Food and beverage industries
Machine safeguarding products
Continuous operation and sustainability
Food and beverage processing plants require a high sustainability level from their electrical systems to avoid costly production shutdown and batch loss.

ABB JOKAB SAFETY offers products and systems designed to operate in the harshest processing environments. Our systems will stand up to extreme hot or cold temperatures and high-pressure hose down cleaning with high-temperature caustic chemical solutions that often shorten the life of expensive equipment.

Machine safety and industry today
The need for machine safety has become one of the most important concerns for manufacturers throughout North America today. The necessity to protect employees from injury and the fact that there are standards that must be met are realities that can no longer be ignored.

In an industry where the demands on cleanliness, traceability, operational reliability and productivity are high, it is especially important that machine safety is integrated in a natural way. Whether at the planning stage or retrofitted to an existing process, we can offer turnkey solutions for the food and beverage industry. We can demonstrate that safety measures do not affect productivity in a negative way, but contribute to its improvement.

Machine safety — productivity — profitability
Productivity and machine safety are not contradictory terms. ABB JOKAB SAFETY knows that machine safety solutions that are properly designed and executed will increase productivity and profitability. By engineering safety systems in a smart way, the mode of operation will not need to be changed to meet the requirements that safety sets. Instead, this creates a system that is operational-friendly and takes into account the business and its productivity objectives.
Safety products for mixing machines

- Eden is a non-contact, non-magnetic Category 4, SIL 3, PLe safety door sensor with an IP69K washdown rating.
- High misalignment tolerance of up to 15 mm +/- 2 mm makes Eden more reliable than conventional switches.
- LED and PLC output for device and system status makes setup and troubleshooting quick and easy.
- Available with integrated independent illuminated reset function for local control and notification of which door needs to be reset.

- Vital 1 Controllers allow up to 30 devices to be wired in series, single channel and maintain Safety Category 4, SIL 3, PLe.
- LED’s on all field devices give immediate diagnostics of both the device and the overall system.
- Vital reduces troubleshooting time, wiring time, and increases the level of safety.

- Robust stainless steel 316, IP69K emergency stop buttons for harsh washdown, food safe packaging applications.
- Bright dual function LED diagnostics allows for quick and easy identification of activated devices increasing machine uptime.
- Available in 24VDC, 115VAC or 230VAC LED voltages.
Safety products for filling machines

— Quick disconnect Smile emergency stop devices reduce costly installation time. In addition to being pre-wired with a 5 pin M12 connector, Smile also comes with center mount holes and mounting hardware.
— LED and PLC output for device and system status makes setup and troubleshooting quick and easy.
— No additional contact blocks or pilot devices required. Smile reduces inventory costs.
— Multiple command functions can be integrated into a single Smile device reducing install time and inventory costs.
— Safety Mats are used for safeguarding areas around hazardous machines.
— Can be controlled using an ABB JOKAB SAFETY Relay, the Vital controller, or the Pluto safety PLC.
— Available with either an integrated ramp trim, or aluminum ramp trim.
— An anti-slip surface is implemented into the design.
— Designed to IP65 standards.

— Robust modular fencing for quick and easy machine guarding applications.
— Quick Guard panels can be customized in the field with only a pair of bolt cutters which reduces design time.
— No welding, drilling, tapping or painting required.
— ABB JOKAB SAFETY Products easily mounts with ready-made brackets and fasteners reducing installation time.
— Panels are manufactured in the United States for immediate delivery.
Safety products for sleeving machines

- Pluto Safety PLC allows for system zoning through multiple different switching outputs.
- Complex safety logic can be accomplished quickly with the easy to use, value added, Pluto Manager software.
- Damaged units in the field can be “hot swapped” with full program upload without the need of laptops, programming cables, programs, validation or passwords.
- One 45 mm wide Pluto can monitor up to 150 devices.
- The Pluto Safety PLC can eliminate multiple safety relays, thus reducing plant maintenance inventory.

- Integrated muting in Orion Safety Light Curtains for easy material transfer in and out of the cell without stoppages.
- Protective washdown enclosures protect against harsh packaging industry environments.
- Light curtains and enclosures are stocked in North America for quick delivery.
- All features are built into a single model which reduces plant inventory.

- ABB JOKAB SAFETY offers a complete assortment of ASi integrated products.
- ASi reduces long cable runs with its patented single cable connection to all devices and installation time is reduced due to the direct connect piercing of the ASi cable by the field devices.
- Immediate diagnostics back to the control system keeps systems running longer and activated devices addressed immediately.
Safety products for baking applications

- Knox safety lock is ideal for machines that have a slow stopping time or stored energy.
- Knox will remain locked during power loss and offers an emergency release from inside the cell for added safety.
- Robust construction with a stainless steel housing ideal for demanding environmental conditions.
- LED indication for lock status, door status and machine status helps with system trouble shooting and maintaining machine uptime.

- Safety rope pulls allow for long range E-Stop capabilities along conveyor runs.
- Available with dual head which eliminates needed components and reduces overall material and installation cost.
- Bright dual function LED diagnostics allow for quick and easy identification of activated devices increasing machine uptime.
- Available with rope kits and field installed E-Stop buttons.

- One universal safety relay can handle dozens of different safety devices which reduces plant inventory.
- LED diagnostics for each input channel as well as each output relay reduce troubleshooting time.
- High input impedance allows for long cable runs without signal loss or nuisance trips.
Safety products for food & beverage

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- Pluto Safety PLC gateways offer seamless handshaking of information between the safety system and the control system.
- Gateways allow bidirectional communication to all PLC platforms.
- Gateways are integral in modular safety solutions where machines may need to be changed, added to, or expanded, depending on the application.

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- Stainless steel 316, IP69K safety switch and emergency stop offering for harsh washdown applications found in many areas of the packaging industry.
- LED diagnostics allows for immediate device status for continued uptime.
- Product offering eliminates the possibility of food contaminates by eliminating plastics and paint in the design.

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- Safety rated port blocks reduce long cable runs which reduces installation time.
- All Tina 4A/8A safety port blocks offer independent diagnostics for each device connected.
- Quick disconnect allows for system modularity and versatility for design changes as well as last minute additions to the safety system.

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**ABB JOKAB can provide our customers with Machine Safety Services.**

- **Engineering** – Our experienced engineering staff designs and implements machine safety solutions.
- **Consulting** – Our highly trained personnel can identify opportunities to improve machine safety while reducing overall costs and adhering to relevant safety standards.
- **Training** – We can train your personnel to become more knowledgeable about risk assessment and machine safety applications.
Contact us

ABB
ABB JOKAB SAFETY Products
8155 T&B Boulevard
Memphis, TN 38125
Phone: 1-888-282-2123
Fax: 1-800-565-9302
Web: www.abb.us/jokabsafety