Parametric modeling of bridges in Autodesk® Revit 2019®

SOFiSTiK presents new axis-based tool for parametric bridge modeling

Oberschleißheim/Nuremberg, November 21, 2018 - The SOFiSTiK Bridge Modeler is the first solution on the market that integrates with Autodesk® Revit® and allows users to generate parametric bridge models using alignment parameters. Now, bridge planners have access to the easy-to-understand, BIM-ready tool that authorities all over the world such as Germany’s Federal Ministry of Transport and Digital Infrastructure and the construction industry have been pushing for. The software offers fully parametric input and semi-automated, compliant plan generation, making it easy to analyze multiple design variants.

SOFiSTiK has also made it possible to capture step-by-step complex geometries down to the smallest detail. Users accomplish this by first taking one or more axes from the road planner or by defining the axes out of horizontal or vertical layout information. Then the desired bridge cross-section is selected from the modifiable cross-section families the software offers. It’s easy to generate as many station-dependent variables as required to account for variation in the cross-section along the axis. Finally, bridge substructures are placed in accordance with the stations, and bridge hardware such as railings, barriers, and parapets are generated. There is no simpler, faster, or more economical way to generate a complete BIM-capable 3D bridge model. Bridge Modeler then assists the engineer in generating the required plans.

Benefits the Bridge Modeler offers include its advanced modeling capabilities and parameterization of the entire structure, which enables simple and easy analysis of multiple variants as well as the calculation of dimensions and costs. The software allows for exact control of axis geometry and axis precision from the early planning stages all the way through to construction planning.

The model can be used to automatically generate cross-sections with pre-dimensioned views and sections. These and other user-generated views or lists also automatically change in response to modifications to the model. Users can also generate a developed section cut of the model in Revit and add tags to it. Everyone from experts to new graduates will benefit from the user-friendly, intuitive interface of SOFiSTiK Bridge Modeler.

Frank Deinzer, head of Sales at SOFiSTiK AG, sees the Bridge Modeler as a new, intelligent solution for designing infrastructure with BIM technology. “SOFiSTiK AG has once again proven it is at the forefront of Building Information Modeling in Germany.” In its Road Map for Digital Design and Construction, Germany has declared BIM the new standard for transportation infrastructure projects from 2020 on.

Approximately 2,600 characters

About SOFiSTiK AG

SOFiSTiK is one of the world’s leading suppliers of analysis, design, and engineering software for construction projects. For over 30 years, the company’s applications have been developed in Bavaria and marketed internationally.

In addition to the traditional disciplines of finite element analysis and CAD, SOFiSTiK has in recent years contributed to the advancement of building information modeling (BIM) planning, launching successful products in the field.

SOFiSTiK is an Autodesk® Industry Partner and currently active in over 60 countries with its partner network. For more information, please visit: www.sofistik.com.