



PLANT DESIGN: FROM PIPE TO STEEL

Building a production plant is not just an architectural challenge. In many respects, it is actually a very small component. All too often there is far more process and pipe, blended with all kinds of industrial material or product handling equipment and it is all supported by lots of steel. **What tools do you use to accelerate design, improve accuracy and facilitate collaboration of intelligent data across varying teams?** Let's first look at who might fit the profile of someone needing such...

TYPICAL SITUATION AND CHALLENGES

Several scenarios are typically seen out in the market but here are the more common.

ESP — Engineering Service Provider that has a strong bench to help create the P&IDs to map out the process and then transition the data into a full process design for outsourced production by the owner.

Design and Build Firm — Works with the owner to design the project and then fabricates all of the material to build and erect it.

Fabrication Company — Downstream of both of the above in many cases and this group focuses just on the steel production needed for skeletal design and miscellaneous steel.

The challenge is that all too often traditional 2D CAD is the basis of design and this could even include architectural teams even further upstream. Add in the mixture of Revit and the growing need for intelligent BIM ready model and it is hard to pull off when there are so many specialties involved throughout the process.

Autodesk has risen to this challenge to provide a number of tools that work together and allow a team or a number of teams to collaborate and streamline the process all at the same time.

These teams live in a world that live and die by the deadline, so the ability to remove errors early in the design and pass along smart data to the next team in line can really help you avoid costly delays. In many cases, with the right tool, we can help you take 50% or more out of your timeline by helping you do it more quickly and accurately the first time.

A BETTER WAY AND THE BENEFITS

Tools designed to allow you to pass intelligent data downstream that can be returned with even more data than when you sent it out.

Revit — Great for the design of traditional building along with the skeletal model.

Inventor — Component modeling for equipment.

Plant 3D — Great for the design of a process solution that starts with P&IDs and then needs to move on to a full 3D model of the facility, including the skeletal model.

Advance Steel — Great for the design of steel connections, stairs, rails, and all other miscellaneous steel.

These tools will help you communicate more effectively from the start and allow you to work at a much faster pace. Don't get left behind.

D3 Technologies has the expertise and resources to help you bring your team together. We are experts at helping you adopt the right technology for your workflow and we can work together shoulder to shoulder to help you tackle projects. If others are adopting these tools and not turning back, are they affecting your ability to win at a profitable level?