

Designing a New Era in Manufacturing Innovation

What does it mean to be a global leader in your industry? For Davis-Standard, a manufacturer of extruders and industrial blow molding machinery for the polymer-processing industry, it means creating engineering systems that are environmentally friendly, cost-effective, and profitable. It means running manufacturing facilities from Germany to China to the United States to help leading manufacturers produce essential, high-value products.

It also means a commitment to a continual quest for innovation and efficiency. As a forward-thinking company, David-Standard strives to tailor their products and support to their customers' exact needs to help them optimize profitability.

On a day-to-day level, that means ensuring engineers can integrate their design tools with their processes for maximum accuracy and productivity. Davis-Standard offers more than 11 product lines across a range of industries, including automotive, construction, consumer products, medical, packaging and more. In today's complex engineering landscape, they know their manufacturing success is tied to immaculate data management, from drafting designs to ordering parts.

"That's why we wanted more control over our product for engineering," said Nicholas Thompson, System Administrator, of the organization's decision to adopt a PLM solution 10 years ago. The team wanted a platform that could assist with CAD integration and ultimately usher in greater manufacturing coherence and collaboration across their global facilities.

The Search for Smarter Systems

Like many manufacturing giants, David-Standard consists of multiple engineering teams, who have used multiple systems to manage their data and projects. From design to development to production, this complexity has heightened the risk of errors and inaccuracies, which in turn has sometimes led to delays and hindered the teams' productivity.

The organization's leaders wanted to solve those challenges by leveraging enterprise data across all locations. Their wish list included easier knowledge sharing, informed decision making and smarter collaboration, as well as tighter engineering control.

"By moving forward with CAD integration, we wanted to move away from using a green screen for product integration," Thompson explained. The team looked for a PLM solution that could centralize their data and offer seamless communication across their global facilities. After considering a few solutions, they ultimately decided that PRO.FILE made the most sense because it provides an end-to-end solution from engineering through production and integrates their CAD systems with Epicor and SAP ERP solutions.

From Siloes to Standardization

The PRO.FILE deployment began well, with a straightforward onboarding and implementation process. "There weren't too many hiccups along the way," Thompson recalled. "And we saw tangible benefits right away with CAD and PRO.FILE integration. Standardization was a big one. At the time, engineers were in their own groups and did things their own way."

PRO.FILE changed that with workflow controls that kept staff activities within specified parameters. "Once everything was standardized, they followed uniform processes," Thompson said.

Now, instead of siloed information, all product-related data is centralized in a Digital Product Data Backbone, which put the most current and comprehensive information at the engineers' fingertips whenever they needed it. With the ability to base their decisions on the most up to date data, materials were produced correctly and cost-effectively the first time. Work performed based on outdated documents, or the need to hunt through different systems for information, became a thing of the past.

Standardization also ensured uniformity in training, so that engineers shared the same skills across teams. Engineers also were able to discover and correct design issues earlier than ever before. "We quickly saw fewer mistakes and errors, and more flexibility between teams," Thompson said. "Now bill of materials are correct. PRO.FILE brought that control into our business."

Turning Synergy into Smoother Production

One major factor in the engineering teams' success has been the solution's common parts/components library, which has been key to the integration of Davis-Standard's various CAD programs: AutoCAD, SolidWorks and AutoCAD Electric.

"Over time, we have really seen the benefits," Thompson said, noting it accelerated their design processes and streamlined knowledge management in terms of their parts and BOMs. "We even adopted PRO.FILE in Germany at one of our other companies."

The engineering team also liked how the product worked. "A few engineers were initially chomping at the bit to use it because they could see the benefits; they could see things would be easier for them and more accurate. Once they used it, they liked the ease of use and the scope of the features. And the product is backed up with excellent service and support."

Just recently, a director told Thompson that a new integration project for the company's SolidWorks program has gone smoothly thanks to PRO.FILE.

"It's synergistic," Thompson said. "They're still learning the nuances of the system, but managers can see the product design and engineering are going well."

Because some design work is still done in silos, Davis-Standard intends to integrate all their global design sites. "We want to bring everyone into the system for better efficiencies in CAD and ERP management," Thompson said. "PRO.FILE is the key to making this happen. Bringing in other parts of the business provide flexibility to engineering design, too."

"By using the same numbers for the same items, we can purchase larger quantities and obtain larger discounts and save money across all our locations," Thompson explained, adding, "It's very cost-effective."



Building a Stronger Future

Today Davis-Standard continues to manifest a competitive advantage through PRO.FILE, from faster design time to reduced waste and delays. Because they have increased their ability to efficiently connect with customer needs, they've built stronger relationships with their customers.

"We have another system at other locations and in comparing them, PRO.FILE is the Ferrari and the other system is the Ford," Thompson summarized. "PRO.FILE is very good – it does everything it's supposed to do and more."