

CUSTOM MADE SOLUTIONS FOR CUSTOMIZED BIOPROCESS PLANTS

Customer Success Story: Vogelbusch Biocommodities GmbH



Customer Success Story: Vogelbusch Biocommodities GmbH

A company can only achieve the maximum result if solutions for 3D plant design are adjusted to their requirements. Therefore Vogelbusch Biocommodities GmbH relied on the advice of auxalia and combined the Autodesk AEC Collection and the auxalia PlantTools. This customized package helps to avoid mistakes and save time.

Wilhelm Vogelbusch was one of the most gifted and important specialists in the fermentation and yeast industry in his days. He founded a technical office in Vienna in 1921 and thus carried out important development work in the field of evaporation, distillation and aeration apparatus in the following years.

Wilhelm Vogelbusch's business philosophy centered on finding solutions to his clients' problems. By remaining true to his legacy of customer focus and commitment to innovation, his company went on to become a leading supplier to the global bioprocess sector.

The experts of the branch Biocommodities are specialized in starch and sugar processing companies in the food and beverage industry.

Vogelbusch Biocommodities has its own technologies for the production of products such as alcohol and bioethanol, yeast, vinegar, starch sugars such as glucose or fructose syrup as well as organic acids, for example, citric or gluconic acid.

The 35 employees plan and build these bioprocessing plants and accompany their customers step by step, starting with concept studies, ground engineering through detailed planning and process automation to the turnkey delivery of complete systems or individual process units. In doing so, the experts respond to the individual requirements of their customers and offer tailormade solutions



Evaporation plant - planned and realized by Vogelbusch

"2,000 pipelines in one plant"

One of these customers is the Russian company Biotech Rosva, for which Vogelbusch is currently developing a grain processing plant in Russia. There wheat is used to produce special products for the food industry, such as starch, gluten and various starch sugars. The start-up is scheduled for 2018.

Vogelbusch is responsible for the planning and delivery of the processing units for glucose monohydrate, fructose syrup (HFS) and sorbitol. In addition, the engineers take over the system integration of those production sections that are contributed by other suppliers, for example for dry grinding or for drying the by-products.

After the development of technology and process planning, the design department of the Viennese engineering service provider comes into play.



Customer Success Story: Vogelbusch Biocommodities GmbH



Potable alcohol plant – planned and realized by Vogelbusch

They determine the flow charts, tank specifications, the 3D model and the plant layout and then plan the piping. "We have around 2,000 pipelines involved in this plant", explains Gerhard Kaiper, designer and system administrator at Vogelbusch.

"In such cases having software support that we can rely on and helping us to work as efficiently as possible is especially important."

"Customized software solutions"

The company is therefore relying on a software package consisting of the Autodesk AEC Collection and additional PlantTools from the Autodesk Platinum Partner auxalia, with which Vogelbusch is working together to integrate the applications.

The Autodesk AEC Collection brings together the key tools for 3D plant engineering in one powerful solution. For example, R & I flowcharts can be planned and drawn with AutoCAD P&ID, and AutoCAD Plant 3D can be used to model and document process plants in 3D.

The PlantTools are a suite of applications and tools specifically developed by auxalia to extend and improve Autodesk software solutions. This combination package was customized exactly to the needs of Vogelbusch - a goal that auxalia



pursues with all its customers and which was also very important to Vogelbusch Biocommodities GmbH. When introducing new software the system house is therefore using the specially developed Customer Assessment method, an evaluation methodology the company uses to introduce new software.

At Vogelbusch the specialists started in March 2012. In a two-day workshop the needs were analyzed and the requirements formulated locally. auxalia then determined what steps, configurations and adjustments are needed to meet these requirements.

It also has been analyzed which additional auxalia Plant-Tools were needed. When the project progressed auxalia assisted in setting up and configuring the systems and trained employees in the application of the new software. Through a service and maintenance contract, employees are still the point of contact when it comes to support or technical issues.

The needs-based implementation of the software solutions went even so far for Vogelbusch that auxalia specially developed a new PlantTool to really meet the requirements

PlantSpecDriven allows you to assign catalog data from



Customer Success Story: Vogelbusch Biocommodities GmbH

your AutoCAD® Plant 3D specs to your P&ID Symbols. In a second phase you can insert the P&ID symbols with the assigned data into your AutoCAD® Plant 3D drawings. During this process PlantSpecDriven checks for inconsistencies between P&ID and 3D. You can also link equipment and nozzles and have them checked for inconsistencies.

Non-visible elements such as seals, flanges or screw sets can also be added to the pipes in the P&ID. These are not visible in the drawing itself, but are stored in the background. As a result from the P&ID drawings almost complete bills of materials are created which might be used for further cost and production planning.

This information can also be used for 3D planning with AutoCAD Plant 3D. The pipes created in AutoCAD P&ID can now simply be transferred into the 3D model. Gerhard Kaiper explains: "All we need to do here is to make the main routing. The elements that need to be placed on the main pipe can be simply dragged and dropped into the pipe via PlantSpecDriven, without having to stop at every fitting or tee."

In addition, the whole range of auxalia PlantTools are in use at Vogelbusch:

PlantExpressTools are a collection of CAD-related functions as well as project administration features. PlantLink significantly extends the use of data with the plant project data by enabling linking to external and internal data sources with flexible and configurable unidirectional and/ or bidirectional live links.

PlantLink can modify AutoCAD®-Properties like layer or color as well. PlantLink enables customers to tremendously improve the data flow within their P&ID drawings to further become more productive and reduce errors. With the ability to create and manage reports from AutoCAD P&ID and AutoCAD Plant 3D, **PlantReporter** is a powerful tool for data intensive workflows. PlantRepor-



Company location Vogelbusch Vienna

ter extends and enhances reporting capabilities by both enabling reporting of plant project data without Autodesk products and by providing additional configurability. Company location Vogelbusch Vienna.

The assessment and the combination of Autodesk AEC Collection and auxalia PlantTools has been in productive use for well over a year - and has definitely paid off. In the overall process, the engineers record 25 percent time savings, much of it in 3D piping. The error rate also dropped significantly due to the new tools.

Gerhard Kaiper draws a positive balance: "Thanks to the auxalia assessment, the result is exactly what we wanted it to be. The addons refine the PlantDesignSuite and make life easier for us in our daily work", summarizes the designer in 2016.





CONTACT PERSONS

Susanne Nell

Teamleader Plant Group Branch Manager Vienna

Carsten Beinecke

Product Manager Plant



