

ALLPLAN ENGINEERING
THE BIM SOLUTION
FOR ACCURATE
ENGINEERING PLANNING



HIGH-QUALITY PLANNING IN THE SHORTEST TIME

Higher planning quality thanks to Allplan Engineering

Allplan Engineering is a strong tool in 3D general arrangement and reinforcement design for buildings and infrastructure. Using the Allplan model, you can virtually run through the building process with shell entities, openings, reinforcement, fixtures, prestressing etc. You therefore identify inconsistencies early on and avoid planning errors. Changes to the general arrangement or reinforcement are transferred to views, sections and lists bidirectionally and associatively. You therefore reduce the time needed for planning. The 3D model shows details and complex building processes clearly. This simplifies communication.

Diverse data exchange

Via the certified IFC interface, you can transfer the architecture plans from all relevant systems. From Allplan Architecture, you do not even need to convert the data. The transfer of the structure models to a calculation software (Scia Engineer or others) is just as easy. There are also direct interfaces to Frilo Statik. Calculation results and the required reinforcement quantities are imported back to Allplan and form the basis for reinforcement planning. CAD and the structural analysis therefore all come from the same company.



Aviatica, Prague

Planning office: Building s.r.o., Czech Republic

Photo: Ing. Vaclav Toman



ALLPLAN ENGINEERING MAKES BIM POSSIBLE

All requirements at a glance

For more than 30 years, Allplan has been providing BIM solutions “made in Germany”. We have always known how to provide professional solutions for experts while looking beyond the boundaries of the disciplines. Our software is used around the world and takes account of the local situation.

Solutions for the entire life cycle of a building

BIM stands for the integrated and cooperative planning, construction and management of a building. With open interfaces, we support this idea and provide a data and communication interface for other software providers. The intelligent, open software solutions from Allplan enable you to record building information over the life cycle and to link it up: from the first draft, tender and award through to construction and efficient management and use. With Allplan, you create 3D models, collect and manage all the relevant information and pass it on to the operator.





*European Central Bank, Frankfurt am Main
Planning office: Bollinger + Grohmann Ingenieure, Germany*



ACCURATE MODELING OF FREE FORMS

Allplan and Parasolid modeling kernel: A perfect combination

The Parasolid modeling kernel from Siemens PLM, which is integrated in Allplan Engineering, offers you many new ways of modeling in 3D. The tried-and-trusted Parasolid technology provides greater freedom and accuracy in the modeling of bridges, tunnels, containers or complex structures. It is a particularly effective support for the planning of curved forms, e.g. in structural engineering.

Greater performance - less data

With Allplan Engineering, you can define free forms in detail and integrate them better in the planning process. This improves the quality of your planning. Polygons are no longer created when you model 3D solids. It is therefore easier to modify freeform solids. And because less data is generated, your system becomes faster and the quality of the representation in the animation window increases. Allplan Engineering offers an optimized representation in the plan and animation, and a better look and feel in the creation of building models than ever before.



State Ministry for Urban Development and the Environment, Hamburg
© NBK, photo: Andreas Lechtape



