

Europe's leading Enterprise Resource Planning (ERP) System for PRECAST concrete manufacturers

All of our customers work in the precast concrete industry, and since 1986, we have been developing and optimising **Betsy**, our dedicated cloud-based ERP system, with full 3D/BIM integration We trust, respect and rely on each other.

INNOVATION

We are open to learn and excited by change.

RESPONSIBILITY

We personally commit to our decisions.

TRUST



Introduction

BETSY Cloud Software is Europe's industry leading Enterprise Resource Planning System for precast manufacturers who produce structural and architectural elements. It is used for estimation (pricing), production planning, control of hours and materials spent, transport planning, erection planning, productivity overviews, quantity proofs, invoicing and manages/monitors drawing and element delivery dates and production and erection dates.

Developed in cooperation with the precast industry in the eighties, Betsy was specifically designed for precast manufacturers who produce **beams**, **columns, TT and hollow core slabs, walls, stairs, facade panels, long span prestressed beams, etc**..

Use of the software in 75 % of all German precast companies for more than 35 years ensures practicability, robustness and quality. Our customers vary from large manufacturers with many factories to small local manufacturers. **Today BETSY is used by more than 1000 users in 180 factories around the world**.

Every year, we hold yearly user meetings where detailed feedback and suggestions are shared and help to guide the development and direction for Betsy over the next year. In this way, our users are a major part of the development of Betsy and have been so since 1986.

Betsy is a state-of-the-art Microsoft .NET based Client Server application. It is a modular software that allows its user to use only the parts he or she needs. It provides interfacing options with CAD systems, production machines, bookkeeping and salary programs and comes with a complete set of 3D data for element geometry and time ratios for a quick use of the software.



Tender letter creation

Betsy calculates both siple elements such as hollow core slabs, and more



complex elements such as facade elements. In addition, Betsy can calculate both materials and hours used via production steps that allow you to calculate each proess such as cut and bend, cage fixing, production, washing, repairs and loading.

Key features include:

- an MS-Excel-like user interface which enables easy and quick use of the system;
- easy modification of data to the individual needs of any plant;
- quantities take off as an initial integrated step in the calculation of price;
- all costs, including transport and erection costs, are part of the estimation of each prefab item;
- mould costs include all elements casted in the mould;
- powerful allocation tables to allocate overheads/profit easily;
- predefined 3D data (geometry and time curves) for the most common elements like beams and TT-slabs, columns, single layer facade elements, sandwich panels for users who want to start from scratch.

A strong tool for the whole Organisation

Project Status Overview:

easily stay up to date on the status of your project with Betsy's traffic-light colour coding system. The colours indicate whether a given element has been produced, whether the time between the production and delivery dates of an element is sufficient, or whether the element cannot be produced.

Dynamic Project Visualisation:

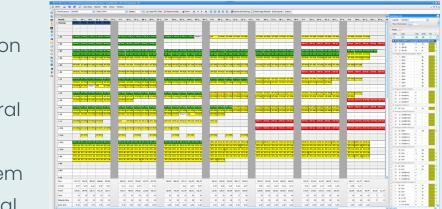
Betsy's Sate of the art visualisation capabilities mean that reliance on marked elements from general arrangement drawings is now a thing of the past. The Betsy system presents this information in digital format, allowing for an entirely new workflow for erection and delivery planning. Combining pdf files for images and element labels from the data base, your project can be visualised as a single drawing on screen and updated in real time.

Production Step Reporting:

in reporting the readiness of a production step, Betsy effortlessly delivers all information on used materials, hours, costs and revenues per project and/or during a period of time, as well as comparisons of estimated and true hours.

Project Delivery Status:

the system will automatically update the project department if the planned delivery date is not going to be met based on the available data.



Strong production planning for Precast

The planning board is the main tool for the production planning:

both rough and fine planning use a common planning board where individual elements are assigned to a date and a mould. For rough planning, items from the A-estimation can be used. Fine planning is developed from the results

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of the labor estimation based on the final element drawings. Assignment of elements to moulds is done via drag and drop. The daily hours required for different production steps, and materials used, are

automatically updated after a drop has been completed.

Colour Coded Status Indicators:

the precast production manager usually prefers to have element labels highlighted in traffic-light colours for ease of status identification. The colours indicate whether a given element has been produced **(green)** or can be produced **(yellow)**, whether the time between the production and delivery dates of an element is insufficient or shifted behind the latest production date **(orange)**, or whether the element cannot be produced due to a missing shop drawing, missing approval, missing reinforcement cage, project on hold or any other user definable reason **(red)**.

