IMAGINIT TECHNOLOGIES

AUTODESK Platinum Partner

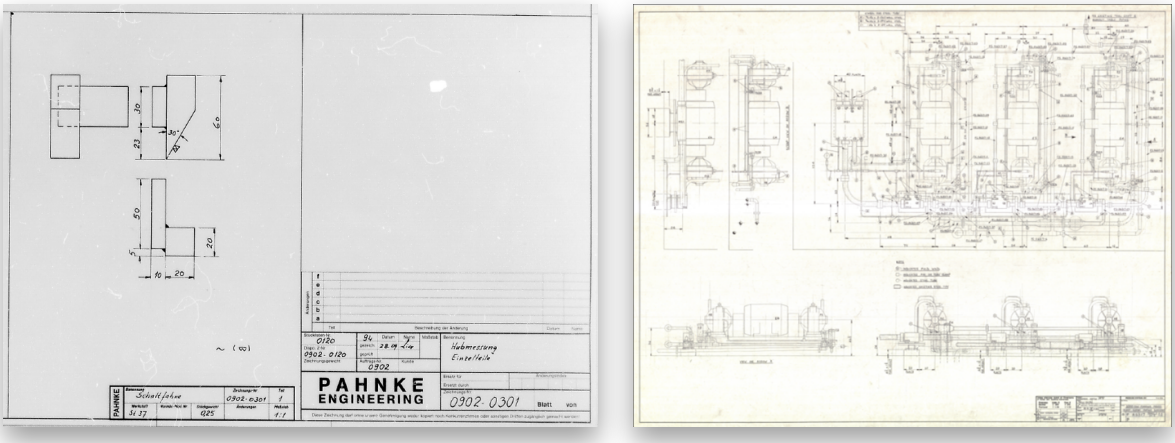
Wepuko Pahnke Manages Legacy and New Designs in Autodesk Vault

The Organization

Wepuko Pahnke (WP) is a market leader in the design and manufacture of specialized forging systems and presses throughout North America. It provides turn-key solutions through designing, manufacturing, installing, and providing services such as training and commissioning on complete press systems, including press castings, press drives, controls, manipulators, die slides, and other custom auxiliary components. WP also specializes in high pressure high flow pumps for a variety of industries, giving the company a unique ability to provide custom applications.

The Challenge

With a history that goes back to 1974, WP has thousands hand-drawn designs, and for years, the company used Microsoft applications for design file management.



Examples of WP's hand-drafted drawings that include everything from small parts to large systems

"Our products have long lifecycles, and we design them so they can be refurbished or rebuilt at a fraction of the cost of new ones," said Roberto Millan-Ayala, Design Engineer, WP.

During the years between when an original product was designed and a customer needs it rebuilt, WP personnel can change, their standards may be adjusted, designs might be updated, etc. If changes made to a part aren't captured correctly, the process of locating the correct part number can be extremely time consuming.

"To increase the efficiency of the refurbishing phase, we needed a technology solution that would allow us to store all design information in a central location and easily track changes," said Roberto.

WP needed to leverage technology to manage both the legacy designs as well as new files created using AutoCAD and Inventor, which their engineers had used for several years as individual products and more recently as part of the Autodesk Product Design & Manufacturing (PD&M) collection.

The Solution

When Roberto joined WP in 2019, he learned about the products in the PD&M collection and looked into Vault Basic software, which is included in the collection, to see if it would meet WP's data management needs for both legacy and new projects. He engaged with their machinist involved in the process who spends a lot of time reviewing and interpreting drawings. "Because he has been with WP for years, he often remembers specific details about the projects," said Roberto. "It turned out that he had already been thinking about improving the process, and we decided to move forward in exploring Vault software further. I then took the recommendation to the president, who immediately understood the value in helping us deliver a better customer experience."

Based on WP's long-term successful relationship with IMAGINiT Technologies, Roberto reached out to his account manager to get started.

