

Model-based project controlling

GRANID[®]

The platform for investment projects

Objective and area of application

Project controlling is based on data that are generated as business objects in GRANID – the client-side controlling system – during the planning and execution phases of construction projects. Functional models are used to structure the data management with the goal of creating meaningful reports and analyses for decision-making processes.

Multi-model-based information management ensures improved transparency for all project stakeholders. This allows the definition of high-standard building targets, against which the deliverables of the construction companies are to be measured.

A client must always have an overview of the current project status in relation to the original functional and qualitative specifications and aims as well as the financial framework and deadlines.

This information lays the foundation for consistent controlling across all phases of the project.

Innovation

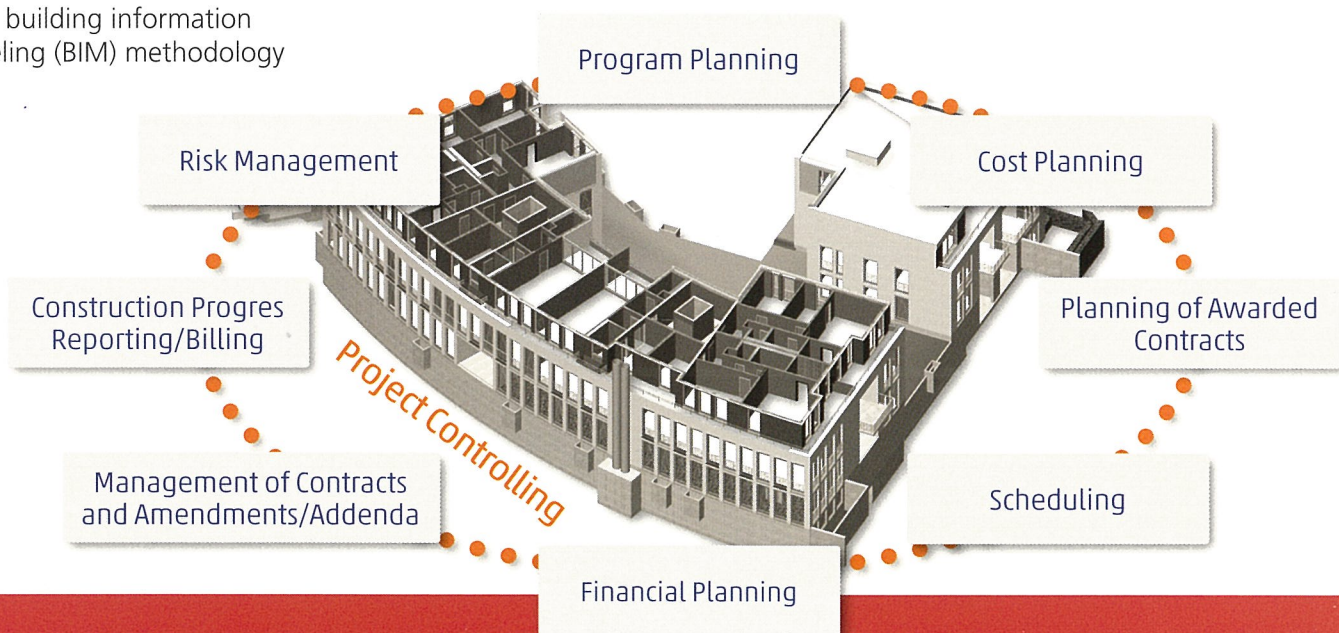
Along all the project phases, functional and qualitative specifications as well as the geometry of the building model are integrated into the controlling models.

Thus the cost and scheduling structures relevant for project controlling are linked to the planned deliverables in each project phase. The building model with its qualitative and quantitative parameters supplies current and reliable volume data for controlling costs and deadlines.

Likewise, the controlling results can be visualized using the building model. Complex analyses of variants and simulations are considerably simplified.

Model-based project controlling

using building information modeling (BIM) methodology



Methodical and technological implementation

The building model and the alphanumeric data representing the detailed contents of the model are recorded in a structured fashion in a building project book.

At the same time integrative relationships are created between the various functional models. The system offers both a functional and a geometric view of the

future building. The latter additionally supports the IFC standard 3D geometry model. The performance model, including its building geometry, is extended by the cost and process model.

The project structure organizes the cost and scheduling information generated at each project phase.

Our GRANID project platform ...

... supports the project controlling processes arising in your projects, from program planning to account posting. The individual specialist modules are integrated in such a way that in each case the current cost development status is mapped out.

