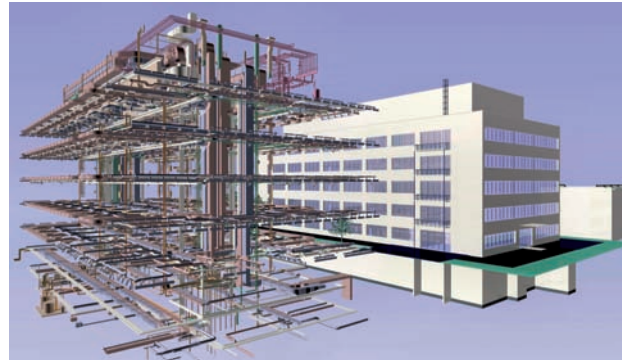


The JETTER Engineer and Service GmbH and Co. KG, Gersthofen, provides planning for the complete range of the technical building equipment such as the sanitation and sewage, refrigeration, heating, ventilation and air conditioning systems. They also specialize in clean room design for the pharmaceutical industry which incorporates dust separation technology, pure media, complete ET I&C electronics, quench water systems and a lot more.

The business-philosophy reads: "We differentiate ourselves from the competition by permanent development and conversion of the newest planning concepts." The basis of every planning is the application of simulation programs: At selected plant variants, the Jetter engineers carry out an economic comparison and suitable energy concepts are developed from the simulation results. For some years now the engineer's office has had a strengthened presence on the foreign market, primarily in Russia.



*Pharmaceutical plants are typically situated inside enclosed buildings – that raises the requirements for quality planning.*

## The task

Particularly when planning for clients from the pharmaceutical sector, the chaff separates itself quickly from the wheat. Since here still more than in other industrial sectors, it depends on actually linking all the trades with each other. And there are strict defaults to adhere to not only for the enterprises themselves but also for national legislators and international authorities.

## Challenges in the Pharmaceutical plants construction

Projects in the pharmaceutical industry are for various reasons highly complicated. Today there are strict internationally valid yardsticks that are set on the production of pharmaceutical products:

- Adherence to and documentation of the given marginal values regarding temperature, humidity and space pressure.
- Adherence to the valid GMP-guidelines and preliminary work on a problem free and quick FDA-acceptance of the complete manufacturing process and the respective site conditions and plant conception.
- Minimization of the energy costs during simultaneous optimisation of the operational safety for the entire manufacture process.
- Monitoring of quality with the implementation of the technical equipment.
- Accurate defaults for the functionality and the starting-up criteria for the technical trades (building engineering BE).

## Case Study

## JETTER Engineer and Service GmbH and Co. KG

### The solution

Horst Jetter relies on TRICAD MS for one of their primary planning tools: "Because we can process great volumes of data with it. And because we could over the years, gain a lot of experience and also have great confidence in the software". And further: "We plan all BE trades in detail in 3D. And with us, it is like this, that the implementing companies need not prepare their own assembly plans – rather they must assemble according to our plans and then implement."

This functions, because TRICAD MS is an integrated tool for all the trades of building engineering and factory design (heating, ventilation, sanitation, electrical, sprinkler, conveyor systems, plant construction, steel construction, coating systems, logistics/tractory curves, layout etc). Thus, the planner can work even on complex projects, not with different tools, but always remaining in a familiar environment. The mode of operation is the same in every module and besides the data being constantly available; it must be entered only once.

### The advantage

Thereby the client also profits from it and can nevertheless already give the general contractor or the plant engineer in case of the order negotiations on the account of unnecessary technical expenditure, regularly between 3 and 5% of the manufacturing costs as additional deduction. "At BE-costs on the amount of 10 million Euros are between 300.000 and 500,000 Euros, which do not result at the customer on account". Notice: Quality planning at Jetter is besides better functionality and economic efficiency also cost-efficient.

For visualization and clash detection, Jetter uses 'NavisWorks' with convincing results for the enthusiasm of its demanding customers: "The program is very good. And the updates always bring about great advancements each time."



*View into the steam centre of a pharmaceutical company. With this detailed accuracy of 3D-CAD-Models the implementing companies no longer require their own assembly plans.*

***"3 to 5% of manufacturing costs  
is possible as deduction."***

### Contact

ITandFactory GmbH  
Auf der Krautweide 32, 65812 Bad Soden /Germany  
Phone +49 (6196) 6092-310, Fax +49 (6196) 6092-202  
info@ITandFactory.com, www.ITandFactory.com