

Manufacturing

# SUCCESS STORY

## Entire Plant Maintenance and warehouse management transforms from rigid to flexible with 18 new mobile applications

CertainTeed (Saint-Gobain) built 18 mobile solutions with low-code app development, automating warehouse management functions, and transforming their SAP plant maintenance solution into their own digital vision.

### Company Snapshot

CertainTeed, a subsidiary of Saint-Gobain, is North America's leading brand of sustainable exterior and interior building products. CertainTeed has helped shape the building products industry for more than 100 years, through the responsible development of innovative and sustainable building products. CertainTeed is North America's leading brand of exterior and interior building products, including roofing, siding, fence, decking, railing, trim, insulation, gypsum and ceilings.



**CertainTeed**  
SAINT-GOBAIN



Industry Focus

**Manufacturing & PM**

Department

**Plant Maintenance/  
Warehouse Management**

System Version

**SAP ECC 6.0, EHP5  
Support Pack 9**

Devices

**Samsung Tab Active 2 devices with RAM mount accessories for plant maintenance, ruggedized Zebra devices mounted on forklifts for warehouse management**

Timeline

**9 months**



## Manufacturing



### Challenges

- Quarter mile walks to computers slowed down processes in the warehouse
- Manually processing 125,000 work orders a year across 65 plants
- No access to real-time information needed to keep the supply chain moving



### Solutions

- 18 mobile applications for plant maintenance and warehouse maintenance to streamline and mobilize processes
- Real-time information without the use of desktops
- Mobile and offline capabilities with the ability to work across a variety of Zebra devices



### Benefits

- Increased efficiency and visibility
- Standardized work entry and execution with the elimination of paper orders
- Training time reduced down to 2 days, performed virtually due to COVID-19

# The Success Story

## Challenge: High volume operations across 65 plants stilted by long walks to a desktop

The Neptune Software journey to reach their digital vision started with the standardization and mobilization of their Warehouse Management processes. Due to the success of this project and the ability to own and drive innovation with the Neptune DX Platform, CertainTeed quickly progressed to Plant Maintenance mobilization which is currently on-going even in times of COVID.

When you process more than 125,000 work orders a year across 65 plants, efficiency is key. Fast, easy access to plant maintenance documents – pictures, bill of materials, work orders, PMARS, and the like – makes a big difference in efficiency and ultimately the bottom line.

At CertainTeed, keeping the plants operating smoothly doesn't allow time for quarter-mile jaunts between the job site and the dedicated computer workstation to access the SAP Plant Maintenance solutions. Plus, there's a risk of information not getting documented in the system in the first place, which makes it harder to accurately assess processes, workflow, and output.

**“We needed to eliminate the need to use a computer terminal to get work done,” said CertainTeed’s Digital Manufacturing Director David Halpren. “The high volume of orders we process meant that we needed a more efficient way to access and add data to our SAP PM module where work was happening.”**

It's a scenario that was ripe for a mobile solution. And that's exactly what CertainTeed set out to deliver using Neptune Software's modern rapid application development platform—the Neptune Software Digital Experience Platform (DXP) - SAP Edition. The solution provided CertainTeed with full mobility and out-of-the box offline capabilities that helped them quickly digitize plant maintenance and warehouse management solutions bringing them one step closer to their digital vision.

With the **Neptune DX Platform, being an SAP-certified app development platform and embedded within the existing ABAP stack, CertainTeed would be able to design, build, integrate, deploy and maintain SAP Fiori apps in a fraction of the time it would take with custom Fiori development** or other development platforms — accelerating the delivery of its mobile solutions with the most-native application development platform for SAP-centric use cases.

## Solution: Modern low-code application development helped to launch new mobile apps with flexibility

As part of a larger effort to create common processes, systems, and better tools for employees, CertainTeed first worked to gain alignment across its five businesses to create more unified plant maintenance operations. An effort to bring all operations on SAP, completed in 2019, paved the way for even greater enhancements that would help make work easier and help them reach their digital vision. That same year the new mobile warehouse management solutions were also activated.

For the plant maintenance effort, the company's Plant Maintenance Business Process counsel sought to **take their standardization journey even further and enhance the user experience for plant maintenance with mobile apps, which would need to operate on rugged devices** able to operate in subzero temperatures.

