



SchuF Fetterolf Rolls Out Adept Product Data Management Across Four Continents

OVERVIEW

For SchuF Fetterolf, a leading international industrial valve company, it's critical to provide current, up-to date information to everyone involved in the design and review process. However, with design teams spread across four continents, the task becomes increasingly difficult, especially when working with 3D solid models. SchuF Fetterolf's managers realized that without a Product Data Management (PDM) system in place, they risked the chance of handing off inaccurate information between geographically dispersed design teams, increasing financial risk and customer dissatisfaction. To solve this challenge, SchuF Fetterolf (www.schuf.com) invested in Synergis Software's Adept PDM as their integrated PDM system for Germany, the United States, Ireland, England, Brazil and India.

ABOUT SCHUF

SchuF Fetterolf's products can be found in the Chemical, Refining, Pharmaceutical, Plastics and Polymers, Mining, Aluminum, and Power industries. SchuF has delivered over one million valves during their near 100 year history to customers in 50 countries. They have staked their reputation on innovative design, manufacturing expertise, and reliability. While most of their competitors have languished in the last 15 years, SchuF Fetterolf continues to expand through growth or acquisition. But in order to maintain their high quality and improve time to market, they needed to maximize resource sharing and collaboration between all their design departments.

Christoph Kehrs, Director of Sales at SchuF explains. "We have grown massively over the last 15 years while some competitors are really struggling. We wouldn't be in this position without PDM. We would have had to add three to four more people just to exchange information and still wouldn't be as effective. We have the same number of people as when we started with PDM but now have three times the output. It was worth every dollar we spent on PDM. We get good return on it."

THE CHALLENGES

Like many global manufacturers, SchuF Fetterolf is continually under pressure to get their custom valve designs to market faster while they maintain the highest quality and service. To achieve

their revenue and profitability goals, they are cost conscious at every level—from controlling product costs, improving design processes to eliminating resource and material waste. To help them realize maximize efficiency and productivity, the company is laser focused on resource leveling across their global sites.

"We practice simultaneous engineering, leveraging our sites in the US, Ireland, and India," says Kehrs. "Without a PDM system, we would not be able to achieve the worldwide handoffs across all time zone."

"Some sites might be busier than others so sharing resources is important," adds Brian Walsh, IT Manager for SchuF. "We wanted to centralize our system to share workloads across design departments."

ADEPT IS "AN EXCELLENT" TECHNICAL AND BUSINESS FIT

SchuF's overarching goal for a PDM system was to create a single, centralized repository that allowed fast access to data with the ability to share licenses across continents and time zones. They needed:

- a single integrated PDM system for all global sites
- a PDM solution that provides the tightest integration with SolidWorks and AutoCAD for revision control, collaboration, compliance and workflow automation
- a central repository to store and access all designs for better design re-use

In 2004 SchuF started a serious research initiative for a single PDM enterprise wide solution to replace the out-of-date system used in Ireland and Germany. They also needed to provide a new system for Brazil and India that had no data management. That same year, SchuF acquired Fetterolf Corporation in Skippack, PA, who was successfully using Synergis Software's Adept PDM to manage their SolidWorks, AutoCAD and other engineering data.

After a thorough review of existing and competitive products, SchuF chose Adept from Synergis Software. Adept had met all

their key technical requirements, including its tight integration with SolidWorks, which has earned Adept the highest “Gold Level” certification from SolidWorks Corporation. The software also had a powerful, built-in visualization, mark-up and compare capability, and a flexible concurrent licensing model that ensured optimal access to data across time zones.

Perhaps as important as the technical capabilities was the partnership they established with Synergis Software. They liked the company’s smaller, more focused development organization. In addition, they felt that Synergis Software—both the developer and the team responsible for implementation, data migration, and ongoing support—would provide the best central support for all their global sites.

“Adept was proven at Fetterolf, our U.S. location,” notes Walsh. “And Synergis Software has extensive experience migrating other vendor’s PDM data into Adept. As a result, we had huge confidence in the success of the implementation and concluded that Adept would provide us the lowest total cost of ownership and best return on our investment.”

UNIFYING THE DESIGN PROCESS

SchuF had foreseen the challenge of bringing together separate design centers as each site had its own processes and habits. “We had situations where we had two files and ordered castings from the old drawing and suffered the immediate cost associated,” states Walsh. “I thought all we needed was a central location to start to share and access files. But when we implemented Adept, it exposed a lot of shortcomings in our design process. So we put a lot of work into unifying all the disparate design processes and standards across the multiple sites. The positive outcome is that we’re not seeing the same file management problems anymore.”

