

PDC Consultants

Customer Success Story

Autodesk® Navisworks® Manage

Autodesk BIM solutions enabled us to collaborate better, which resulted in faster decisions and higher efficiency throughout the project, from design to completion, helping us to deliver projects faster and generate a quicker return on investment. We now use Autodesk Navisworks software products as central project management software for all our projects.

—Martyn Weir  
Managing Director  
PDC Consultants

# Accelerate building with BIM.

PDC Consultants integrates design and review throughout a project's lifecycle using Autodesk Navisworks products.

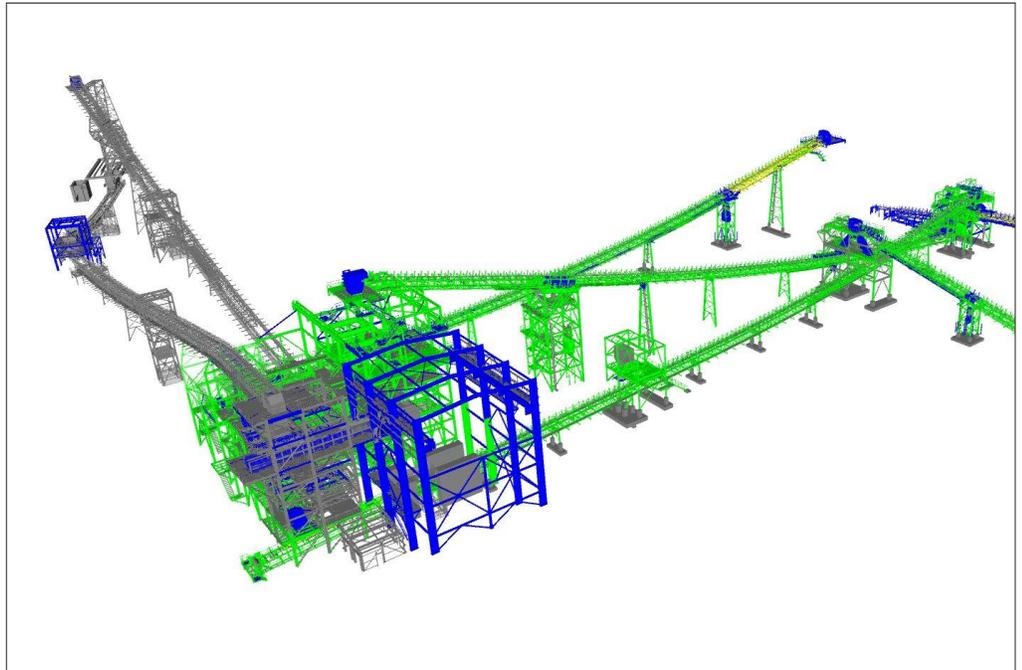


Image courtesy of PDC Consultants.

## Growing from Strength to Strength

Based in Perth, Australia, PDC Consultants is one of the world's largest structural and mechanical workshop detailing companies. The firm works on projects across a range of industries—including mining, oil, and gas; power; and infrastructure—with clients that include BHP Billiton, Rio Tinto, Woodside Energy, and Alcoa. Established in 1972, PDC has grown from a team of three to a company of more than 100 experienced professionals who quickly take projects from inception through to completion.

PDC has been acknowledged by the industry and customers for its leading-edge use of Building Information Modeling (BIM) technology to shorten project schedules and lower operating costs through improved access to mission-critical information. From planning to coordination to construction execution, PDC relies on Autodesk® Navisworks® software products to better visualize and coordinate designs with multiple stakeholders.

## Using the Benefits of BIM to Bolster Growth

PDC had used various software applications to manage its various project components. As projects got larger and more complex, PDC needed an integrated solution that could bring all the elements of the project—from budgeting, design conceptualization, materials, and logistics management to document management and customer reviews—together on a single platform.

Customers also wanted a central software product that would enable them to review data, draft designs, and provide feedback more easily at any stage of the project.

“One of the primary reasons we selected Navisworks is for its ease of use,” says Martyn Weir, managing director at PDC Consultants.

“On-site at the mine, you often have someone who's not a detailer or a designer, but who needs to get information on the project. Navisworks is an easy-to-use tool for them to access what they need. The level of efficiency that it helps bring is critical to our success.”

Autodesk®

## Improved Collaboration

Today, PDC is recognized for its innovation in providing 3D modeling solutions to clients' projects. The company has developed a proprietary system called iConstruct, which was developed on Autodesk Navisworks software. Navisworks has a comprehensive developer interface that enables customers and partners to tailor the core product in order to deliver workflows that are specific to their industry. PDC worked closely with Autodesk Partner AEC Systems, whose experience, knowledge, and solutions helped PDC to implement and integrate their systems, and who helped ensure that their engineers were trained to a professional standard.

"AEC Systems has been a great partner to work with and assisted us in taking several years of internal and client customized development to a commercial product that suits broader market requirements," says Weir. "AEC's market-leading knowledge on the interoperability of the various systems and products available on the market—and their assistance with effective implementation—have been essential in providing our customers with the right solution."

