

Application area:

Simulation-based control station

Control station with forecast function

Classic tasks of control stations are plant visualization and the provision of control options. However, the effects of control options. However, the effects of control interventions can only be predicted to a limited extent. In particular, the long-term effect of the intervention as well as the dynamic interrelationships between different areas of the production are difficult to estimate.

For this reason, SimPlan supplements the basic functionalities of the control station with a simulation component. This component enables the control station personnel to run certain control interventions virtually in a simulation scenario first. The effects can thus be made transparent.

A comparison of alternative control systems ensures that the best solution is used.

BMW builds on the SimPlan solution

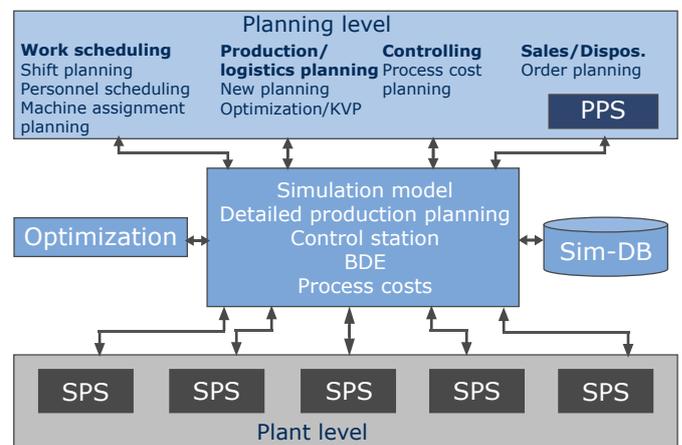
The Bavarian car manufacturer proudly reports on the success of the pilot project in the final assembly of a plant. The reduction of cycle losses in the first months of use alone justify the operational effort. The forecast of when vehicles with special scopes will arrive at certain workplaces enables personnel to be dispatched with pinpoint accuracy.

BMW is now planning to set up further simulation-based control centers at other plants. The expansion of the existing system, e.g. to include the connection of seat production, is already in progress.

Diverse solutions

A novelty of the SimPlan product is the use of a standard simulation software for the complex functional scope of the control station.

On the basis of the software, not only the prognosis function but also well-known control station functions such as visualization, statistics or control can be realized. Local controllers (PLCs) are coupled for this purpose via an interface developed by SimPlan.

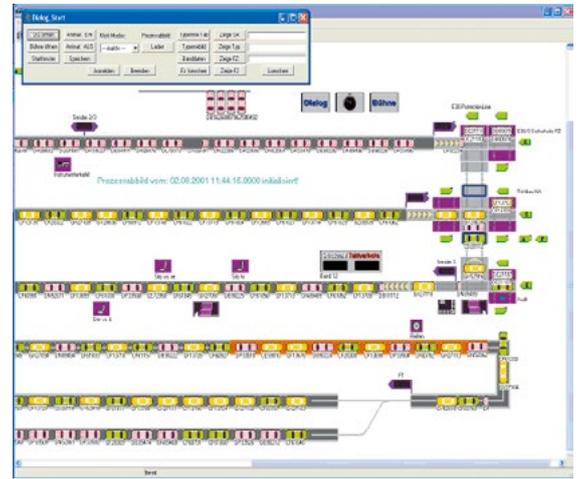


Schematic representation of the control station principle

Incidentally, the customer also receives a simulation model that can be used independently of the control station, e.g. for planning or structural improvement measures.

The range of applications for the simulation-based control station is diverse.

It can be used wherever complex decisions have to be made during operations. Modern hardware and software guarantee short simulation response times, so that short-term decisions can also be supported.



Example of a control station from the final assembly of an automobile manufacturer

Goals and benefits

- Safeguarding of short and medium-term decisions in operational business, e.g. manual control interventions
- Visualization of the process image
- Prognosis of the process over the upcoming period
- Support of maintenance, e.g. by visualization of expected malfunctions in combination with simulation-based detailed production planning also usable for scheduling purposes
- Low effort for the simulation of process changes, since the control station already provides the model basis

Fields of application

Can be used as a control station in production, assembly or logistics systems in all industries.



SimPlan AG was founded in 1992 as a service provider for the simulation of operational processes and today, with more than 120 employees, it is one of the leading German providers of simulation services.

Why SimPlan?

We are a cross-industry full-service provider for simulation, supporting companies of all industries with extensive expertise in the analysis and optimization of their business processes

- Objective and independent analysis
- Detailed knowledge in logistics and production from over 30 years of project work
 - Development and use of standards
 - Permanent advancement of simulation topics through research and development
- Excellent resources to respond quickly to your issues
- Close collaboration and project integration with a high level of on-site involvement
- Development of innovative solutions for the efficient handling of problems
- Neutral distributor for simulation software
 - Support in software selection and implementation as well as training

Feel free to contact us

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