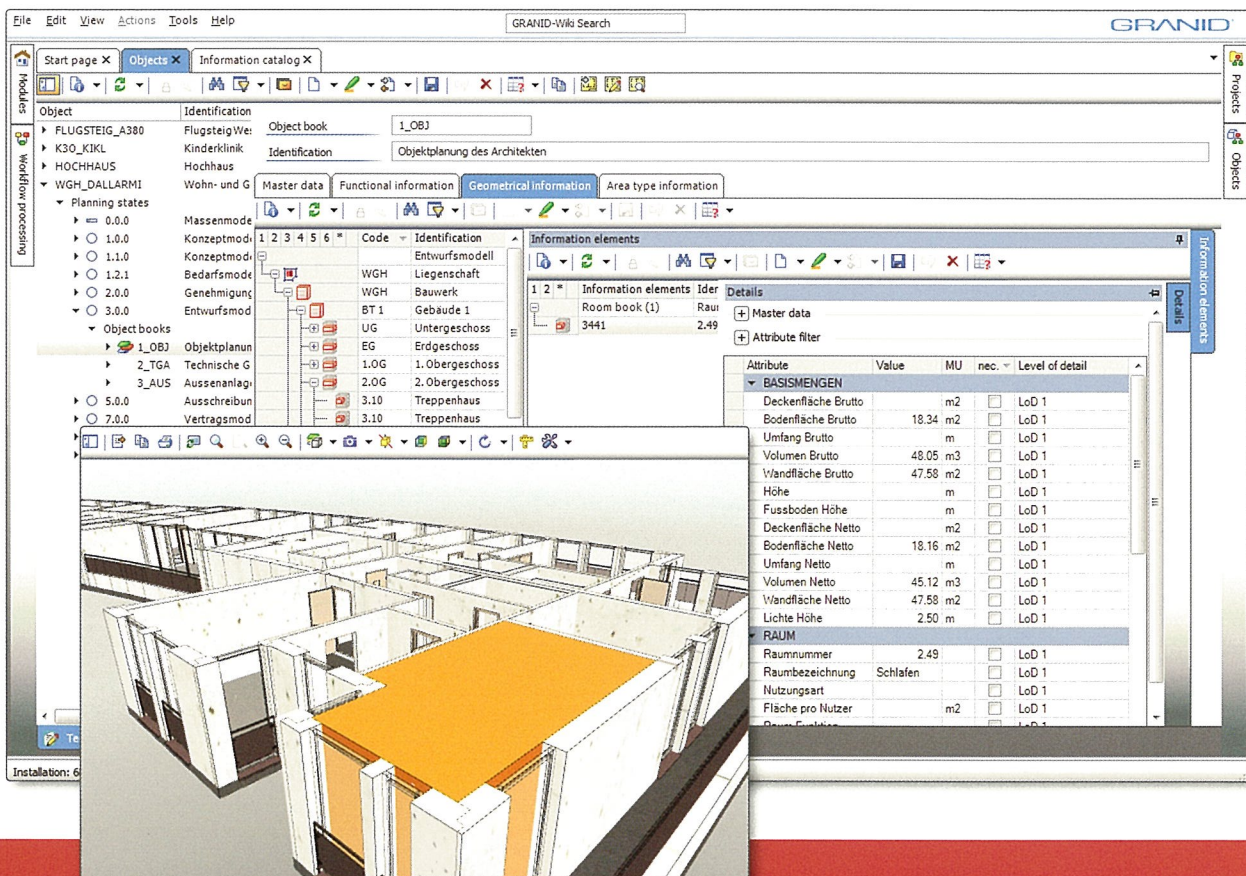
Structured data are used to prepare meaningful analyses and reports for your multi-project controlling. All project participants work in their different roles with the same database.

A connection to your business systems is possible at any time.

In addition to the controlling features, all documents arising in the context of the business processes

are centrally managed. Change and authorization processes are thus documented in a comprehensible manner. Configurable workflows promote efficient collaboration of the project participants, ensuring the professional handling of your projects.

This generates an extensive knowledge base for your projects. An integrated access and security concept guarantees the security of your data, while a central support service is available for system availability issues. Training and targeted coaching of the project participants are organized in the course of the project.



Added value

Model-based target/actual performance comparisons reveal possible deviations from the planning objectives and facilitate transparent reports and analyses.

More added value is created in complex building projects when the GRANID controlling platform is used to evaluate and analyze the deliverables of various

planners and building companies in their entirety.

This approach also supports multi-project building owners who require integrated project controlling for their project portfolio at different organizational levels.

