SIEMENS

Background information

Nuremberg, October 02, 2018

BrauBeviale

Siemens at BrauBeviale 2018

- "Digital Enterprise Implement now!" the motto for this year's booth
- Decisive competitive benefits for large and small businesses with Digital Enterprise
- Braumat 7.5 process control system, specifically tailored to the whole life cycle of the brewing process
- Data capture and evaluation in the MindSphere IoT operating system: specifically, MindApp for intuitive analysis of the relevant metrics

Not every beer is the same. Thanks to different ingredients, temperatures, fermentation times and process steps, there is an enormous range of beers. This is equally true for multi-national businesses with many brands and small craft beer breweries with many recipes. They have one thing in common and that is to deliver the highest possible quality so that they can satisfy their customers – irrespective of how complex the brewing process may be. Increasing cost pressures and fluctuating seasonal demands pose further challenges. By using a digital twin, all the processes in the recipe, right to the point of bottling, can be simulated in a completely digital environment, both realistically and down to the finest detail. This allows breweries to test and optimize their processes, whatever the complexity, until they can produce the actual beverage efficiently, flexibly and to an optimum quality.

At BrauBeviale 2018, from November 13 to 15, Siemens is demonstrating how the brewing industry can benefit from digitalization (Hall 7, Booth 7-419). Siemens has created a fully integrated product and solutions portfolio tailored to the specific demands of this sector which has already successfully proven itself in practice for many businesses. Siemens is showing how both large and small businesses in the brewing industry have achieved decisive competitive benefits using the Digital

Enterprise solutions package under the banner of "Digital Enterprise – Implement now!" Irrespective of the volume produced, the priority is always to produce beverages of the highest quality. The recipe for success is based on data: Starting with the recipe for the beverage, across the whole brewing process to the point of bottling, perfect virtual images of the relevant process step are produced by end-to-end digitalization.

The Siemens Simatic IT R&D suite allows breweries to produce a digital twin of their future product at the research and development phase. This contains all the relevant data and thus allows the subsequent processes to be simulated under highly realistic conditions in order to test the processes and to adhere to quality requirements. To this end, Siemens offers the PLM Plant Simulation software which allows production facilities to be tested without disrupting actual production. This generates optimized processes which produce greater flexibility – and thus increase competitiveness.

At BrauBeviale 2018, Siemens is showing how important data is to actual production. The whole life cycle is covered by the Siemens Braumat 7.5 process control system which is tailored to the brewing process. From its intuitive recipe system, through efficient process overview, to vat management and tailored reporting systems, the combination of Braumat and the Simatic S7-1500 Advanced Controller simplifies the process and guarantees beer of a constant quality. The Simatic PLC and Simatic WinCC visualization system provide transparency in the bottling process as well as efficient control of production.

This produces a digital twin of both the performance of the process and the product which allows continuous optimization – right back to research and development. The performance data is used as the basis for further improvements in the recipe. Data is captured and evaluated using the cloud-based, open IoT operating system MindSphere and a special MindApp for intuitive analysis of the relevant metrics. Visitors to the fair can experience every step of this at the Siemens booth through interactive touch screens and models. The comprehensive Siemens hardware portfolio will also be on display, including HMIs, industrial communication, power supplies, control products, process instrumentation, the service portfolio and much, much more.

Further information at

https://www.siemens.com/global/en/home/company/fairs-events/braubeviale.html

www.siemens.com/global/en/home/markets/food-beverage.html

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