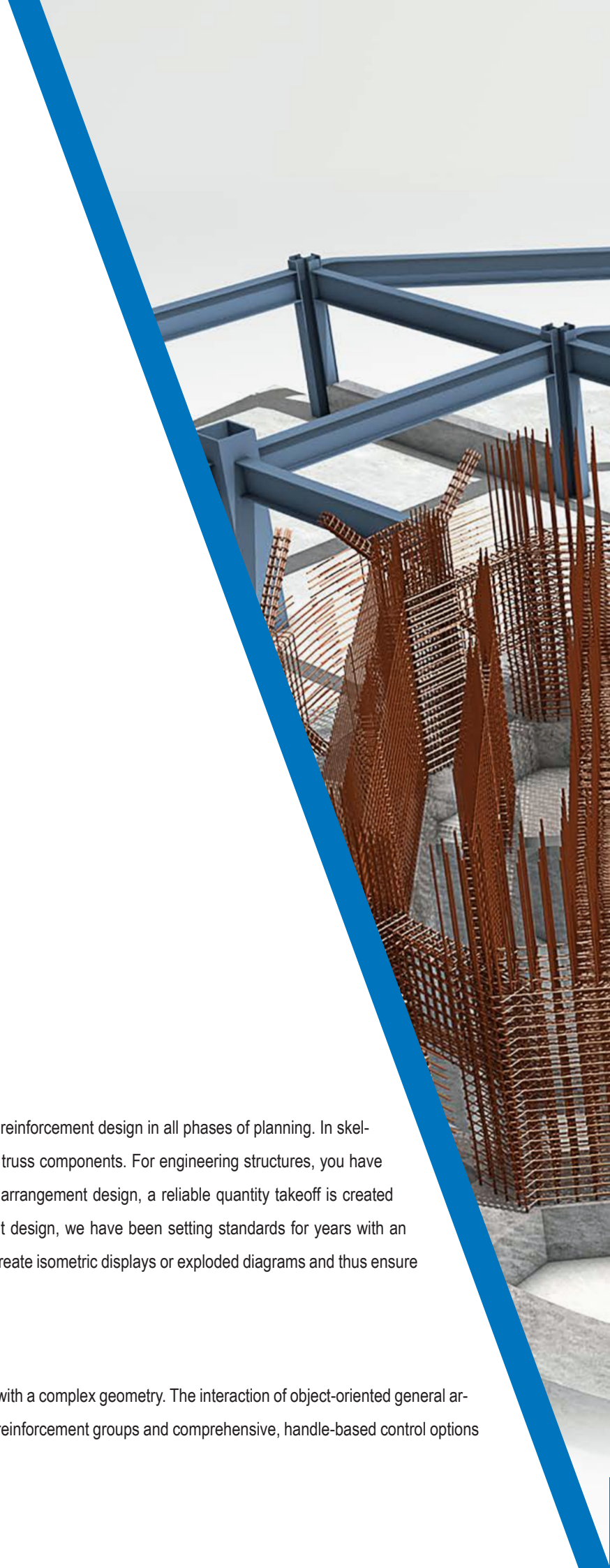
PLAN EFFICIENTLY IN 2D OR 3D

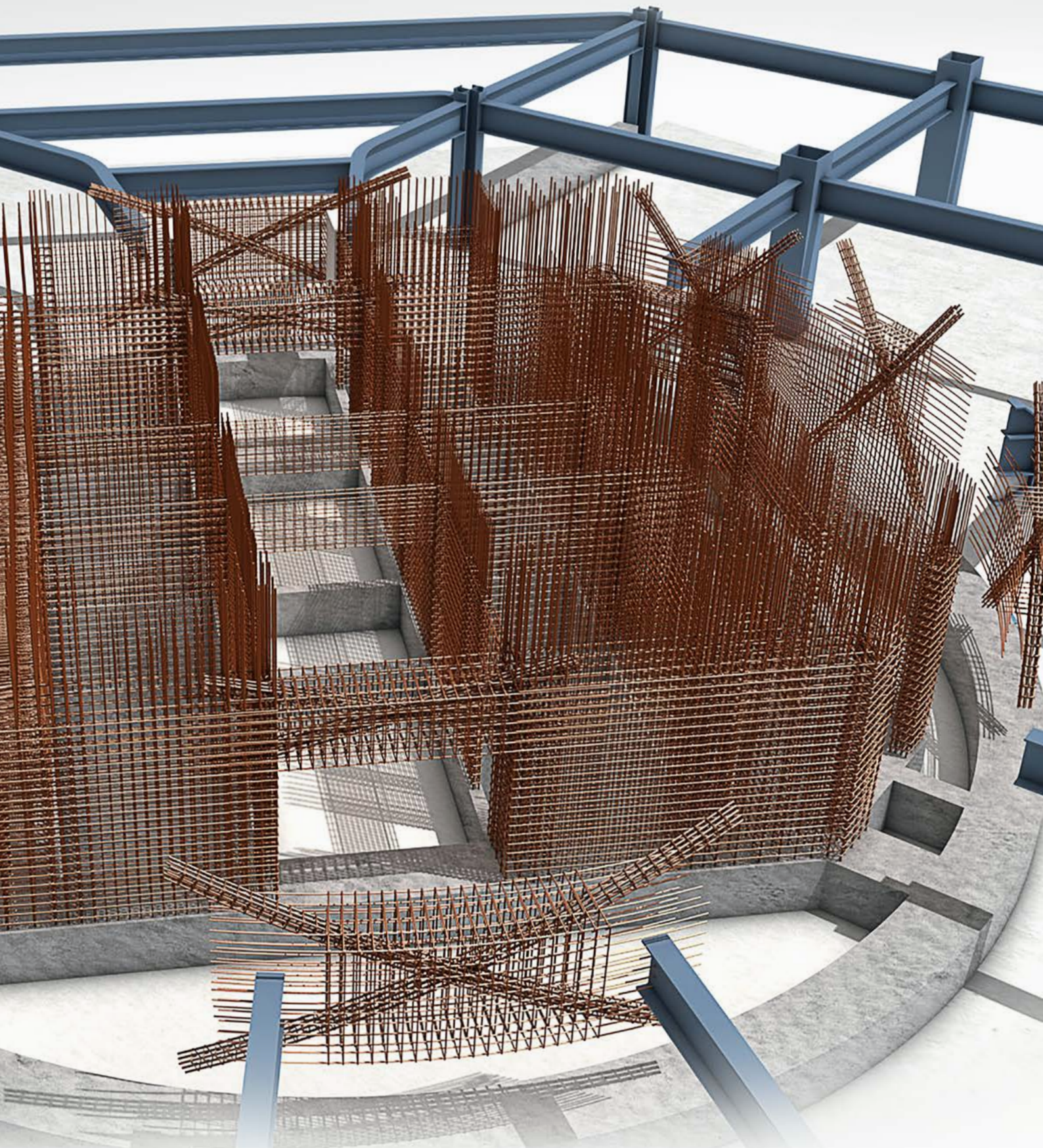
Precision thanks to the intelligent building model

