



A cost-effective solution for every brewery:
BRAUMAT Packages

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SIEMENS



Develop more flexibility for new products and solutions.



Add the right ingredients for high plant availability.



Ensure constant beer quality with the right flavor.



Get things flowing toward strictly economic and investment-proof modernization.

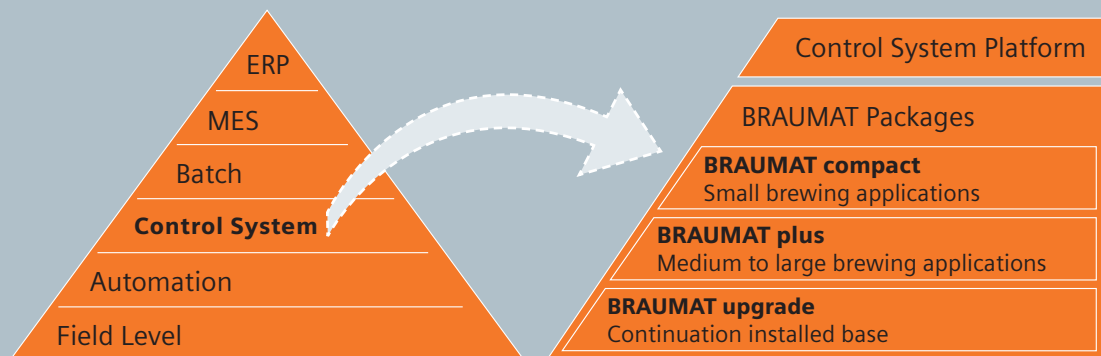
A new chapter of the **BRAUMAT** success story

BRAUMAT has been a fixed asset for many years. A considerable number of breweries worldwide, from small regional operations to international groups, benefit from integrated and efficient process automation with BRAUMAT. We want to continue this success story with a new chapter about reliable, powerful and cost-effective process control technology.

It was essential for us to align BRAUMAT even closer with the current and future requirements of the brewing process. Our goal was a solution that supports you in increasing your productivity and protecting your investments. We achieve this, while working closely with leading brewery equipment suppliers, by leveraging our industry-focused process expertise from hundreds of successfully completed international brewery projects for the innovative SIMATIC PCS 7 process control. The results of these efforts are the scalable BRAUMAT Packages.

With systematic approaches, sophisticated industry solutions and reusable standards for any brewery application, the BRAUMAT Packages provide exactly the functionality that you need for your brewing. Whether this is a small plant or a complex and demanding batch operation, whether you plan a new plant or want to expand or modernize your existing facilities.

Fact is: The BRAUMAT Packages are an especially cost-effective solution for any kind of brewing process.



BRAUMAT

Innovative system engineering on small scale: **BRAUMAT compact**

Neither too much nor too little of what you need to benefit from efficient, fast and smooth processes in a small or medium-sized plant: this is what BRAUMAT compact offers you. The cost-effective system is suitable for small applications in production or for self-contained subprocesses as well as for the automation of a lab, technical facility or microbrewery.

Optimum functionality

Based on the SIMATIC PCS 7 Box, BRAUMAT compact combines all the essential functionalities for automation, visualization and control as well as engineering. The distributed process I/O is connected via PROFIBUS.

Efficient recipe control

BRAUMAT compact has a two-stage control logic for recipe control. The controls of the first stage are grouped into logical functions and solve associated subtasks, such as routing. The second stage represents the unit recipe. It places the functions into a recipe-specific sequence and combines them with the recipe parameters of the beer type. The recipe sequences can be changed during online operations.

Easy engineering

A full SIMATIC PCS 7 Engineering Station equipped with integrated PCS 7 tools enables fast hardware and software engineering with minimal effort. User-friendly visualization and control is ensured by the SIMATIC PCS 7 OS software WinCC that offers full functionality for process visualization, including faceplates, trends and a messaging system.

Flexible operations

The scalable system can be expanded at any time without compromising its compatibility. It can be integrated with existing PCS 7 installations. Even a redundant design is possible.

BRAUMAT compact: Efficiency across the line

- Cost-efficient solutions for small breweries, subplants or process areas
- Compact hardware and software based on SIMATIC PCS 7 Box V 6.1 with full PCS 7 functionality
- Scalability from single station to distributed client-server system
- Flexible and easy recipe control through parameter archive for different types of beer and easily customizable sequence control for process steps
- Integrated, user-friendly graphical engineering system for control, visualization, and batch
- Brewery-specific add-ons support the planning of product or cleaning jobs as well as messaging
- Batch- or subplant-specific trend analysis



Flexible control system for demanding tasks: **BRAUMAT plus**

BRAUMAT plus is a modern and forward-looking control system especially for medium-sized and large breweries. The scalable and especially flexible system enhances the powerful control system platform SIMATIC PCS 7 with SIMATIC Batch to provide key functionality for efficient batch operations. High transparency and consistency are ensured by the graphics engineering for PLC, HMI, and batch as well as detailed runtime diagnostics.

Consequent forward-looking approach

Through its highly modular design, the batch package of BRAUMAT plus meets the requirements for mapping the plant structure and the brewery process according to ISA S88.01 and is FDA-compliant at the operations and phase level. In addition, it offers you a graphical recipe editor and the capability to run the recipe logic at the control level (AS-based Batch). A standard interface enables the system to be connected to a higher-level MES system such as SIMATIC IT.

Intelligent route control

An interesting option package for BRAUMAT plus is the Route Control System. The intelligent and flexible standard-based system for route control defines and controls all material flows within the brewery. At runtime it offers a detailed diagnosis of all active transfers.

Enhanced functionality

Brewery-specific add-ons complete the range. They include an ordering system for the planning of product and cleaning jobs as well as reporting and unit-/batch-specific trend evaluation.

