

CAD VISUALIZATION IN PLANT ENGINEERING

CAD VISUALIZATION



IntegaDesign®

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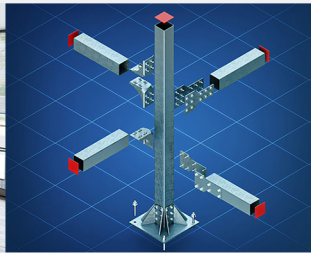
Effective planning and communication through virtual reality and photorealistic renderings

Visual clarity is a crucial success factor in plant engineering. Using modern CAD visualization techniques, IntegaDesign GmbH makes complex planning data tangible – in 3D, as photorealistic representations, or in immersive virtual reality environments. This allows for more informed design decisions, earlier identification of technical risks, and more efficient implementation of your projects.

We take your planning to the next dimension – interactive, clear and convincing.



Screenshot of a 3D 360° virtual tour



Product rendering



Example of a 3D rendering in a plant design

Our services in the field of CAD visualization

✓ VIRTUAL REALITY FOR DESIGN REVIEWS

Use virtual reality specifically for quality assurance and project coordination in early planning phases:

Conducting design reviews in VR with live feedback

Inspection of the facility before construction begins – directly in the CAD model

Checking accessibility, maintainability and safety

Early detection of collisions (clash detection) between components or trades

✓ PHOTOREALISTIC RENDERINGS AND ANIMATIONS

We create high-quality visual CAD representations of your planned system to communicate technical content in a clear and convincing manner:

High-quality renderings for internal approvals, customer dialogues or tenders

3D views for brochures, websites or sales presentations

Animated sequences for functional explanations or assembly processes

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✓ EARLY DETECTION OF TECHNICAL PROBLEMS THROUGH IMMERSIVE SIMULATION

Our visualization solutions are not just beautiful – they help you avoid real problems and validate your planning:

Simulation of typical maintenance work in plant engineering to evaluate installation space and mobility as a VR maintenance scenario

Checking safety-relevant distances or lines of sight

Identification of critical planning errors through realistic representation of the plant structure

✓ VISUALIZATION AS A COMMUNICATION AND DECISION-MAKING TOOL

3D models and visualizations create understanding – not only for engineers:

Support with stakeholder presentations and management decisions

Optimizing collaboration in interdisciplinary project teams

Visualized variant comparisons for faster decisions

Why IntegaDesign GmbH for your CAD visualization?

- Specialization in plant engineering, piping planning and 3D engineering
- Expertise in Autodesk Plant 3DTM, Revit®, Navisworks® & visualization platforms
- Seamless integration of visualization into your existing CAD processes
- Combination of engineering expertise and design knowhow

Do you want to not just see your plans, but understand them?

We help you avoid errors with CAD visualization, accelerate projects, and make a lasting impression on your clients.