Beckhoff PC Control optimizes pallet and warehouse management

# PC-based control sweetens production processes for Bauli

Renowned Italian confectionary products manufacturer Bauli S.p.a. has subjected its pallet and warehouse management to a "sweet" revamp. The introduction of a PC-based controller has optimized the automatic label printing and pallet production count at the end of the production line. A Beckhoff CP62xx Panel PC ensures greater reliability in tracking the ongoing production and supplies precise inventory information.

ment make the best commercial and strategic decisions," explains Giuliano Bonizzato, systems coordinator at Bauli.

### Reliable facts and figures promote efficiency

The aims of the measure were to improve the tracking of pallet assembly and individual batches, to reduce stock level uncertainties and to optimize the use of the workforce at the end of the production line in order to improve working processes. The whole system was to rely on an open and distributed control architecture.

The PC-based control, to which the three palletizing and wrapping lines were converted, guarantees absolute reliability in the production quantity count and of the warehouse input. It also simplifies the automatic pallet label printing process by eliminating all the print codes while new operating panels facilitate system display and monitoring.

### CP62xx Panel PC makes operation simple

In the previous system, delays and issues relating to the management of machine downtimes were exacerbated by the fact that no direct tools for assessing the situation and no display for immediate handling of the problems in the production line were available. This has now been rectified. A Beckhoff CP62xx Panel PC displays summary information about the ongoing production and the number of pallets

Bauli commands about 50 % of the market share in Italy for seasonal confectionary products (Christmas and Easter) and 11.9 % in the case of Easter egg products. In recent years the company has undertaken various restructuring and improvement measures to optimize its internal production processes. Bauli has been supported in upgrading of its warehousing division by Itworks S.r.l. from Ancona, Italy, a company with years of experience in monitoring and tracking systems, and by Beckhoff, its controller supplier. "In the past, the seasonal demand for our products and the related high staff turnover made troubleshooting and pallet production counting difficult. However, this information must be absolutely reliable to help the company's manage-

The Beckhoff CP62xx Panel PC displays information about the ongoing production and the number of detected pallets.

detected – and compares with the number of pallets specified for production. The touch screen Panel PC makes it easier to carry out troubleshooting even when faults occur during the production process. For export purposes the production order can be complemented with formatted data according to the country of destination.

The touch functionality of the Panel PC makes it easier to rectify errors that may occur during the production process. If the system is unable to recognize the product code during product identification, the pallet is stopped at the winding station. In order to complete the mandatory registration for the process to continue, the operator has to enter the product code manually.

If the scanner does not recognize the product code during a pallet production count, the affected pallet is stopped in its tracks immediately. This prevents it from entering the warehouse. The pallet readers are situated together with I/O terminals at the final station with the roller conveyor to prevent unauthorized removal.

### EtherCAT, the efficient network

Beckhoff EtherCAT Terminals have been used throughout all processes. The system-wide, open control platform from Beckhoff with unlimited programming flexibility enables the simple integration of all components from the Bauli host PC via Ethernet and the monitoring PCs to the field level. For example, the printer for the pallet labels are connected directly to the distributed serial terminals in the EtherCAT I/O system.

A lot has changed compared with the previous system, including identification of the palletized product, transfer of the information to the Bauli host, preparation of the pallet label, identification of products intended for foreign markets, input prompts for mandatory pallet label data, production counting, and fault alarm management. Gilberto Biasi, production personal manager at Bauli, is delighted with the new control system: "The system hardware with its touch screen and PC makes the operator's work much easier while reducing costs."

Bauli S.p.a.    **www.bauli.it**
Itworks S.r.l.    **www.it-works.it**
Beckhoff Italy    **www.beckhoff.it**