**AUTODESK** Construction Cloud | **ALKONDOR** HENGELO

How Data-driven Insights Improves Quality and Efficiency for Alkondor

Based in Holland and founded in 1990, Alkondor engineers and produces façades, windows, and doors, particularly for large and complex projects. The team works on various construction projects from residential to non-residential buildings, like hotels and cinemas, and has specialist expertise with complex architecture programmes.

ALKONDOR
HENGELO

Customer Snapshot

FIRM SIZE:	<500
FIRM TYPE:	SPECIALTY CONTRACTOR
REVENUE:	N/A
FOCUS AREA:	COMMERCIAL
HQ:	HOLLAND, NETHERLANDS

PHASE:

DESIGN — **PLAN** — **BUILD** — OPERATE
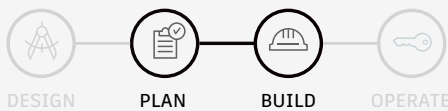
CAPABILITIES:

· Field Collaboration
· Project Management
· Quality Management

OUTCOME:

Quality

Digitalising Construction Management Processes to Reduce Risk

Five years ago, Chris Schoneveld joined Alkondor as BIM Manager, where he focused on digitalising construction management processes at the company's Netherland-based production facility. The team used many time-consuming processes, including printing physical copies of PDF documents and manually delivering them between departments and the factory. This process added a layer of risk to the project and increased the likelihood of teams working off an outdated drawing, leading to rework and added costs.

"It was very easy for things to go wrong," reflects Chris. "We were working in a way that was open to errors and meant there was a lot of work for everyone; we used Excel forms, handwritten notes, PDFs and spent a lot of time transferring and tracking documents."

With all documents stored on local servers, soon the team recognised issues with different naming conventions on drawings, and poor practices led to miscommunication and confusion.

A Step In the Right Direction with Standard Ways of Working

ITANNEX (Arkance systems), an Autodesk reseller, introduced Alkondor to BIM 360 within Autodesk Construction Cloud™. Alkondor began trialling how the functionality could support document management, versioning control, and issues management.

To start, Alkondor undertook a pilot project with a small group that tested how the team could share documents and data from Autodesk Revit into BIM 360. After this, Alkondor decided to roll out BIM 360 across the entire organisation and provided dedicated training to their team to ensure this investment was firmly embedded into its ways of working.

"The best features we have found in BIM 360 are the quality elements we can derive. We can document and freeze elements at certain points during construction," says Chris. "This means we can complete extra quality checks to avoid extra costs incurred to our products we install on site."

In addition to increased quality, having digital document management practices means that all Alkondor team members can find documents quickly and easily. "Being able to search and find documents quickly saves a lot of time," says Chris. "We can also see version history, and there is a clear audit trail when it comes to changes."

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> We can visualise our asset progress using the Power BI dashboard with the help of Autodesk's data connector. The module updates every two hours and provides valuable information to our production area managers."
>
> **-Bram Cotter**
> CEO,
> Alkondor

Using Data to Capture Key Learnings and Drive Greater Outcomes

When it comes to improving project outcomes, Alkondor uses BIM 360 to capture insights on each project and apply those learnings to increase quality and certainty. Chris remarks, "We have integrated Power BI with BIM 360 to visualise our data and improve outcomes."

BIM 360 is also assisting Alkondor in tracking assets across the project lifecycle. Using the assets module in BIM 360, the team can track progress from the factory through project handover.

"All of our windows and doors are digital assets within the BIM 360 asset module," says Bram Cotter, CEO at Alkondor. "We can visualise our asset progress using the Power BI dashboard with the help of Autodesk's data connector. The module updates every two hours and provides valuable information to our production area managers." This streamlines communication and provides teams with greater insight into if something is going wrong and how to change it.

Alkondor has used BIM 360 on 197 projects, documented 13,810 issues, and created 17,500 checklists and 10,500 assets to date. And this is only the starting point as Alkondor plans to continue using BIM 360 across more of its projects.

The Power of Data in Driving Business Growth and Development

For Alkondor, having meaningful data available to analyse is significant. And the ability to document and capture data in real-time has proven invaluable. "In the past, we were unable to confirm with our clients that there weren't any scratches on door panes, broken glass, or concrete stripes. So if there was a defect afterwards, customers could blame us and ask to front the costs for solving it," says Chris.

Now, Alkondor has evidence of the quality of their outputs documented on a set date and stored in BIM 360. Depending on the project, that could save between 10,000 euros to 100,000 euros.

In the future, the team is looking to add in sensor data to offer services like predictive maintenance schedule management. For example, they could use this functionality to identify that one door opens once a year while another opens a thousand times a year.

"We are committed to embracing technology today so that we can use it for the better in the future," says Bram. "This also means we can be more flexible as a company – for example, pivoting our market offering from projects to ongoing services which will provide us with more revenue streams to explore."

And at the heart of all of this for Alkondor is using their data for the better.