The new plant maintenance apps would be used to process work orders and manage photos and documents.

“Subash Mohanvel who led the plant maintenance project comes from SAP Labs in India and helped build the plant maintenance solution for SAP. He championed our Neptune Software app development and worked with the various businesses – which did a great job of mocking screens. He provided great insight on what things we could do to boost this mobile solution even further,” added David. “And our in-house developer was also very quickly able to begin developing apps using Neptune Software.”

Mobile and offline warehouse management capabilities were also introduced in 2019 to streamline work processes across CertainTeed's plants, including processes to manage picking products and scanning bar codes, using ruggedized Zebra devices on VC980s mounted on the forklifts.

**“Forklift drivers had inefficient paper processes and had to get on and off their trucks many times a day, which also could impact their safety,” said David. “With more than 200 trucks a day at our bigger plants, we knew there had to be a better way to work.”**

**CertainTeed was able to launch 7 plant maintenance apps in 6 months after having previously successfully launched 11 warehouse maintenance apps.**



Within the two main projects for warehouse management and plant maintenance, CertainTeed launched a total of 18 different transaction and reporting apps. Specifically, the plant maintenance apps were launched earlier this year across its first plant, with two others quickly following, and more rollouts planned.

Interestingly, CertainTeed's training and go-live efforts needed to be completed virtually when in-person visits to the plants had to be canceled due to global health restrictions during the COVID-19 pandemic. The team adapted rapidly, quickly changing gears to provide online training and virtual launches that were conducted in just three days. **As a result of their flexibility, users – some of whom had never used a tablet before – were able to get up to speed quickly via training videos and online conference calls.**

Launching the new apps is simple. "Once each plant completes a simple five-step stage gate process, they're basically ready to go live," said David. "We can easily roll it out to all of our plants with just a little training."

**"With this approach, each gate has a set of prerequisites that need to be completed to determine if the plant is ready for the tablet rollout," said Subash Mohanvel, Senior Manager, Digital Manufacturing at Certain Teed. "This may include having WiFi setup, hardware procured, training tablets readiness, and the like. Once those stages are complete, we spend approximately two days in training. Then the rollout happens. A training app helps support remote deployment via How-To guides, documents and other videos to help the user if they run into issues."**

### Results: Neptune Software's mobile apps are a game changer for daily work

**"The new apps have been a game changer in terms of daily work, with users able to accomplish tasks on-screen on their tablets and immediately, right where they are,"** said David. "Users appreciate the ability to quickly access work orders, equipment, and part information from anywhere on site."

The increased efficiency and visibility are making a big difference. "Our workforce can be more efficient in their jobs and they are more likely to put accurate data points in their work assignments, so more and better data is being captured and stored for improved analytics as we move forward. They can even access work instructions from the tablet, where before, those were hard to find," said David.

With Neptune Software, CertainTeed has been able to **standardize work entry and execution and eliminate paperwork orders across its maintenance departments** and reduce the time it takes to get work done helping them achieve their digital vision.

"A plant maintenance project like this has a lot of moving parts, building functionality compliant with the tablet, working with our industrial firewall as well as our firewall to SAP," said David. "Plus, it needs to support offline work. **The Neptune DX Platform has given us the ability to transform the entire backbone of our SAP plant maintenance solution into our own vision of the process,**"

**"Neptune Software gives you the flexibility to do almost anything and basically rebuild functionality. It was a great experience to be able to connect those dots and to turn something rigid into something flexible. Ultimately, Neptune Software's app development platform made our digitization journey a good experience."**

### About Neptune Software

Neptune Software is a rapid application development platform vendor with more than 600 enterprise customers and over 3 million licensed end users globally that empowers IT departments to deliver tangible business outcomes. Neptune Software offers with its Neptune DXP, a leading low-code, SAP-centric, enterprise app development platform to digitize and optimize business processes and user interfaces – at scale and with ease. Neptune DXP provides a fast and cost-effective way to industrialize the development of custom applications - saving companies time and money on development, integration, and operations. More info at: [www.neptune-software.com](http://www.neptune-software.com)