BALLUFF

Compatible, secure and efficiency enhancing

RETURN TO TOP FORM WITH MACHINE RETROFIT

Compared to a costly and time-consuming replacement of existing systems by completely new investments, a retrofit can be an efficient and beneficial solution. Machines can be retrofitted to the latest state-of-the-art standards. Integrating a new machine into the existing process results in downtime and additional costs for test runs. Replacing obsolete components and adding new, technological innovations makes existing machines and entire plants competitive again. With a retrofit, you extend the service life of your old machine, ensure compliance with the latest standards, increase product quality, save energy, and increase efficiency. At the same time, you create the basis for the digitalization of your production.

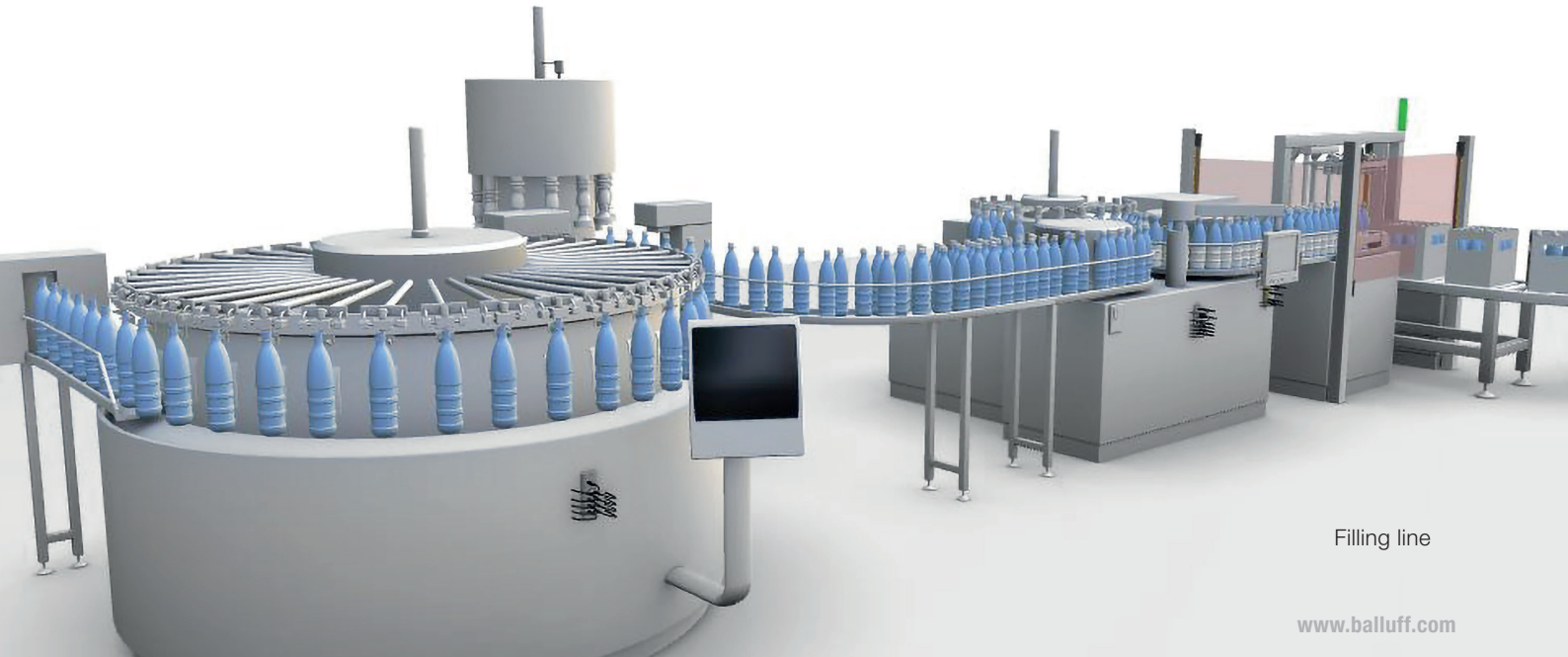
Examples of how Balluff supports you in retrofitting?

