested a custom product. I tried to convince them to use our standard product design, but they wanted special clips placed inside the device. This was something I would have dismissed out of hand, but went through the engineering change process to try justifying not doing it to the customer. To my amazement, the change saved us 20 minutes of manufacturing time per product. Due to our high volume of these units, that’s a huge impact. Looking back in retrospect, it’s blindingly obvious. Unfortunately, it was not so obvious to us at the time. By making that one change, it saved us about £9,000 a year recurring. I’m sure there are many other such examples we will discover in the future. Fusion Lifecycle is helping us to operate properly and more efficiently."

According to McEvoy, P3 Medical expects Fusion Lifecycle to deliver more benefits especially in the area of new product development. "We expect to see further gains in the future, especially with products we are designing today. This can be a reality because all of our designs have to be externally audited before we can bring a product to market. Overall, our process is 50% faster than before Fusion Lifecycle. We don’t have engineers working on projects that are never going to fly. For example, in the past we arrived at the end of a project and found we can’t use a particular chemical because it’s carcinogenic. Now, with Fusion Lifecycle we have completely eliminated these issues."

Future Plans

In the future, P3 Medical anticipates using the collaboration capabilities in Fusion Lifecycle to facilitate partnerships around the world. “Collaboration is definitely the next area we will be using with our new OEM partners. We have a lot of interest and new ideas coming from overseas partners, and Cloud-based software is essential to support collaboration. This is an exciting area for us, and we see this as a big opportunity to grow the business,” said McEvoy.
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About P3 Medical

P3 Medical Limited is a privately-owned UK-based company that specializes in the design, manufacture and marketing of innovative, high-quality medical devices for the global healthcare market. Founded in 2001, the company is headquartered in Bristol in the South West of England, with an additional production and clean room facility in Preston in the North West of England. Today with over 100 employees, P3 Medical works closely with clinicians to develop cost-effective solutions which enhance hospital efficiency, patient care and overall safety in operating rooms. In addition to marketing its own products, P3 Medical also acts as UK distributor to a number of leading medical device manufacturers to bring innovative products of high quality and value to hospitals.

Learn more at www.p3-medical.com

About Autodesk

Autodesk's product innovation platform brings together a set of connected design, manufacturing, and IoT tools in a single data-centered solution. This cloud-based platform, Fusion, supports the new ways that products are designed, made, and used while giving you access to tools for the top manufacturing trends.

Learn more at www.autodeskfusionlifecycle.com

Key Takeaways:

- P3 Medical needed to modernize its new product introduction and engineering change processes to pass future ISO audits.
- Product information was currently maintained on paper files and spreadsheets.
- P3 Medical has also reduced the workload to prepare for an audit by 50%.
- Company had 8 weeks until their next ISO audit to implement a solution.
- PLM tool had to be Cloud-based, integrate with NetSuite, and be relatively easy to use.
- With two locations in the UK and representatives worldwide, accessibility and security were of paramount importance.
- P3 Medical went live with Fusion Lifecycle in just 8 weeks.
- ISO auditor was impressed with processes and documentation.