Get your materials consumption in order

Supply chain management, is integrated into the most important modules of Betsy, and throughout the process, from sales to invoicing, you will have control over our elements, materials and hours.

Sales Department Integration:

as part of the sales process, we of individual materials and materials groups and can manage our storehouse accordingly, making sure that supply orders are placed in good time.

BIM Integration:

from the BIM integration, the exact consumptio data from the production drawings are obtained and required materials can be ordered directly from the supplier.

Planning Board Integration:

via the Planning Board, we can see exactly where and when the material consumption will be realised and when we will run out of materials in the storehouse. Betsy generates an alert when we don't have the necessary materials in stock, not just on the day, but well in advance so they can be ordered in time.

as part of the sales process, we plan the expected consumption levels



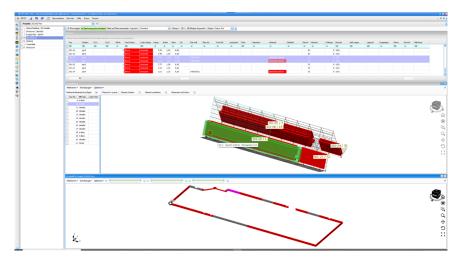
Fast transportation **Tour Planning**

Easily plan the transportation of your concrete elements:

based on the already existing data in Betsy, and from the production and design studio, it is easy to plan the transportation of your concrete elements. With a range of semi-automatic tools, loads can be divided quickly, with all the necessary information for the freight forwarder, driver and construction site.

Easily generate documentation:

after planning, reports can easily be printed for the various stakeholders



involved in the process of delivery, from the caretaker, to the driver, logistics, construction site manager and assembly team, everyone will have the data they need at their fingertips.

Customisable Delivery Notes:

delivery notes can easily be designed to align with your brand and layout, or you can use our standard design. In the delivery module, all the necessary data can be added, including co-delivery parts to the assembly team and to the construction site.

Smartphone App for Android/Windows/iOS:

the Betsy App covers almost all the functionality provided by the desktop version. Enjoy easy handling of stock through barcode scanning, track the status of deliveries and print delivery notes directly without the need of a Desktop PC.

Plan the Erection of elements quickly

Comprehensive Assembly Planning Features:

planning the assembly takes place in our dedicated layouts, which help to ensure proper and fast planning, incorporating the use of colours, guidelines and warnings, so that your planning is consistent with the agreement with your customer at all times. Once you have control of the assembly order and time, you can plan the transport, finish, production, reinforcement, projection, all the way back to project transfer from the customer. In this way, Betsy ensures that all planning deadlines are achieved.

Multiple Planning Resources:

planning is done either through the item list or through the corresponding 3D model. During planning, Betsy helps you by enabling quick access to production drawings, assembly times and all the information you need to make an efficient planning of the assembly. After planning, our standard reports are printed so that all parties have the correct and necessary information.

Assembly Team Planning:

in addition to the planning of the individual elements, the planning of assembly teams can then be carried out in Betsy. These have their own planning board, designed specifically for this purpose and which are constantly connected to what is happening in all other departments. E.g., if you move a team and its elements in the wrong way, you will immediately be warned that the items can no longer be delivered and mounted on time.



Technology should be friendly

Experienced Development Team:

our expert in-house development team ensure that our solutions offer accurate applications that satisfy the the specific requirements of our clients. Every year, we hold a summit where we invite clients to give feedback so that we can keep developing, customising and providing the best product possible.

A Truly Open System:

betsy is a truly open system allowing you to incorporate data from spread sheets, CAD systems like AutoCAD, Tekla or IDAT. Data can also be exported to analytical bookkeeping, salary programs and master computers for carousel production machines.

Data Export Customisation:

exporting data to analytical bookkeeping always requires to customisation of the content to be exported according to the needs of the client and to apply the accounting codes that are provided by the client's accounting system. The MIS helps to clarify what is really needed in the accounting and analytical bookkeeping system.

Save time/money by using BIM technology

BIM integration:

by using BIM integration, we facilitate your work and make processes more efficient, improving the speed and accuracy of Sales Department pricing calculations for projects.