ADEPT GETS 3D DATA UNDER CONTROL

When Schuf moved from 2D CAD to 3D they knew they needed help. “You need to have a good PDM system to keep a 3D system running properly,” notes Kehrs. “It was possible with 2D, but when you have complicated assemblies with lots of parts you need a PDM system. No question about it,” agrees Walsh.

Adept helps designers keep file relationships intact when they check in, check out, move, copy, or rename files. PDM prevents mistakes made by wrong revisions or wrong files. “Now we



SchuF Fetterolf has built the largest and most advanced diverter and control valve assembly used in the world. It is installed at the Shenhua coal liquefaction plant in the world’s only full scale to coal to liquid fuel plant.

get the file we want at the click of a button and it is always the latest revision so you can continue your work,” states Kehrs. “With PDM, you don’t worry about it, you always have the latest. The headache is gone.”

Adept also provides fast searching and quick access to accurate information. “We can’t afford for somebody in the U.S. to send an e-mail to India requesting a drawing or BOM,” cautions Kehrs. “We can’t afford days— it may be too late and our customer’s plant may be shut down. That’s not good customer service. Search is a critical benefit;

the data has no value unless you can find it.”

REDUCING DESIGN GAPS, IMPROVING WORKFLOW AND ACCOUNTABILITY

The company has also been able to create suitable workflows in Adept for automating their product approval processes. “We set up workflows so that designers can design and checkers can review and approve their work,” explains Walsh. “It gives us accountability because they realize their name is going on the review and it provides audit capabilities so we can trace exactly what has happened. Our Quality department can keep an eye on why things are revised in our change process, because PDM is used to generate it.”

Adept workflow has also helped SchuF improve their processes by identifying logjams. This analysis translates into faster time to market. “A problem that we’ve always had with design is that the work comes into the design office and then comes back out after two weeks with initial designs; then there’s another six weeks to getting a finalized design,” comments Walsh. “With Adept we’re able to see when files are being signed in and when they are approved. So, it’s helping us to eliminate those gaps where the work is either not being tackled or if it’s been checked in and just sitting idle. The overall effect is shortening the design period and getting the product to market faster.”

Adept audit trail has solved the work of maintaining and renewing their ISO certification. “We have ISO certification on the sites every two years,” states Walsh. “We have to renew our ISO certification so that we can work with pharmaceutical companies, for example. For a lot of customers we need to say that we’re an ISO certified company in order to supply products in the first place.”

ADEPT IN ALL DEPARTMENTS

Currently, SchuF is using Adept in every department throughout the organization—from sales, presales, order processing, design, shipping, and even purchasing.

“Not only do we have our drawing files in Adept, but we share design meeting notes, so issues that might arise at each site are shared and are accessible by other sites,” explains Walsh. “We also have designers from different sites check each other’s work, which has helped enforce our standards. So when marking up, drawing, or looking at information in the drawing prototype, it enables cross checking of design standards.”

“The initial spark for PDM came from design,” notes Kehrs. “Now different departments—even Accounting—use Adept. Commercial data like project calculations and quality documents like non-conformance reports are in there. We even store invoices and purchase orders to vendors. Even for a valve from 1950, we can get spares for it. We have complete drawings but we also have design calculations.”

SEEING RESULTS

Looking back over their five year use of Adept—from initial goals to the present, Walsh is pleased with the results. The company has now united Germany, Ireland and United States into one central Adept database and has deployed Adept to India and Brazil. There are currently 130 active users between all the sites. Walsh spends at most an hour a week administering Adept now that all the users and the database are in place. Adding or moving users is a five minute job.

All departments within the company now use Adept to some degree as part of their daily activities. And Adept has helped the company stay on target with their business objectives to reduce product development cost. They’ve estimated a 25% time savings within each new site or department that uses Adept.

For Brian Walsh, who helped pave the way for Adept’s growth within the organization, it continues to be a rewarding experience.

“I would definitely say that it was a longer process than I’d hoped because it uncovered things that needed to be addressed in our design processes—things that are far outside the realm of PDM and document management,” remarks Walsh. “PDM helps serve as an active cross check across a lot of different things, and gives us a different view on things. And that’s worth it. Having Adept in place is definitely something that I am proud of achieving.”



Some of SchuF Fetterolf's valves that are created in 3D and managed by Adept

“Adept helps SchuF designers keep file relationships intact when they check in, check out, move, copy, or rename SolidWorks files.”