The account manager brought in a Vault expert from IMAGINiT's technology implementation team. After learning about WP's specific situation, IMAGINiT recommended that they get Vault Workgroup for its CAD users instead of Vault Basic, even though it was not included in the PD&M collection, because Vault Workgroup offers tracking functionality needed by WP for:

- Tracking revisions to drawings
- Tracking where parts are being referenced
- Tracking dependencies
- Adding custom tracking fields

IMAGINiT also recommended Vault Office for WP's non-CAD users for access to assembly BOMs, drawing PDFs, and other documentation they needed to track as well as the ability to create exploded views than can help with assembly.

WP accepted the recommendation and worked with IMAGINiT to develop a solution that included:

- Securing the appropriate licenses of Vault software for WP's users
- Collaborating on Vault software implementation and customization to meet WP's objectives
- Customizing training sessions for key team members:
  - High-level administrative training with Roberto
  - Half-day in-person training for four CAD users who would be pushing AutoCAD, Inventor, and other Autodesk software files into Vault
  - Half-day training for non-CAD users who would use the software to interact with Microsoft Word, Excel, etc.

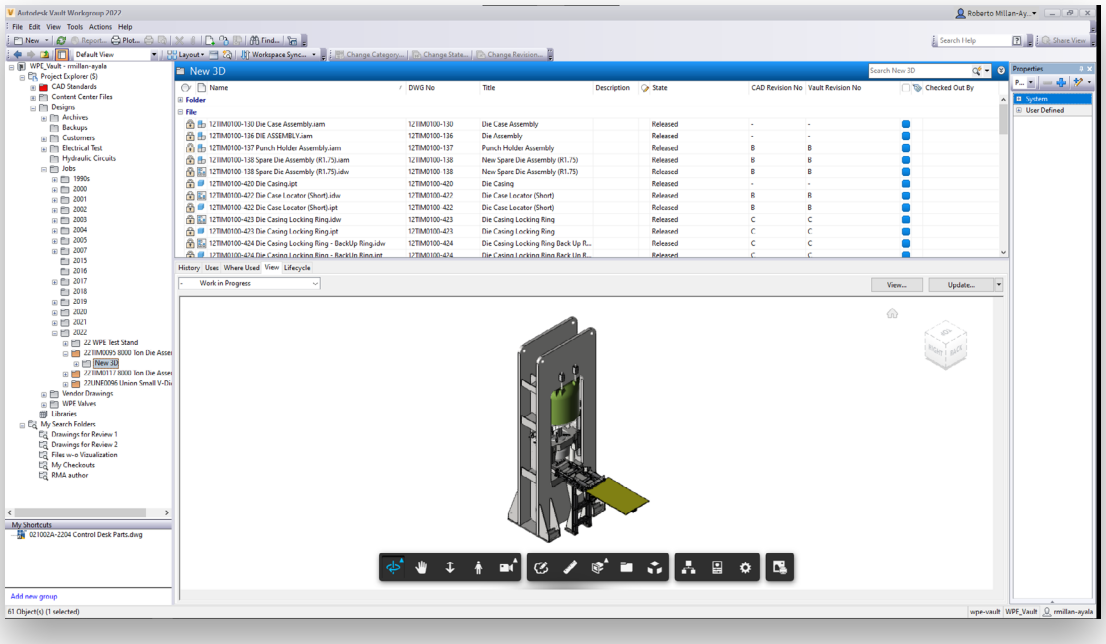
The Results

"We have been using Vault for several months now and everything is going well," said Roberto. "We have more control of the new projects, and the process of building our library of legacy projects is moving along smoothly."

Here are some improvements WP is already experiencing as well as some they expect as they continue to transition more files into Vault:

