



PCL Construction Uses AutoSpecs to Improve Productivity and Profitability Without Sacrificing Quality

Using AutoSpecs provides PCL Construction with an actionable data-set that illustrates the full contract requirement scope from day one.

BACKGROUND

PCL Construction is a group of independent construction companies that perform work across Canada, the United States, the Caribbean, and Australia. They work on construction projects that range from \$20,000 to \$1.5 billion in value, covering Buildings, Heavy Industrial, and Civil Infrastructure.

Headquartered in Edmonton, Alberta, Canada, PCL was founded in 1906 by Ernest Poole and has grown to more than 4,000 salaried employees, and over 6,000 tradespeople world-wide.

PCL Construction develops and incorporates the latest technologies into its construction methods and project delivery process, striving to find the best ways to meet clients' project goals. Employees currently use specialized hardware and software on jobsites, including solutions that provide Augmented Reality, Data Analytics, Field Execution, IoT, Lean Project Planning, and Virtual Design and Construction.

CHALLENGE

When it came to reviewing specifications for their projects, PCL's project teams were spending many hours searching for the planning and quality information they needed, such as submittal requirements for shop drawings, product data, samples, mockups, and QA/QC processes.

Reviewing the specification documents used to take significant effort. Identifying every requirement and then copying and pasting it into a spreadsheet carried a potential risk, particularly on very large specification documents. Submittal items might be left out, arrive later than they should, or testing requirements could be missed.

The consequences of late submittals range from delayed work, where workers must put in extra effort to get back on schedule, to significant delays that incur monetary loss and affect profits.



SOLUTION

Evaluating Pype AutoSpecs' functionality led a group of PCL employees to immediately realize the potential benefits of the product. It could review their specifications and produce the results they were looking for with a high level of accuracy.

Since PCL operates mainly in the US and Canada, Pype decided to create a Canadian version of their Artificial Intelligence (AI) rules so that PCL could use AutoSpecs for both countries.

According to Larry Andreychuk, PCL's Quality Management Business Systems Analyst, "We did a demo and it looked promising. We started using it on a few test projects and we were very impressed with the results."



"Enabling productivity gains for PCL employees through the use of smart digital technologies like Pype allows our people to better focus on our client's pressing needs."

- Mark Bryant, Chief Information Officer, PCL Construction

RESULTS

Track Multiple Versions of the Specs

It's normal for construction projects to receive multiple updates to specifications. Architects and engineers make changes as a project progresses, and companies like PCL need to be able to track those changes. With AutoSpecs, there's no need to go through the new iterations manually anymore—the Versioning feature does it by presenting changes, omissions, and additions in an easy-to-read format. The project team can simply upload the new versions, and the software reviews it. "Considering the extremely large specification documents on our project, we'd still be in the process of identifying submittals if we had to do the old method of manually reading and creating our submittal log," says Project Coordinator, Carmen Thirsk, helping to build the Calgary Cancer Centre.

Estimating with Confidence

AutoSpecs also helps PCL's Estimating department provide more accurate project bids by making detailed project requirements available during the estimating process. According to Larry Andreychuk, "It gives us greater confidence in our cost estimates."

This level of confidence extends to trade subcontractor partnerships. A full understanding on everyone's part of all closeout requirements during the bid process allows for more detailed contracts. Trade contractors can then request the appropriate Operations & Maintenance and General Warranty documents from the manufacturer, ensuring they collect the correct documentation on the first request.



Simple Review Process

Using the SpecView feature in AutoSpecs, PCL can view the specifications alongside the requirements that Pype's software pulled out. The extracted items are displayed in a sidebar, allowing the team to read along and verify that items are included in their submittal log and quality requirements matrix.

Pype even added a feature to SpecView to help PCL scan more efficiently. Now a checkbox in SmartView highlights all of the submittals in the specification, making quality assurance a clear and painless process.

Emma Wilton, Quality Coordinator for PCL, says, "In my training system I tell people to get into SpecView and check that box to make sure all submittals are highlighted."

Team members who find something that they would like to include in their matrix can use the SmartBuild feature to highlight the section they want to automatically add. No need to copy and paste the item.

Takes Time to Comprehend the Specs

The AutoSpecs review replaces time spent scanning for keywords and tedious copying and pasting, allowing the PCL team to focus on reading for true comprehension and quality assurance purposes.

Carmen says, "Pype's doing that for us, giving us the time back to review what's important in the specification."

Special Projects Getting the Attention They Deserve

PCL's Special Projects division deals with projects that are typically of short-duration. A lot of pressure was placed on these projects in the past to document submittals at the level of detail required for the submittal log and quality requirements matrix. There simply wasn't enough time to devote to the task.

Using AutoSpecs to extract the required data means the project team can quickly get the information they need without sacrificing quality. The submittal review process is so much more efficient with Pype AutoSpecs, that these fast paced projects can mobilize even more quickly with high quality plans.

CONCLUSION

Using AutoSpecs to review specifications, both before a project starts and during construction, improves productivity throughout the project lifecycle. A construction company can reinvest the time saved to better understand its projects, provide owners with a better product, and estimate work more confidently in both the United States and Canada.

