

Marbos Nord GmbH & Co. KG

HiCAD automatism replaces manpower of larger companies

Marbos Nord GmbH & Co. KG, founded in 2012, covers a wide range of tasks as a small engineer's office: From processing offshore drawings as transformer and exploratory platforms over the functional development of pipe systems as well as new and conversion ship drawings to special drawings for mechanical engineering. "Flexibility and coordinated drawings are our daily bread", says managing director Sabine Loock. "The software we work with should comply with our requirements". Since 2015, the CAD software HiCAD and the PDM system are the software in question — both solutions by Dortmund's ISD Group.

"HiCAD was recommended by a former employee from Thyssen Nordseewerke/SIAG. The excellent consulting also played its part to convince us of the system's vertical industry capabilities. The combination of steel engineering, plant engineering and mechanical engineering in a drawing as well as the extensive insertion and implementation of step models of sub-contractor



REFERENCE REPORT





"HiCAD offers a variety of possible applications which are useful for interdisciplinary work. For instance, we can depict a pipe routing as easily as a sheet or steel construction."

Sabine Loock, Managing head, MARBOS Nord GmbH & Co. KG

components such as pumps, engines, air conditioning clinched it for our choice", claims the managing head of the Dutch company. In the face of this, HELiOS has been implemented, too. The increasing product complexity led to a higher degree of linking up product data, so that new concepts for product data administration became necessary.

At the push of a button: ${\bf BOM},\,{\bf DXF}$ processing, drawing derivation, ${\bf HCM}$

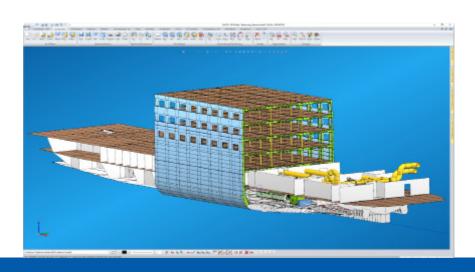
"We are a small company, thus we are trying to even out the manpower of larger companies by smart automated procedures", Sabine Loock explains. To derive BOM from a 3D drawing at the push of a button and change it if required is one of many essential HiCAD automatisms. One of the important tools for Sabine Loock is the import of 2D data and 3D geometries in DXF format in order to create appropriate developments.

"The process blank of base and sheet metal is saved as DXF file and can thus be forwarded to the production line in a compatible file format." An added plus is to configure detail drawings individually, also the creation of sectional views for welded-on parts, showing axes

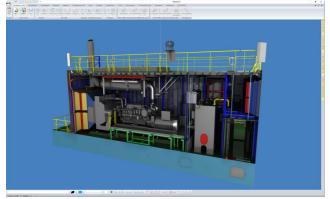
and associative axis annotations as well as configurable dimensioning rules. The contact person for licensing who is responsible for the project management and EDP administration also praises the HiCAD Constraint Manager HCM3D, which allows to enter constraints between 3D parts and/or 3D sketches: "The itemization with 3D part HCM is useful as the automation functions help us to use different variables for our 3D drawings. The drawing adjusts itself if changes are required. "

Conforming to standards: beams, material, 2D/3D functions

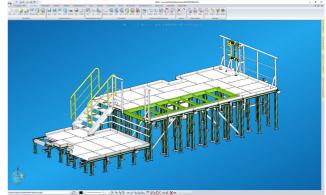
Since 1 July 2014, the DIN EN 1090 became obligatory for steel building and HiCAD does support weld seams and tolerance class conforming to standards. Before the implementation of Dortmund's construction software, Marbos Nord GmbH & CO.KG had worked with Nupas/ Cadmatic and Inventor. "One of our aims is to determine welding positions for weld seam test protocols as well as creating firing support for ship building with exact itemization and draw upon a rich treasure of beams and materials conforming to standards", says Sabine Loock. The benefit of the 2D/3D consistency is beyond question: "A distinct 2D area is still a relevant factor nowadays.



Picture: HiCAD drawing of a hull with pipes (© Marbos)



Picture: HiCAD drawing of a strong room with diesel generator and piping (© Marbos)



Picture: HiCAD drawing of a control stand ground (© Marbos)

On the one hand, many of our customers work with 2D and on the other hand, preliminary plans as general arrangement plans and set-up plans among others are important for the production to be on track with changes. 3D is still essential for variant and feature techniques, for working with referenced parts, for the use of modelling sets and creation of BOM and not least that the insertion of steel-engineering specific components and connections with integrated plausibility check is available."

Interdisciplinary: Pipe routing, sheet and steel construction

"Interbranch functions must not be initiated with additional applications since they are already integrated in the HiCAD surface, which reduces routine work", claims our contact person for licensing. "For instance, we can depict a pipe routing as easily as a sheet or steel construction." Moreover, she emphasizes that the plant engineering is to be recommended, "the option to link P + ID schemes with the 3D drawing in particular."

Successfully mastered: Offshore substation

An offshore substation including complete coordination of all subsections and subcontractors had to be designed with HiCAD as a complete drawing – also with the

workshop documents, with fulfill the QC requirements of the customer/institution and the final documentation. "Thanks to HiCAD and our high-performance computers the processing of different steel support structures, the implementation of numerous complex step files in the drawing without loss of performance has been realized", stresses Sabine Loock. "We appreciate the functions of the context menu and the transformation for its fast modification and detailing". With this, she refers to activating numerous different modification functions via mouse click in the browser as well as carry out similar modifications for different objects in only one processing step by multiple selection. To scale 2D weld seams with the function 'transform' or even to transform one assembly in particular with the desired value is as much time-saving.

Customer-friendly, reliable, fast: ISD-Support

A company increases its authenticity if it offers a good service, reliability and and after sales support. According to Saine Loock, this also is true for the IT service provider from Dortmund: "The support by ISD is very customer-friendly if problems occur. The trainings were held professionally by best informed employees and the



"Cooperating with ISD was excellent – even special requests were mostly programmed and delivered in due time."

Sabine Loock, Managing head, MARBOS Nord GmbH & Co. KG

webinars are also worth to be emphasized. Questions are answered to their best knowledge. If an immediate response is not possible, a solution will be found at all times."

In brief:

- Marbos Nord GmbH & Co. KG
- > Branch: Mechnaical engineering
- Software: HiCAD und HELiOS
- > Services: Processing offshore drawings, pipelines, ship drawings and special drawings for mechanical engineering

Much more than just CAD and all from one single source!

The ISD Group - one of the leading suppliers of CAD and PDM/ PLM solutions – develops innovative soft-ware for the complete process chain. With the help of our software products HiCAD and HELiOS, our customers can realize the most demanding engineering tasks throughout all fields of industry. We are not just software developer, but also dealer and service provider with a specialist team for consulting, installation, training, and hotline. We provide you with our complete service portfolio - perfectly harmonized and from one single source. Short ways of communication and direct, uncomplicated contact are a matter of course for us.



Sucess requires a strong partner

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