

*Bosch Packaging Systems AG –Packaging technology pioneers*

# Ready for the pharmaceutical industry with zenon

Following increasing sales in the pharmaceutical sector, the machine manufacturer Bosch Packaging Systems AG required a solution for the process control technology and visualization for its packaging equipment. As part of a comprehensive evaluation, more than 20 HMI/SCADA systems were subjected to meticulous analysis. The resulting decision was the selection of zenon from COPA-DATA.



Bosch Packaging Systems AG, a subsidiary of Bosch Packaging Technology based in Beringen in Switzerland, is a global leader in the development, manufacture and sale of packaging and handling systems. Their repertoire includes flexible robotic solutions for varied products such as foodstuffs, animal feed, health and hygiene articles and pharmaceuticals. The packaging technology specialist has 660 employees in over 80 countries on all continents. Previously, Bosch Packaging Systems was primarily active in the Food & Beverage sector, but it is now increasingly supplying the pharmaceutical sec-

tor and also provides professional system engineering for major pharmaceutical projects.

## **UNAVOIDABLE REQUIREMENT: FDA COMPLIANCE**

For applications in the Food & Beverage and luxuries sectors, Bosch Packaging Systems' existing HMI system had been satisfactory—until now. As a result of their strategic decision to increase engagement in major pharmaceutical industry projects, a new solution was required that would correspond to the strict official requirements of the pharmaceutical sector. Their requirements from the new process control system and visualization were clear from the start: the new system must fully meet the requirements of regulation 21 CFR Part 11 of the American Food and Drug Administration (the FDA) and be GMP and GAMP compliant.



*The production display informs the user at Bosch Packaging Systems about all relevant parameters. The upper screen section shows information on the product dimensions (left) as well as machine speed (right). The user can use each input field (center of screen, left) to make offset corrections to the product or foil positioning.*

The existing system, based on WinCE, was not able to meet these requirements. The Bosch Packaging Systems management consequently decided to evaluate alternative systems. Their expectations were high: on the one hand, Bosch Packaging Systems hoped to be able to directly influence product development; on the other hand, they wanted to achieve double digit percentage cost savings. Additional criteria in the decision-making process were more rapid and simple engineering for customer projects and the scope for a variety of individual adaptations. More than 20 different software systems from well-known international manufacturers were scrutinized and assessed as part of the evaluation. From this selection, Bosch Packaging Systems ultimately chose zenon from COPA-DATA.

## WINNING OPENNESS AND FLEXIBILITY

Pascal Witprächtiger, Manager of Software Development and Construction at Bosch Packaging Systems AG, explains the reasoning behind the decision: “We decided on zenon because it is an open system that offers all the interfaces we require for the future. Our customers are looking for complete solutions that can be individually adapted. As an independent system, zenon meets this requirement. It can communicate with other components without problems and, thus, closes existing gaps in the line management. Because zenon is so simple to configure, we can also meet special customer requirements. Additional modules

are licensed as required and functionalities can be expanded. Thus, the applications remain flexible and important decisions about functionality and scope can be made by the customer. Our expectations in terms of cost savings have also been met. Firstly, as a result of the new system’s potential for optimization and, secondly, thanks to zenon’s hardware-independence. Due to the fact that zenon is not bound to particular hardware components, we can open up competition amongst the manufacturers of touch screen panels, which has cost benefits. Another important factor in our decision-making was the company supplying the software. COPA-DATA has international subsidiaries and we can look back over their corporate history, which spans more than 20 years. This gives us security and means we can trust that we are investing in a stable and long-term business relationship.”

With its product philosophy of setting parameters instead of programming and its core values of consistency, independence and compatibility, zenon has been following a somewhat unconventional path since the start of its development. A modular construction, simple configuration, open communication via over 300 of its own communication protocols and adherence to international standards guarantee a high degree of freedom. Lars Krause, a software engineer at Bosch Packaging Systems says: “Generally, the applications that our end customers use can be very different and individual – despite similar industry-related requirements. At one customer we might find control units from



In the “Project Management” screen, the main settings for the current project are adjusted. For example: fading main menus in or out, selecting the language or unlocking special functions such as Remote Access or forced login.

Allen Bradley, then Siemens Simotion or Bosch Rexroth with another. However, usually there is a mix of different equipment from different manufacturers – including control units, PCs and operating panels. The greatest challenge is ensuring reliable and secure exchange of data between all these various devices. With zenon, we can provide our customers with a product that overcomes this challenge and meets all their legal requirements.”

#### COOPERATION LEADS TO SYNERGY

Bosch Packaging Systems uses zenon mainly in two areas of business: firstly, for horizontal hose packaging machines, storage solutions and distribution systems and, secondly, in the field of top-loading, cartoning and Delta robotics. Pascal Witprächtiger concludes: “COPA-DATA has proven to be a strong partner. It has taken on board our wishes and, in the most recent version of zenon, it has integrated some of them as new developments into its product release. For us, it is especially important to be able to contribute to ongoing product development, but without creating special solutions that don’t aim to serve the whole industry.”

“As part of our comprehensive evaluation, we have assessed and evaluated more than 20 systems from different manufacturers. Ultimately, zenon was the clear winner.”

PASCAL WITPRÄCHTIGER,  
BOSCH PACKAGING SYSTEMS AG