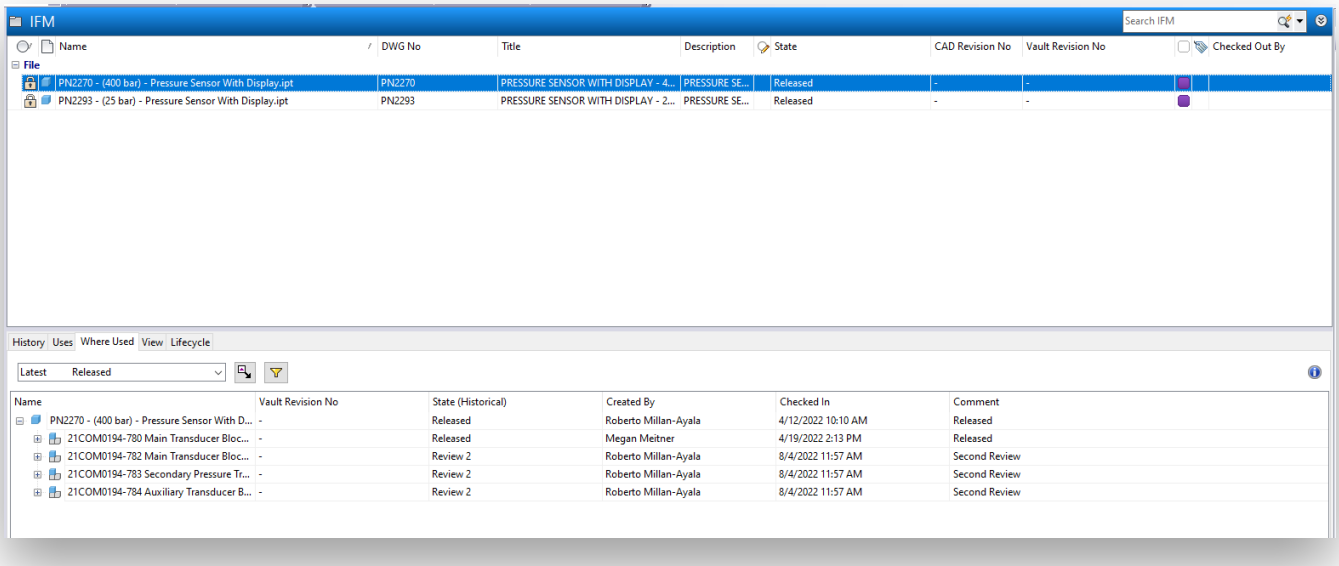
1. **Smoother two-check process.** Previously handled through email, now one engineer places a drawing into Vault, which tags it for the first review. After the first reviewer clears the drawing, Vault tags it for the second review. When that review is cleared, Vault tags it as ready to be released to the customer.
2. **More self-reliant office staff.** Several processes that previously required interactions between the office staff and the engineers can now be handled directly through Vault. For example, a BOM for an assembly can be pulled up in Vault, eliminating the need for the office personnel to identify the engineer who designed it and work with them for the information.

   Below is a view of WP's Vault environment showing a 3D assembly. "Vault has a built-in viewer that non-CAD users can use to view work without going into a separate program," said Roberto. "Inventor also allows us to use these assemblies to create drawings or videos for clients, and Vault helps keep all related files together."



3. **Less time spent tracking down part changes.** In the past, when an actual part didn't match the corresponding part number, someone would have to determine the last time the part was in the shop and find any changes made since then. Vault captures all changes made to designs, including when they were made, why they were made, and who made them.

4. **Faster response to customer requests.** With part information easily accessible, WP will decrease the time from when a refurbished part request is received to when its processed.
5. **More informed decisions about creating new part numbers.** Because Vault tracks all assemblies in which a part is used, WP can determine if a change to a part will negatively impact other assemblies, and if so, give it a new part number.
6. **Thorough responses to recalls or issues.** Below is an image showing information about a sensor WP recently used on a project stored in Vault. "If we use the sensor on another project, we can see that it was also used here," said Roberto. "Should there ever be a recall or issue found with a customer's sensor, we can easily track down who else may be affected by it."



"Teaming with IMAGINiT on this project was the right decision," said Roberto. "They worked as an extension of our team, taking the time to learn about our goals and making sure we had the technology and training to reach those goals."

Roberto continued, "Vault Workgroup was the right technology solution. It was like the Goldilocks version for us; it included what we needed without much extra to overwhelm us. Now that Autodesk has discontinued Workgroup, we will transition to Vault Professional, which has all the functionality of Vault Workgroup with additional support for streamlining interdepartmental collaboration."

"I think Vault Professional will continue to improve things for WP. I'm looking forward to the ability to do geometric searches, which will allow me to pull up identical parts that were inadvertently given different part numbers."

For more information on how to leverage the latest technology to improve your processes, **contact us**.