Sliding contacts are often used in ring fillers, which wear out due to their mechanical stress. This weak point can be eliminated by implementing inductive couplers, with which data and energy are transmitted without contact. Thanks to their extended operating temperature range of –5...+70 °C and their robust stainless steel housing, our inductive couplers can cope with even the most demanding environmental conditions.
They feature an IO-Link interface that enables a frictionless, transparent and very fast exchange of data between an IO-Link device and the IO-Link network module. A unique feature is the second IO-Link channel, which can be used for process and diagnostic data and, thus, for status monitoring.

The inductive couplers are also part of the innovative Smart Automation and Monitoring System (SAMS) and have smart features built in. In addition to process and condition data, these also provide you with valuable diagnostic data for in-depth analysis, deriving trends, and for better planning of product replacement and maintenance.
Accurate and fast level measurement is also important during filling. If new sensors are used for this purpose in a retrofit, they must be able to be easily and reliably integrated into the existing network topology.
Our BTL-SF level probe measures precisely in the micrometer range and enables high filling accuracy. Thanks to its special hygienic design, it also meets the strict requirements of the food industry. Here, too, data is transmitted via the IO-Link standard. Retrofitting your system generates more data, which is transported quickly and reliably via IO-Link for subsequent processing. This takes you to digital production. The use of a network module as well as safe I/O modules, simplifies the network structure. In addition, fast error detection is supported and you reduce the unplanned downtime of your machine.

Your advantages

- Contactless and wear-free power and data transmission (up to 1.5 amps continuous output current)
- Second IO-Link channel for process and diagnostic data
- Smart features directly on board for condition monitoring, predictive maintenance and multi-functions
- Continuous and precise level measurement in hygienic applications
- Compatible and safe integration of IO-Link into the existing topology



Filling line

PORTFOLIO



	BNI00EK	BIC0086	BIC0087
Dimension	68 × 36.8 × 226 mm	Ø 30 × 85 mm	Ø 30 × 85 mm
Signal type		bi-directional	bi-directional
Transmission distance		0...5 mm	0...5 mm
Transfer rate		COM2 (38.4 kBaud), COM3 (230.4 kBaud), Diagnostic channel: COM2 (38.4 kBaud)	COM2 (38.4 kBaud), COM3 (230.4 kBaud)
Process data IN		0…32 bytes, diagnostic channel: 2 bytes	0…32 bytes
Process data OUT		0…32 bytes, Diagnostic channel: 1 byte	0…32 bytes
Housing material	PPS	Stainless steel	Stainless steel
Connection	Slots, 8× M12×1-Female, 5-pin, A-coded	Connector, M12×1-Male, 4-pin	Connector, M12×1-Male, 5-pin
Ambient temperature	–25 °C...70 °C	–5 °C...70 °C	–5 °C...70 °C
Function		IO-Link	IO-Link
IP rating	IP68, IP69K	IP67	IP67
IO-Link version	1.1		
Digital inputs/outputs	16× PNP, Typ3/16× PNP		
Operating voltage Ub	18...30.2 VDC		
Interface / IT Interface	Profinet I/O / REST API		


	BCC0JRZ	BTL7-CE-SERIE-DIGITAL
Operating voltage Ub	250 VDC/250 VAC	10...30 VDC
Cable	TPE-V gray, 2 m	
Connection 1	M12x1-Female, straight, 5-pin, A-coded	
Connection 2	M12x1-Male, straight, 4-pin, A-coded	
Number of conductors	4	
Cable temperature, fixed routing	–50...105 °C	
Cable temperature, flexible routing	–25...105 °C	
Interface		Digital pulse
Measuring length		25...2000 mm
Ambient temperature		–40...85 °C
Mechanical configuration		Fastening M22 threads
IP rating	IP67, IP69K	IP69K
Approval/Conformity	CE, Ecolab, EAC, WEEE	I = S, KA: CE + cULus + EAC + WEEE I = FA: CE + EAC + WEEE

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