

Brewery Newsletter



Come and visit us!
Hall 5, Stand 113

Impressive trade fair presentation

The trade fair presentations at China Brew in Beijing, China, and at the World Grains Summit, San Francisco, USA, in September 2006 showed the comprehensive solutions and competence of the GEA Group in the brewery industry. At these two events, Huppmann was integrated in the GEA stand for the first time.

At Brau Beviale 2006 we will also have a joint stand and present our comprehensive portfolio. Come and visit us in Hall 5, Stand 113.



Whether in San Francisco (left) or in Beijing, GEA Group left a lasting impression on the visitors

Successful lauter tun upgrades

In the Chinese city of Shunde, the upgrade of a lauter tun (from another manufacturer) with the Huppmann Lauterstar® technology led to an increase in extract yield of 2 percentage points. In addition, the capacity was boosted by almost 50 % (from 6.5 brews to 10 brews per day). The retrofit included mechanical modifications of the run-off system and the installation of the intelligent MLM control software.

In late 2005, Huppmann upgraded the first of two lauter tuns in a twin stream brewhouse in the Netherlands. This equipment had also been manufactured by a German competitor. A direct comparison between the original and the retrofitted lautering system clearly showed a significant performance increase with the same malt and the same mashing technique. The article about the upgrade was published in German in Brauwelt No. 12, 2006. The results prove that with a lauter tun optimisation, which requires only little effort, the brewhouse yield and also the turbidity curves can be improved significantly. The customer calculated a payback period of approximately 1.5 years for this investment.

As part of a brewhouse audit, Huppmann offers an analysis of the brewhouse results and develops a customized solution for each brewery. Our expert team of internationally experienced brewmasters will be pleased to advise you individually according to your specific needs.

For further information please contact Karl-Heinz Höhn (k.hoehn@huppmann.com) or Marc Schreder (m.schreder@huppmann.com).

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Even the professional association was positively impressed by the new safety concept



Professional association presents vessel safety concept

The comprehensive Huppmann safety concept in the brewhouse of Kulmbacher Brewery was presented in detail by the professional health and safety association for the food, drink and catering industry in its members' magazine "Akzente", issue 4/2006. With this concept, which is protected as utility model and now generally applied by Huppmann, a new standard in the prevention of accidents in vessels is reached. Of course the safety guidelines, including, among other things, DIN EN 60 204-01 and DIN EN 954-1 for safety-related parts of control systems, also apply to brewhouse plants. According to the EU Machinery Directive 98/37 EC, protective equipment in the brewhouse is designed to "protect people working in the sphere of dangerous movements and other mechanical hazards of machinery against these hazards, particularly in case of faults." The electrical control system must be designed in such a way that it protects the operators and the maintenance personnel against negative consequences, even in case of failures or faulty behaviour of components.

The new safety concept is based on the hazard analysis and the risk assessment for brewhouse plants according to DIN EN 1050 and DIN EN 954-1 with the classification in category 3 of the safety-related parts of control systems. Category 3 is defined as follows: "If irreversible injury to the operating personnel can occur, a simple fault in the switchgear must not lead to the loss of safety." With the new design it was ensured that all safety-relevant electrical components are certified for category 3.

The article describes the special features of the new safety concept. If you wish to order this article, just contact us.

Mixing methods combined by the tandem process

Whatever the task, from premix preparation to the preparation of components in very small quantities precisely in accordance with the recipe, GEA Diessel's tandem mixing equipment ensures that finished syrup is constantly available from the tandem vessels. Extremely suitable for the processing of solid and liquid components, it provides for rapid and loss-minimising product changes and minimum space requirements for high starting volumes.

The advantages of the rapid concentrate starting of the batch mixing system type DIMA[®]S and the high blending capacity of the continuous in-line blending system type DICON[®] are combined by the tandem process. Two superposed vessels assume the functions of both the mixing tank and the storage tank. A DIMA[®]S system with a flow rate of approx. 2500 l/h supplies the upper vessel with the different concentrates. For rinsing purposes, a small volume of beverage water is pushed through the pipeline between the DIMA[®]S system and the tandem vessel.

An agitator ensures good mixing of the concentrates in the upper tandem vessel. The way into the lower vessel is opened when the stirring time has elapsed. By gravity the concentrate is carried into the lower vessel where it is made available to a downstream DICON[®] system (continuous). In the DICON[®] system, beer is mixed with beverage water, sugar and concentrates. A new preparation of the same concentrates is immediately started in the upper vessel. Generally, the extraction from the lower tandem vessel takes considerably longer than the new preparation of concentrates in the upper tandem vessel. Consequently, a continuous function of the whole system is guaranteed.

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Brewhouse expansion at Lees Brewery in Manchester/UK

If you want a job doing properly, you call in the experts. If you want to produce lager to the highest standards, you call in the specialists from Germany. That's why pioneering family brewer JW Lees of Middleton Junction in Manchester is working with Huppmann AG to upgrade its brewhouse facility. The ambition is to produce lagers by Easter 2007 that wouldn't feel out of place at the Oktoberfest in Munich later that year.

Giles Dennis, Head Brewer at JW Lees, explains, "to survive and prosper in today's market we need to produce the beers that people want. We chose Huppmann not just because of their excellent track record but also because of their determination to help us deliver superior lagers to our customers, produced at our "state of the art" brewing plant."