Our products and services based on building models

- Program controlling
- Draft controlling throughout the planning phases
- Cost controlling
- Scheduling/deadline controlling
- Financing controlling
- Risk controlling
- Awarded contracts and contracts controlling
- Performance controlling
- Settlement controlling
- Process organization
- Creation of catalogs and structures
- Interface definitions
- Data migration
- Training and coaching
- System configuration

Value-added using the example of performance/settlement controlling

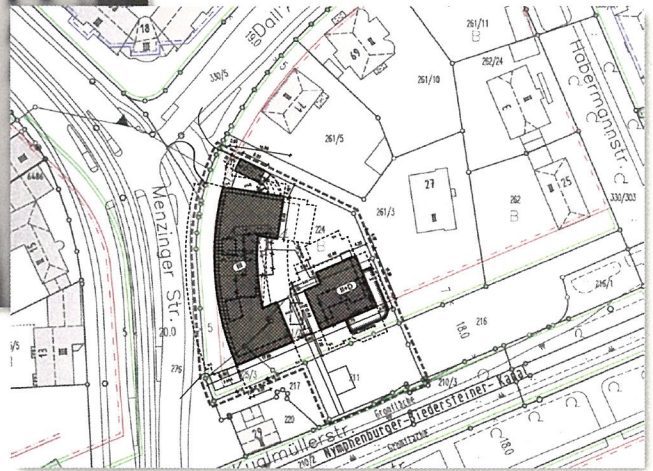
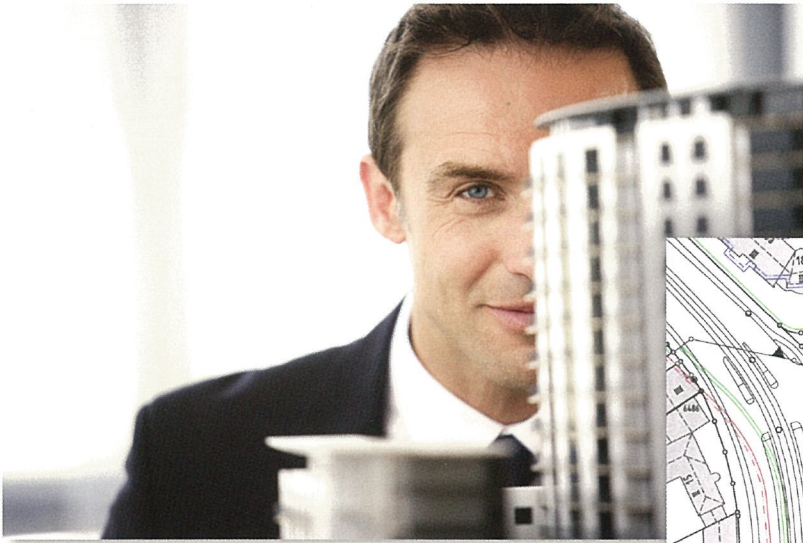
Building models ensure that the rendering of performance, performance assessment and service billing can be linked up and correlated. Thus cost development becomes transparent down to the level of individual construction components.

The screenshot displays the GRAND software interface, which is used for project management and cost control. The main window shows a 3D model of a building structure with various components highlighted in green and red. The interface includes a menu bar (File, Edit, View, Actions, Tools, Help) and a search bar (GRAND-WW Search). The left sidebar shows a project tree with folders for 'Start page', 'Objects', and 'Work reports'. The main area displays project details for 'FH02 Erweiterung Internationaler Flughafen - Neubau Flugsteig' and 'VT_001 Rohbauarbeiten Flg'. A table of 'Item' data is visible, listing construction components like 'Ort beton Einzelfundamente' and 'Schalung Einzelfundamente' with their respective quantities and differences. A 'Work value from work items' table is also shown, detailing contract items, quantities, and values in EUR. The bottom of the interface shows technical documents and accompanying reports, including installation details for 6OPRES, Executive: RAITH, and Role: DATA OWNER ADMINISTRATOR.

Item	AgCh No.	Short text	Target
01.01.02.0010	0	Ort beton Einzelfundamente	
01.01.02.0020	0	Schalung Einzelfundamente	

Contract item	AgCh	Q/EB	Short list	Quantity MU	UP after DC (WR)	TA after DC (WR)
01.01.02.0010	NNN		Ortbeton Einzelfundamente	936.684 M3	80.30	75.316.33
01.01.02.0020	NNN		Schalung Einzelfundamente	783.642 M2	28.18	21.518.63
01.01.02.0030	NNN		Bewehrung Einzelfundamente	112.642 T	935.00	105.320.27
01.01.03.0010	NNN		Ortbeton Streifenfundamente	121.972 M3	80.30	9.784.35
01.01.03.0020	NNN		Schalung Streifenfundamente	407.026 M2	28.18	11.461.85
01.01.03.0030	NNN		Bewehrung Streifenfundamente	7.321 T	935.00	6.845.14

Projects. Processes. Perspectives.



Integrated project controlling for your building projects

- Public bodies / authorities
- Infrastructure companies
- Manufacturing companies
- Financial institutions and insurance companies
- Real estate companies
- Project and land developers
- Overall and general planners
- General contractors



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