

# Align production site design

You provide the framework that allows great products to get made, but sometimes, ensuring all the pieces that go into a factory work together is where things fall apart. With lots of collaborators, strict requirements, and limited time and budget, it'll take more than meticulous drafting to make great facilities. The right tools can help identify better solutions for your buildings.

*Image courtesy of Vimek*

## Challenge

Design data from manufacturing and facilities engineers isn't easily compatible, so we waste time with workarounds and late-stage changes.

## Opportunity

Use 2D and 3D layout tools that import BIM data, MEP tools that accept layout data, and project review software that aggregates it all. Manufacturing engineers can design in context of the facility and facilities designers can accurately place structural and MEP features to support the production line.

## Challenge

We need be able to analyze the environmental conditions inside and outside the factory to support a safe working environment and meet regulatory and compliance rules.

## Opportunity

CFD simulation software checks airflow inside the factory and emissions from it. Then, you can digitally test and implement adjustments to ventilation and HVAC systems to optimize comfort, energy consumption, and pollution control.

## Challenge

It's difficult to accurately pre-fabricate piping and ductwork documented in 2D and fabricating on-site is expensive.

## Opportunity

3D models and documentation of MEP systems take fabrication from the plant floor to the shop floor for a fraction of the cost.

## Ready to learn more?

Plan, validate, build, and operate your factory with one connected workflow.

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## Questions?

Your dedicated Autodesk account team can help.

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