

Industry: Packaging /// Food & Beverage

Products Used: Modular PLC /// HMI /// Software /// Inverter

European packaging standards gaining acceptance in Japan

KHS GmbH is an international manufacturer of filling and packaging systems for the beverage, food, and non-food industries. Together with Mitsubishi Electric Factory Automation it has developed a new packaging machine for the Japanese market. At its plant in Kleve, KHS produces packaging technology with the focus on state-of-the-art consumer packaging. Dirk Langanki, electrical engineering manager at KHS, stressed: "This joint project is a great opportunity for us to gain a foothold in Japan, as very few comparable machines are currently in operation there." Thanks to its collaboration with automation specialist Mitsubishi Electric, which is based in Japan, KHS has the chance to become a real trendsetter there.



The packaging machine, known as the KHS Innopack SP, brings to the Japanese market a packaging machine constructed in Germany for which the necessary local service can be supplied. "It must be possible to maintain the machine locally over its entire service life. The fact that components from Mitsubishi Electric are used in our machine designed especially for the Japanese market is an immense help with local maintenance," explained Reinhard Wilzeck of KHS's electrical design division, outlining the advantages of working with Mitsubishi Electric.

Among other items, Mitsubishi Electric supplied its iQ platform, a GT16 operating terminal from the GOT1000 series, its GX Developer software and an FR-D700 frequency inverter. KHS is extremely satisfied with the software and hardware performance

of the components installed. The inverters used are also operator-friendly and easy to integrate. However, overall KHS is most enthusiastic about the GT16 operating terminal. "The Mitsubishi product is ideally suited to this project. I have never seen such fast visualisation before," commented Wilzeck in praise of the terminal. The GT16, which can be produced to customer specifications, provides detailed insights into the diagnostics and control sequences of the machine. Its TFT monitor measuring up to 15 inches with touch-sensitive human-machine interface permits a flexible, transparent representation of the machine processes, with resolutions of up to 1024x768 pixels and 65536 colours. The main and graphics processors, which have been newly developed for the GT16 models, ensure swift reaction times and rapid image formation in combination with special cache mechanisms. Apart from the speed and image sharpness of the GT16, Wilzeck has positive comments about the functions and ease of operation of the panel: "The mechatronic engineer doesn't need to have had any training – he can handle the equipment intuitively."

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(Dirk Langanki, KHS Electrical Engineering Manager)

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Thanks to the use of Mitsubishi components, the KHS Innopack SP can be integrated easily into complete lines, as it is compatible with the machines both up- and downstream. "This pays off in servicing," said Wilzeck. Launched in 2009, the joint project with Mitsubishi Electric Factory Automation was realised in less than six months.

The KHS Innopack SP has now been set up in Japan to present the "new" type of packaging for the conditions there to local market players, and to test consumer acceptance of the new packaging.

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