



REVIT MEP (Mechanical, Electrical & Plumbing)

A Case Study



CHALLENGES:

- ▶ Equipment and Conveyor modeling was difficult but we have done the modeling by using the model in place.
- ▶ Modeling the Twisted pipes and cable tray was complicated.

INTRODUCTION:

The objective of the project was to generate BIM Modeling Using Laser Scanner Point Cloud Data. The BIM model is to be generated for the Documentation and Presentation purpose.

KEY ASPECTS:

- ▶ The Building is to Surveyed and Documented.
- ▶ 3D MEP models

METHODOLOGY:

- ▶ After the Building is scanned, The Registered Point cloud data is given by Client in pts \ e57 \ las \ Imp \ res \ rcp format.
- ▶ Then the raw point cloud data is Pre-Processed using Registration software.
- ▶ The final Registered Point Cloud Data will be the Input Data for BIM modeling.
- ▶ Using the Registered Point Cloud Data the Database is created.
- ▶ The BIM model is then generated from the INPUT DATA using Revit Software.
- ▶ As per the client requirement, The Level of detailing is divided as LOD100, LOD200, LOD300, LOD400 & LOD500 and the modeling is done MEP features.
- ▶ The detailed BIM model will be done by using Revit software as per the point cloud.
- ▶ The final BIM model will be delivered after all the errors are rectified in the QC/QA process.

TECHNOLOGY:

- ▶ Revit
- ▶ Leica Cyclone
- ▶ Autodesk recap
- ▶ Navisworks

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TESTIMONIALS:

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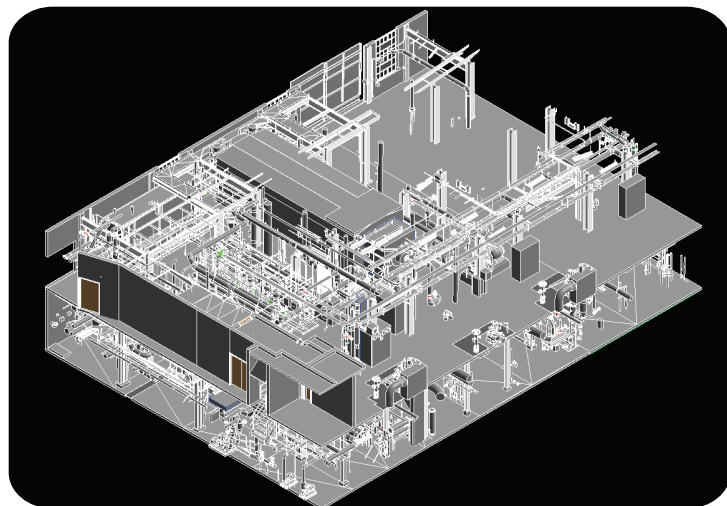
DELIVERABLES:

- 3D MEP models in .rvt revit format.

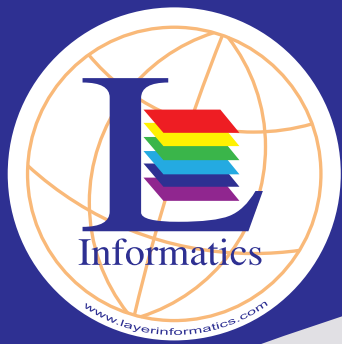
APPLICATION:

- 3D MEP model is used for a refurbished and refitted office premises. It incorporates the existing superstructure with new structural additions and some exiting and extensive new MEP services.
- MEP CAD modeling of a clash-free structural draft.
- MEP modeling for entirely new office premises, huge casinos, sophisticated hospitals (with pneumatic tubing, medical gases, concrete slabs, and other necessary elements), university complex etc.
- Spatially coordinated MEP model of a large leisure complex.

SCREEN SHOTS:



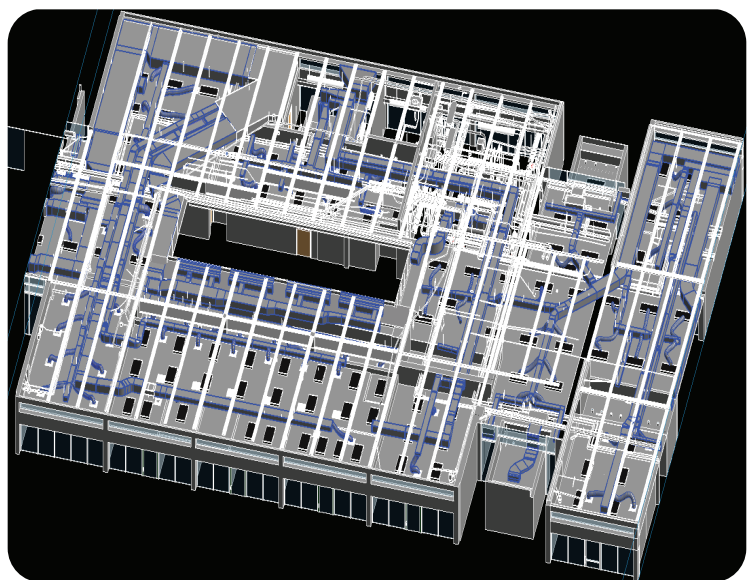
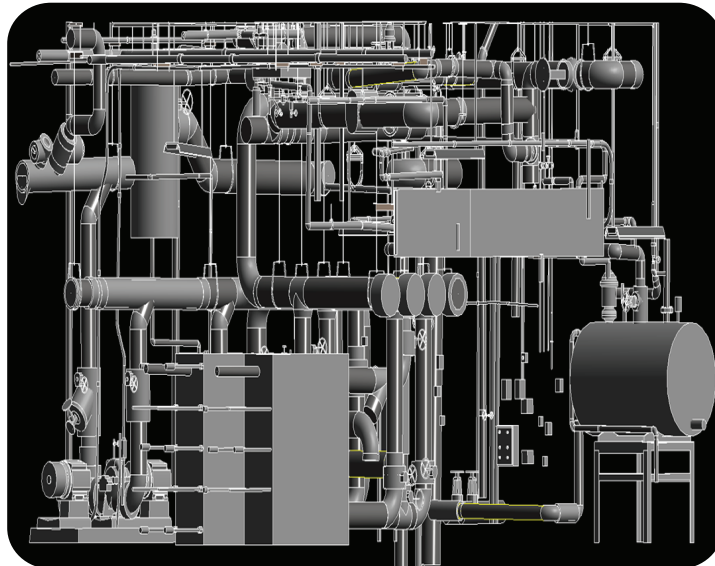
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