Estimations:

BIM helps to create preliminary drawings and layouts, including pieces, sizes, beams, columns, panels, and slabs. It automatically provides both the volume

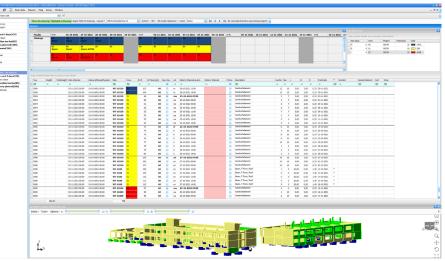
of concrete and information about the complexity of the project in order to estimate the cost of materials and manpower. BIM also helps to estimate the structural elements and connections between pieces for the final design that aren't included in the initial model.

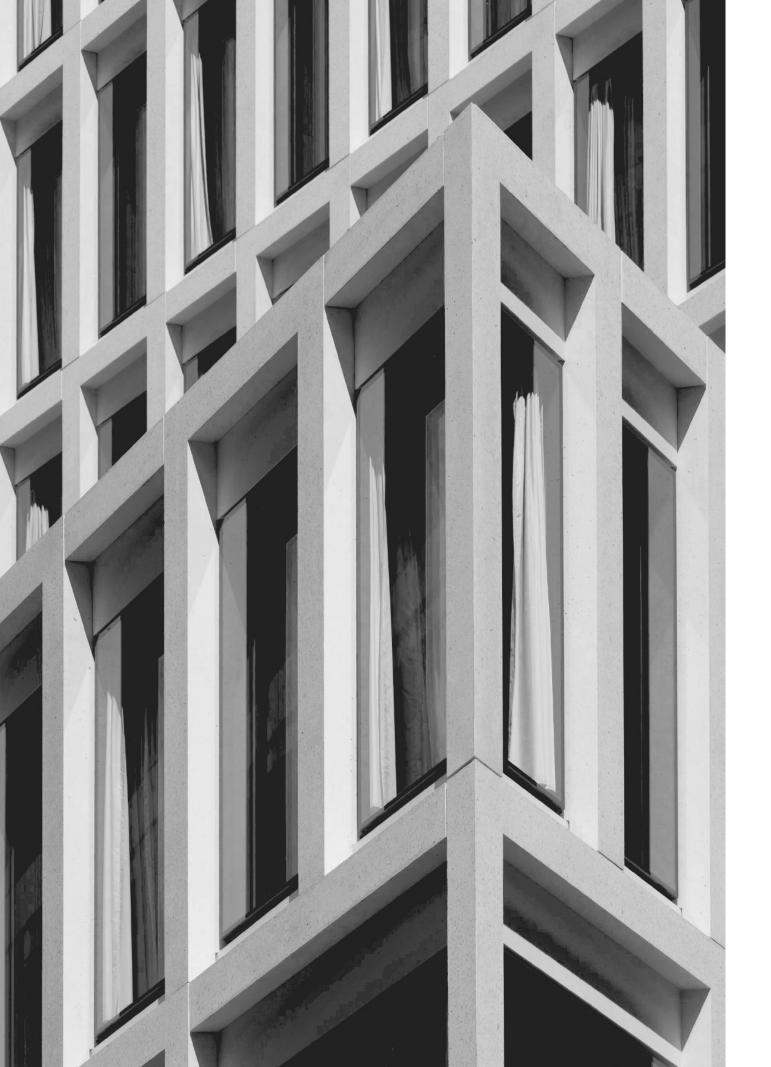
Final Design Automation:

quickly create final designs. With BIM, the productivity benefits are in design automation after you've told Betsy what rules to apply to automate the design. The software creates connections automatically with structural calculations.

Modelling and Tracking:

any type of precast product or project can be modelled and tracked through the system to improve internal productivity workflows as well as support external workflows benefitting all the project stakeholders. Status data can include dates, damage status, erection completed or even bidirectional site layout points.





Our Company

Developed in the eighties by Wolfgang Ehlert and Thomas Wolf

from IBB – Consultants & Engineers, BETSY is specifically designed for precast concrete manufacturers who produce beams, columns, TT and hollow core slabs, walls, stairs, facades panels, long span prestressed beams, etc..

75 % of all German precast companies use our software, and after 35 years in business, practicality, robustness and high quality are assured.

We offer comprehensive support services for the efficient implementation and use of Betsy. The practical demands of more than 1000 daily users inform the constant enhancements that we make to BETSY, a benefit to all BETSY users! Now available on cloud as well - from price calculation to invoicing,

from work preparation to decision making reports for the management – this is our business!

More than 35 years as a software supplier to the precast industry!

Feel free to contact us via phone, or send us a message: +45 22 40 90 07 boysen@betsy.de