Utilizing Autodesk Navisworks software and its powerful collaboration and review technology, iConstruct provides additional toolsets to project teams and consultants to help manage construction information in order to better suit requirements for various segments of the industry—from design engineering to construction management—and to help integrate this intelligence into a single 3D model displayed in Navisworks software products.

Information can be extracted from the model and presented through a variety of customizable reporting tools, which can then be disseminated and distributed to relevant stakeholders, enabling them to collaborate better with clients to review and optimize the designs—making the process more transparent and efficient.

Today, when starting a project, PDC uses Navisworks software to develop a virtual model of the entire structure, enabling the company to use 3D visuals to aggregate models, better detect conflicts, create

schedules that link the building model to timelines, and more easily coordinate subcontractors. One key impact of using Autodesk Navisworks software is that it enables communication through a visual medium, helping to reduce the need for interpretation.

Since implementing Autodesk Navisworks, PDC has managed to improve overall efficiencies and deliver projects months earlier than before. "Any time saved means money is being saved for us and the client," says Martyn Weir.

Mark Beaumont, project engineer at Monadelphous, says: "iConstruct has facilitated unprecedented accuracy of information to the field and reduced the project resources needed."

A customer of PDC, Monadelphous is a leading Australian engineering group providing construction, maintenance, and industrial services to the resources, energy, and infrastructure sectors.

Previously, PDC accessed information for different parts of the project on different platforms. Now, with all the information from plans, designs, forecasting, and budgeting on an integrated software product, PDC can better collaborate and manage workflow across the office.

"It is often difficult for clients to visualize spaces from plans and elevations. However, utilizing BIM makes it much easier for clients to understand the design. It has been a huge benefit to us with the resolution of details and conflicts on-site," says Martyn Weir.

PDC's customers are now able to complete design reviews more easily and quickly, giving them more control over the outcome of the project in collaboration with PDC's engineers.

"The BIM-compliant modeling provides a level of visualization that is not possible using 2D drawings. It facilitates a greater understanding of the scope for all staff, regardless of technical ability. It also helps us to make quick and dynamic changes to the model environment to hone in on particular issues, which means we can spend minutes, not hours, on a task," adds Beaumont.

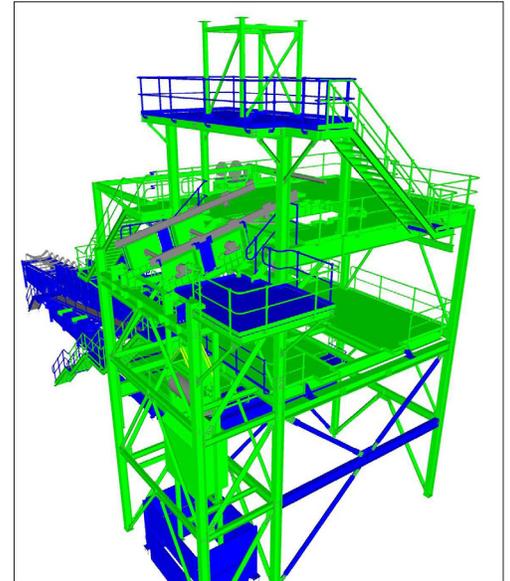


Image courtesy of PDC Consultants.

## Continually Delivering on Standards

PDC has also been able to increase the level of safety by using 3D models, helping structures meet safety standards before construction begins.

"Safety is important and is top of mind for us. During a virtual walk-through, we are able to check on things like clearance, space, and head height to help identify any safety issues. Essentially, the more checks we can do offsite, the better," says Martyn Weir.

Additionally, PDC is able to optimize environmental efficiencies as the pressure for more sustainable designs increases. They can use fewer materials and minimize man hours spent on-site to help reduce the total environmental impact of any project.

To be more efficient moving forward, PDC is looking at bringing Autodesk Navisworks software on-site with mobile devices such as smartphones and tablets. Their goal is to enable workers to quickly identify issues and assist in planning by being able to access imaging data on-site.

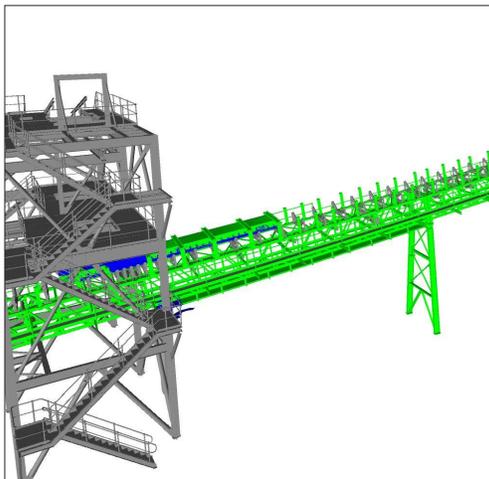


Image courtesy of PDC Consultants.

It is often difficult for clients to visualize spaces from plans and elevations. However, utilizing BIM makes it much easier for clients to understand the design. It has been a huge benefit to us with the resolution of details and conflicts on-site.

—Martyn Weir,  
Managing Director  
PDC Consultants