BRAUMAT plus

BRAUMAT plus: For maximum flexibility

- Distributed client-server architecture based on SIMATIC PCS 7 V 6.1
- Integrated asset management
- Automatic online access, diagnostics as well as maintenance of all system components
- Flexible batch package for recipe control and graphical recipe generation
- Compliant with ISA S88 and FDA
- Standardized MES interface
- Optional package for easy and flexible route control including diagnostics
- Brewery-specific add-ons
- Standardized user interfaces



Cost-effective modernization: **BRAUMAT** upgrade

Be prepared today for the growing requirements of tomorrow's markets – BRAUMAT upgrade optimally supports you with the expansion or modernization of your systems and installations: step by step, avoiding system discontinuities and with plannable short production downtime. This ensures the long-term protection of your investments in hardware and software as well as of the expertise of your operating and service personnel, maximizes your overall capital return and minimizes your technical and financial risk.

Tailored to your needs: Siemens upgrade strategy

We have recognized the importance of upgrading in the food and beverage industry early on and rely on system compatibility in the further development of our proven systems, such as BRAUMAT. However, we do not consider our only task to be to completely substitute existing systems. Working closely with you and the system integrators of your choice, we use BRAUMAT upgrade as a basis for developing a customized, future-proof solution that meets the following goals: step-by-step system innovation, adapted to your specific requirements and flexible according to your production requirements.

Efficient upgrade with BRAUMAT

Due to the common engineering environment, BRAUMAT upgrade allows a smooth and cost-effective migration of the installed base of your BRAUMAT classic system to the innovative, powerful PCS 7 system world. While existing automation programs and recipes can be reused, the hardware and the operating and visualization system is enhanced to meet the state of the art. This will not require a change of the control logic. SIMATIC S5 will continue to be supported.

BRAUMAT upgrade not only ensures efficient modernization but also offers an easy entry into future-oriented process control technology with SIMATIC PCS 7 – including all the benefits of a universal operating and visualization concept, flexible recipe control and graphical recipe creation, innovative route control and much more.

BRAUMAT upgrade is also the basis for migration of SIMATIC based DCS-Systems for other suppliers.

BRAUMAT upgrade

BRAUMAT upgrade: Your value added for the future

- Cost-effective upgrade from BRAUMAT classic V 5.3 SP 1 to SIMATIC PCS 7 while preserving the existing control hardware and software
- Migration of visualization, messaging system and BRAUMAT faceplates to the powerful and universal PCS 7 OS Standard WinCC
- Preservation of the BRAUMAT classic ordering and recipe system
- Migration instructions for the integration of existing BRAUMAT classic projects with higher-level PCS 7 projects
- Integration of the BRAUMAT engineering into the PCS 7 environment: SIMATIC Manager as common engineering station



BRAUMAT Packages: A secure investment

More flexibility for new products and solutions

Shorten your response times – this is possible with the BRAUMAT Packages and will enable you e.g. to make changes to recipes that are created graphically, by yourself. The system can immediately be adapted to new products. You can respond faster to any changes in product safety regulations or environmental protection.

Constantly high product quality

The BRAUMAT Packages support you in your efforts to fully meet the requirements for quality, end-to-end traceability as well as documentation. Process flows can be reproduced, batches logged and an interface used for batch tracing more easily. There is always a reference to the recipe used, all reference and actual values are recorded, and all manual interventions are logged.

More availability in the long run

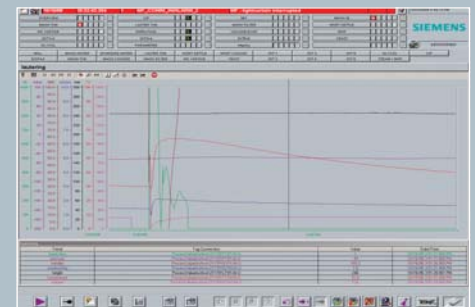
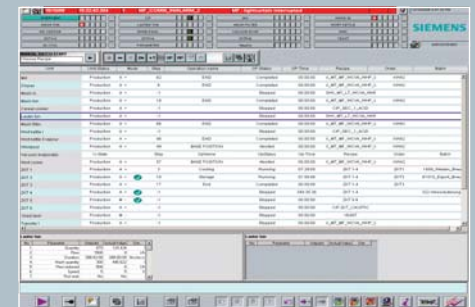
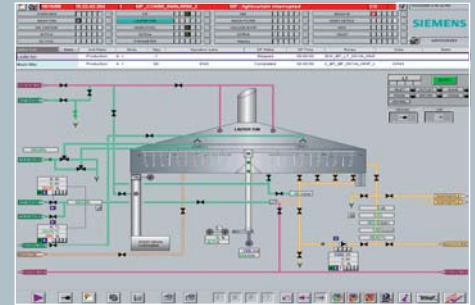
Reduced downtimes due to consistent, error-free configuration data – this is ensured by the system's end-to-end approach. In addition, the BRAUMAT Packages offer tested and proven software libraries. The comprehensive system diagnosis of all components enables the fast elimination of problems. The system can be protected against hardware failure with redundant components.

Easier recipe generation and control

By separating the procedural elements from the plant, recipes become more portable and flexible. They are easier to validate and test. The software can also have a modular design.

Less engineering required

Tested standard software as well as consistent programming reduce the effort and cost of engineering. A central engineering system, from the I/O level to process visualization to batch system, ensures maximum data consistency. Time-saving tools enable automatic mass engineering, e.g. for valves. Preconfigured equipment modules are available for all areas of the brewery within the context of a partner concept, our Solution Partner Program.



BRAUMAT Packages allow you to benefit from higher productivity and a faster return on investment.



Got the taste?

Our Competence Center Food & Beverage will be happy to help you.

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