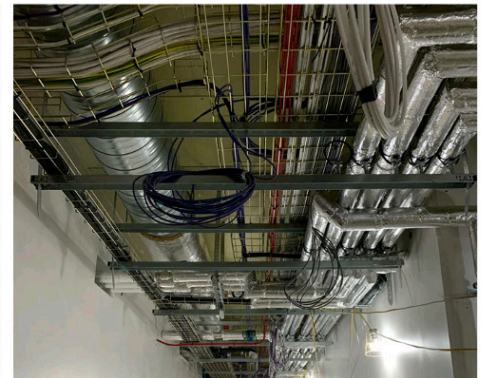


## COMPANY

Jay &amp; Co India Pvt. Ltd.

# Streamlining Building product Design through the Convergence of Manufacturing and Architecture

Moving from 2D to 3D, Jay & Co. India Pvt. Ltd used PDMC and Revit to streamline design workflows with enhanced data interoperability , addressing the need for customized solutions and closer collaboration with suppliers , hence paving the way for Digitalisation.



Images courtesy of Jay & Co India Pvt. Ltd

“The best of what we are getting from Autodesk PDMC Software & Revit is the output, e.g., component detailed analysis, better interoperability & no data loss and finally helping to generate production drawing & fabrication drawing. Seamless integration & interoperability (between 2D & 3D) makes our work easier and our productivity level has increased by 50% using PDMC & Revit Software”

**Kapil Kapur,**  
Director, Jay & Co.  
India Pvt. Ltd.



## Introduction

Jay & Co. India Pvt. Ltd. are a manufacturing, export, import company who design and execute a range of Hanging Equipment and Accessories, Wire Rope Hanging Solutions, Indoor Air Quality Solutions, Dry Scrubber, Industrial Valves, Anti Corrosive and Fire Coating and much more.

Jay & Co's wire rope hanging system is well-accepted among their customers due to the ease of installation, high strength, corrosion resistance, sturdiness, durability and the technical design and analysis solution provided by them.

The products are made at an advanced manufacturing unit, using the best grade raw material and advanced techniques.

## Challenges and Project Goals

Jay & Co. were previously creating all of their support design work using only

AutoCAD / AutoCAD LT. They were using AutoCAD for product & layout design of lightweight rope in hanging ducting, piping & cable tray for building projects/ BIM modelling.

For concept designing Jay & Co, found AutoCAD was a better tool however they could foresee the requirement of Revit/ BIM based modelling to optimize their design process and be future ready.

To better integrate their design with that of their clients Jay & Co., need to adopt a 3D design methodology.

For their mechanical design they had to design a modular support system and a seismic support system as well.

Subsequently they have to ensure that there is interoperability between the software ( 2D & 3D) to get the maximum output when generating a report from FEA analysis and save on design cycle time.

## Solution

Jay & Co. standardized their complete design process using Autodesk PDMC & Revit Software.

PDMC has AutoCAD with Inventor Professional which was extremely important as Jay & Co. are doing complete product development, testing & validation with Inventor Nastran.

With Inventor capabilities, they were able to make light weight hanging support systems easily and can now do the interoperability with Revit (The BIM Software) easily.

In short, PDMC Software used for designing of support components such as heavy pipes, ducts, cable trays and subsequently load test analysis is carried out for selection of support members.



Image courtesy of Jay & Co India Pvt. Ltd

As Jay & Co also provides seismic support design and analysis services to make the MEP services earthquake resistant which is only possible with interactive software for seamless interoperability.

Jay & Co. has developed capabilities of static support & seismic support designing in Inventor and doing interoperability with Revit.

Accordingly, they started doing clash test and reviewing the pain points, walkthroughs etc. with the help of Naviswork Manage which has improved the productivity and helps the whole team to design and review digitally there by saving design cycle time..

### Business outcomes & conclusions

With the help of Autodesk PDMC & Revit Software, Jay & Co is able to make superior-quality products, adopt client-centric approach and timely delivery.

Especially from the concept designing to engineering design and interoperability and then towards the walkthroughs & clash detection moves towards a digital way of Designing & Manufacturing.

With connected and automated software tools, Jay & Co. is able to quickly configure and deliver products to customer's specifications and provide an optimized design outcome not only for Jay & Co. but also for their clients.

### Solution implementation and adoption

GreenLeaf has done a detailed requirement gathering by interacting with the Jay & Co. stakeholders and design team. The solution design is then documented and presented to Jay & Co. management and a implementation & adoption methodology is also shared.

The solution implementation & training is managed by GreenLeaf and subsequently a specific solution adoption methodology is devised and internalized in Jay & Co.