Huppmann Regional Sales Manager John Middleton and Head Brewer Giles Dennis signing the contract in the brewery's board room



Mobile metering system with electromagnetic flow meter and quantity preselection

Mobility in all fields of metering

Mobile metering units with automatic switch-off enable the automatic transfer of liquids in breweries. GEA Diessel has the right kind of equipment for both volumetric metering (by litres) and mass flow metering (by kilograms). Especially suitable for plants with varying metering applications at changing locations. Sturdily built to do a different job every day. Typical fields of application are filling, dosing, bottling, receiving and delivery of liquids.

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The technical advantages of ECO-MATRIX® at a glance:

- Simple and quick to install.
- Reduced space requirement.
- Short tank outlet pipes with minimised product losses.
- No dead ends at the tank outlet.

ECO-MATRIX® - the efficient piping concept for process plants

Production processes in modern breweries are increasingly determined by economic factors and product quality requirements. There is a continual requirement to improve product quality, increase operational safety and, at the same time, reduce capital and operating costs and minimise product losses. Quite a challenge! The response to this challenge is ECO-MATRIX®.

In comparison to ordinary systems, ECO-MATRIX® considerably reduces the number of instruments required and allows for essential optimisation of process sequences. This helps you to manage your capital investment and provides a much shorter payback period.

ECO-MATRIX® is a new piping system from Tuchenhausen in which the process pipes and process valves are connected directly beneath the tank outlet. The process valves may be arranged either laterally at the tank outlet tree, at the tank cone or vertically at the tank bottom flange. This innovative system significantly reduces the length of piping required, thus minimising product losses and the risk of contamination during the brewing or distribution processes.

More efficiency and cost reductions will be possible with a newly developed concept for the operation of tank storage systems in pipe systems for liquids (flow diverting).

Wide variety of automation solutions for breweries

Huppmann and Tuchenhausen Brewery Systems, the two integrators of comprehensive brewery solutions in the GEA Group, also complement one another in the field of brewery automation. Whether with brewmaxx®, PCS 7® or Braumat Classic®, the two GEA companies together can provide all current solutions for process automation, management execution systems and also the link to the ERP level. In addition, due to the close cooperation with the manufacturers, they have a very detailed solution competence in the respective system.

OTAS® - the automation systems for the future



Together, Siemens Automation and Drives (A&D) and Tuchenhausen Brewery Systems want to develop industry-specific operating systems for breweries based on Siemens' Simatic PCS 7® process control system and Tuchenhausen's process engineering know-how. The aim is to provide a system for general use in the market that can be customized to meet each brewery's specific needs.

Tuchenhausen Brewery Systems GmbH is a systems integrator with particular

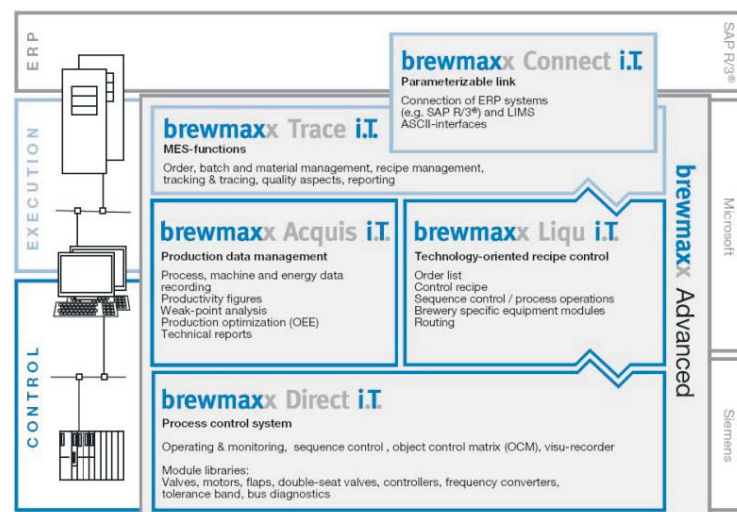
Yeast management in the new PCS 7®

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expertise in process engineering, especially in the brewery and beverage industry. It supplies universal and turnkey automation systems covering all automation and information technology from field management level right up to corporate management.

brewmaxx[®] Advanced: Process control technology with integrated MES functionality

On the GEA Group stand, Huppmann and ProLeiT will jointly present the brewmaxx[®] process control system. brewmaxx[®] has been extended with comprehensive MES functions. The new brewmaxx[®] Advanced provides MES functionality as integrated functional scope of process control technology. Special highlights are a central order specification, graphical recipe handling, comprehensive materials management with batch tracking and a powerful report system. The possibility of data exchange to ERP and LIMS using standard interfaces is also provided.



brewmaxx[®] Advanced provides a package of MES functionalities

Imprint

Huppmann AG, 97318 Kitzingen, Germany, Phone: +49 9321 303-0, Fax: +49 9321 303-603,

e-mail: sales@huppmann.com, www.huppmann.com, Editor: Dr. Thomas Bühler

Contributions: Dirk Baumgarten, GEA Diessel; Kristina Bøe, Jürgen Henke, Tuchenhausen Brewery Systems; Gottfried Hochfellner, Proleit; John Middleton, Frank Kieser, Thomas Plescher, Huppmann;