

COMPANY

China Jingye Engineering Corporation (Singapore Branch)

LOCATION

Singapore

SOFTWARE

Architecture Engineering & Construction Collection

- Autodesk® Revit® (Architecture, MEP and Structural)
 - Autodesk® Navisworks® Manage
 - Autodesk® AutoCAD® Architecture
- Autodesk® BIM 360™ Docs**

Improve collaboration and integration

Autodesk® BIM 360™ Docs helps China Jingye Engineering Corporation (Singapore Branch) improve efficiency and stay on track in construction project.

Autodesk® BIM 360™ Docs is helping us in effective management of the project information, connect the extended teams to provide real time updates on documents, plans and 3D models.

– **Stanley Chia**

Head (BIM, Planning and VDC)
Production Planning Department,
China Jingye Engineering Corporation Limited
(Singapore Branch)



Introduction

China Jingye Engineering Corporation Limited (Singapore Branch) is a subsidiary of Metallurgical Corporation of China Ltd (MCC Group), a Fortune Global 500 Company and one of the largest construction corporations in China. Listed in Hong Kong and Shanghai and headquartered in Beijing, China Jingye Engineering Corporation Limited (Singapore Branch) is a state-owned enterprise under State Assets Supervision and Administration Commission of China. As a reputable contractor in Singapore, the Corporation has successfully completed numerous noteworthy projects and iconic landmarks in Singapore, including Universal Studios at Resorts World Sentosa, Singapore Expo and Keppel Distripark.

The Challenge

China Jingye Engineering Corporation Limited (Singapore Branch) is expected to complete the construction of The POIZ Residences & Centre in June 2018. This mixed-use development located at Meyappa Chettiar Road will become the landmark of Potong Pasir, towering above the surrounding buildings. The development comprises of The POIZ Residences (731-unit flat development) and The POIZ Centre (84 commercial units), set among a high density of low-rise private and public housing estates.

The company's project consultants, the technical team and on-site employees relied on emails and external file sharing to communicate and collaborate.



Image courtesy of China Jingye Engineering Corporation (Singapore Branch)

Information shared was disparate and inconsistent, project documents were not systematically organized, and it was challenging for the teams to effectively communicate the latest project information, drawings and models. This created inconsistency in the project information shared with the teams and decreased the team's overall efficiency.

At risk of slowing down the overall work process and completion of the The Poiz, the Corporation acknowledged the need to identify a solution to help them collaborate effectively.

"Considering that it might be time consuming for the team to keep up with the latest project updates and materials, we needed solution. We required a technology that could be easily integrated with Autodesk® AEC Collection," said Stanley Chia, Head (BIM, Planning and VDC) Production Planning Department, China Jingye Engineering Corporation Limited (Singapore Branch).

The Solution

The speed of deployment was a key concern for the Corporation. After diligently evaluating available options, China Jingye Engineering Corporation Limited (Singapore Branch) selected Autodesk® BIM 360™ Docs as it offered a connected 2D and 3D experience, coupled with true browser, tablet and phone compatibility. With Autodesk® BIM 360™

Docs, the team could extract Autodesk® Revit® 3D model and create easily usable 2D drawing files.

According to Chia, "The POIZ Residences & Centre was selected as the pilot project to deploy Autodesk® BIM 360™ Docs."

Increasing Productivity with Autodesk® BIM 360™ Docs

Following the deployment of Autodesk® BIM 360™ Docs, the Corporation has seen an increase in the team's overall productivity. With Autodesk® BIM 360™ Docs, updates and modifications to the design can be shared in real time with all stakeholders. Field teams can provide real-time update on the as built condition through Autodesk® BIM 360™ Docs.

Autodesk® BIM 360™ Docs allows navigation of digital drawings in real time, and has the capabilities to attach images in context to the drawings. This helps the field teams provide the most accurate status update of the construction site.

"With Autodesk® BIM 360™ Docs, we were able to communicate and collaborate seamlessly with the design teams and the field teams. Design data can be accessed from a computers or onsite using mobile, tablet or a web browser. The project team could access the most up-to-date documents, plans and models anytime, anywhere," added Chia.

Maintaining Data Accuracy and Staying On Track

According to Chia, "Accuracy and meeting deadlines are crucial requirements for every construction project we take on. The success of a construction project heavily depends on information management capabilities. From concept to completion, Autodesk® BIM 360™ Docs has contributed to the effective management of project information. By using a single app, we could manage and review all project information on the cloud. We stayed connected and in sync throughout – as we progressed, everyone was able to keep up with the latest documents, plans and models."

With Autodesk® BIM 360™ Docs, risks have also been greatly reduced with close to zero errors made. With every update made to the BIM models, the modeller would reflect the changes and it can be seen instantly on the platform. This means that the project team is always kept informed on the most updated version of the drawings and models, inclusive of the date and time the changes were made as well as the details of the modeller. Coupled together, this resulted in a much faster and efficient project delivery.

In addition, Autodesk Subscription offered greater flexibility to increase or decrease the numbers depending on the project need and it helped with managing costs.

The Results

Following the success from the use of Autodesk® BIM 360™ Docs for the first time in its pilot project, China Jingye Engineering Corporation Limited (Singapore Branch) is now deploying the solution in new residential projects such as Queens Peak, The Alps Residences and Northwave.

"The use of Autodesk® BIM 360™ Docs in the construction of The POIZ Residences & Centre is a proof of concept. China Jingye Engineering Corporation Limited (Singapore Branch) has been using Autodesk® design technology like Autodesk® Revit®, in all our major projects since 2012 and Autodesk® BIM 360™ Docs will now be the latest addition to the list of solutions we will deploy for our future projects."