

AIGC Services – Digital Twin

Case Study: How an Aluminum Company used Digital Twin to streamline a project construction with multiple EPC contractors

The Opportunity



An aluminum company was facing a lot of difficulties in getting a particular client project executed. They were experiencing many delays in decision making, resulting in a delay in their overall project timelines. They identified the delays due to a lack of data visibility. Further, it was observed that each EPC was working in silos. This was resulting in a struggle to integrate all the information together. Also, with repeated re-engineering in design and modifications, primarily due to multiple EPC, the procurement team was also facing many purchasing material challenges.

The Approach

A digital twin was built for the plant covering all assets at the construction site.

Each EPC contractor was updating the design, material procurement, and construction of the digital twin. Design changes were also processed for review and approval through this digital twin.

The Benefits

The digital twin gave the client visibility to all project design basis, changes, and data where he could control changes, align all EPC contractors, and monitor the construction site's progress. The well-structured documentation of the project allowed proper and cost-effective maintenance programs, including spare parts management. The digital twin was also a valuable source to speed up training and certification of the plant operators.