

# **BaSYS = BIM**

## **The software solution for your infrastructure**



### **CENTRAL DATABASE**

Administration of facility data and geometries, and task-specific information such as costs and time



### **PROJECT MANAGEMENT**

Transparent project control, collaboration and exchange of information between all project participants



### **PLANNING**

Networking of planning and the execution of construction, and continuous updating for optimised processes



### **TASKS**

Management, time and schedule planning, quantity and cost determination, freely definable planning outputs

# **BUILDING INFORMATION MODELLING**

BIM is an intelligent model-based process for the optimised planning, execution and management of infrastructure networks and facilities. All relevant facility and structure data are digitally modelled, combined and easily recorded. The detailed model is enriched with information by all project participants throughout the planning process, thereby assisting with better planning, execution and subsequent management of the building. This makes it possible to identify early on whether the design, time, material and cost planning is realistic and the project can be implemented efficiently. Economical, resource-efficient and effective realisation of all planning processes is the objective.

## PROJECT LIFECYCLE PHASES

A construction project consists of multiple phases from the beginning to removal. These project lifecycle phases can be developed with BaSYS as a typical, ideal nominal process chain, using BIM methods in coordination with all process participants as part of an iterative process.



## ADVANTAGES

With BIM, planners and service providers have access to digital data that is not possible when analogue planning documents are used. Sufficient information (for instance aerial photos, digital scans and terrain models) is already available at the start of a project so that the actual conditions can be captured precisely in order to optimise project preparation. The model contains more information than a set of drawings and allows the various trades to contribute their specialised knowledge to the measures by expanding the model. All objects are connected to a central database and contain all relevant information. This includes administration of the geometry and design. Process steps such as determining quantities and costs are supported by automatic updates during model development through the database, resulting in considerable time and cost savings.

Central data management and model control simplify collaboration and the exchange of information. By providing and approving the project data using cloud functions, the project participants can inform themselves about the current state and enter further information as needed.

## COMMUNICATION AND INTERFACES

Our intelligent database structures prevent redundancies and ensure the efficient use of data. Resource-intensive conversions between applications are eliminated by central data administration. Interfaces for recognised standard data formats permit the smooth exchange of data with all external technical applications common in the market. The Industry Foundation Classes (IFC) constitute an open standard for the digital description of building models in the building trade (Building Information Modelling). As a member of the VSB (Association of Certified Rehabilitation Consultants), BARTHAUER is contributing to a standard process for BIM-assisted sewer rehabilitation. This also includes standardising the required interfaces (IFC) and the structure of the required data model.

## INDIVIDUAL SOLUTIONS



Complex tasks demand unique solutions. We work with you to develop a concept in order to adapt our products to your individual needs for efficient application. The BARTHAUER consulting team offers advice, training and support from the first meeting to smooth operation in your company.

## VISUALISATION

BaSYS with its unique multi-platform concept supports visualisation at various degrees of detail all the way to realistic 3D models. The BARTHAUER software offers forecasting, analysis and modelling functions to optimise effective strategic planning.

Configurable templates for the output of project data are available through the integrated tools. The project scope can be presented in the form of reports, statistical analyses or directly with the animated 3D design.