Allplan Engineering supports practical general arrangement and reinforcement design in all phases of planning. In skeleton structures, you can also use corbel, socket foundation and truss components. For engineering structures, you have a special bridge and civil engineering designer. During general arrangement design, a reliable quantity takeoff is created automatically. In the 3D general arrangement and reinforcement design, we have been setting standards for years with an intelligent building model: You can derive plans and lists from it, create isometric displays or exploded diagrams and thus ensure clear communication in all phases of planning.

Harmonious interaction

Allplan Engineering really comes into its own in building projects with a complex geometry. The interaction of object-oriented general arrangement design, automatic shell edge recognition, predefined reinforcement groups and comprehensive, handle-based control options makes the application easy and efficient to use.





*Anchor Plaza Downtown office building, Bucharest
Planning office: Z Group, Romania*



QUICK AND EASY EVALUATIONS

Always have up-to-date plans thanks to associativity

In Allplan Engineering, you can derive e.g. numerous sections and views for reinforcement planning from the intelligent building model. With the “Section along any path” function you can create a section along any spline. Thanks to associativity, all plans are automatically up-to-date after every change. This saves time and helps you avoid errors.

Achieve your goal with just a few mouse clicks

Thanks to associativity, not only is the component geometry always up to date, quantities and masses are also automatically adjusted. Via a batch list function, all bar, mesh and Bamtex items laid in a project can be combined in one report. A mouse click is all that is needed to then convert this report to standard formats such as Word, Excel or PDF and thus optimize it for forwarding. With interactive evaluations, you can identify collisions and inconsistencies at an early stage.





FROM A SINGLE SOURCE: CAD & STRUCTURAL ANALYSIS

Round-trip engineering with Allplan

In Allplan Engineering, you can transfer individual components such as slabs, walls or foundations directly to Frilo Structural Analysis or even transfer a complete building model to Scia Engineer and derive a static system from it. After calculation, the required reinforcement is transferred back to Allplan Engineering. This method, known as “round-trip engineering”, enables you to create plans and the static calculation on the basis of a building model: If planning changes are made, you only need to maintain the changes once in Allplan Engineering and then transfer them to Scia Engineer.

Save time, gain convenience

Your structural analysis software graphically displays the differences between the previous and the current status. Depending on the effects on the load characteristics, you decide whether you want to accept or ignore the changes. The structural analysis system is then automatically adapted to the transferred changes and the static calculation is carried out again. With round-trip engineering, you benefit from time savings and convenience in the transfer of the geometry and creation of the structural analysis system, as well as higher quality for changes in the plans. As a result, schedules are reliably kept and projects processed within the calculated budget.



*Extension of the bridge over the Waal, Nijmegen
Planning office: Witteveen + Bos, Netherlands; Photo: Wouter Claassen*



COMPETENT AND PERSONAL

Benefit from a plus in service

Your day-to-day planning work is full of challenges. We therefore offer all our expertise and experience in order to help you: Our experts in Technical Support, all of whom are architects or civil engineers, will be happy to advise you on all questions relating to your work with Allplan. The special Allplan Serviceplus service provides regular updates of your software, as well as user forums, training and planning aids, technical support and many other advantages. As a Serviceplus customer, you are part of Allplan information and communication network, which is unique in the industry.

Become part of the Allplan community

The international Allplan Connect service portal gives you direct access to the global Allplan community. User forums, training documents, templates for your plans, direct answers to frequently asked questions, events, webinars and videos are available to you here. Allplan offers permanent upgrade guarantees. You therefore always have the latest software thanks to regular updates. And all at costs that can be planned – because you choose the extent to which you take advantage of what we offer.



Award-winning and certified: Allplan offers maximum user-friendliness and functionality.



TÜV SÜD zertifiziert die grafische Mengenermittlung mit Allplan für ausgewählte Baugruppen in NEVARIS

