
LINE CARD

Food and beverage

Plant-wide solutions to optimize productivity, efficiency and uptime








Food and beverage











Plant-wide solutions

ABB understands the challenges our customers are facing in the food and beverage industry. We're focused on providing solutions that address the critical issues in every area of operation, so plant managers and operators can focus on plant sustainability, cost, quality, flexibility, safety and regulatory challenges across the production cycle. Our family of products and systems match specific application criteria from start to finish inside food processing areas, assuring the quality and reliability of food and beverage from power entry to robotic palletizing at the end of the line.

Mechanical, motions & machines

Product/offering	Benefits and features	Suggested applications
Picker robots 	Pick food products without human contact helping prevent contamination and improve food safety. The FlexPicker features motion control, short cycle times and precision accuracy. It has the ability to operate at very high speeds in anything from narrow to wide spaces with very tight tolerances.	<ul style="list-style-type: none"> • Meat applications • Produce applications • Grain processors • Bakery applications • Frozen food applications
Packing robots 	State-of-the-art high speed robotic packing technology for minimal human contact in the process to improve food safety. ABB's packing robots are compact, flexible and fast. These robots are applicable to and useful in any food and beverage application.	<ul style="list-style-type: none"> • Meat applications • Dairy applications • Produce applications • Bakery applications • Pet food products
Palletizing robots 	An impressive line of robots that palletize bags, boxes, crates, bottles and more for the food and beverage industry. They are able to rotate and lift heavy and large products at optimized speeds; some are the fastest palletizing robots in the world.	<ul style="list-style-type: none"> • Meat applications • Dairy applications • Produce applications • Bakery applications • Beverage applications
Drives & PLCs 	ABB offers a full line of variable frequency drives, ranging from micro drives for simple applications to industrial drives for increasing efficiency and demanding applications. Our drives and PLCs help run food and beverage applications from raw material handling, to processing and conveying, to packing and storage, without compromising quality.	<ul style="list-style-type: none"> • Food processing machinery • Unit handling & conveying • Pumps in breweries, dairy applications, etc. • Grain elevators • Irrigation • Livestock ventilation
Motors, bearings, gearing 	Our motor, bearing and gearing products have been engineered to comply with food safety guidelines and recommendations. These sanitary design considerations mean our products provide the ultimate solution for harsh environments.	<ul style="list-style-type: none"> • Severe washdowns in meat, poultry, dairy, etc. • Processing & packaging • Conveyor lines • Heavy-duty grain & sugar processing




Electrification

Product/offering	Benefits and features	Suggested applications
MV switchgear 	Arc and nonarc resistant, air insulated and gas insulated - ABB offers a wide variety of medium voltage switchgears for safe and reliable power distribution. External influences such as humidity, dust and vermin do not effect the performance of the switchgear.	<ul style="list-style-type: none"> • Dry processing facilities • Wet processing facilities • Sugar processors
LV switchgear 	ABB is the world's largest low voltage switchgear original equipment manufacturer. Low voltage switchgears enable safe and reliable power distribution and motor control solutions.	<ul style="list-style-type: none"> • Warehouses • Distribution centers • Bottling lines
Test switches & protection relays 	Quick and easy multi-circuit testing of switchboard relays and other instruments. These test switches and related test plugs have the features necessary for applications involving the measurement of individual currents and voltages associated with substation instrumentation and protection devices.	<ul style="list-style-type: none"> • Sugar processing • Wet processing facilities • Grain processing • Warehouses
Capacitors & filters 	Full portfolio of low and medium voltage capacitor banks and harmonic filters that enable customers to improve power quality and increase energy efficiency of their electrical distribution networks across their plants, resulting in reduced operational costs.	<ul style="list-style-type: none"> • Beverage & dairy • Bakery & confectionary • Grain processing • Animal processing
Power protection (UPS, AVC) 	Protect food and beverage facilities from disturbances in the electrical supply. With ABB's power protection in place, food and beverage product quality, safety and production are maximized.	<ul style="list-style-type: none"> • Grain processing • Bottling lines • Dairy applications • Sterile processes
Miniature circuit breakers 	ABB, the inventor of miniature circuit breaker technology, offers the largest selection of current-limiting, compact, DIN-rail mounted MCBs including solutions for the wind and solar PV markets and for AC and DC applications. ABB's MCBs feature thermal and magnetic trip units which protect against both overcurrent and short circuit faults, in industrial control panels as well as power distribution.	<ul style="list-style-type: none"> • Food processing machinery & equipment • Unit handling & conveying • Bottling lines
Soft starters 	ABB's soft starters increase a motor's lifetime by protecting it from electrical stresses. With many built-in motor protection features, your motor is safe in its hands. ABB's soft starters are also installation-friendly and can cut assembly and startup time by being easy to use and easy to learn.	<ul style="list-style-type: none"> • Pumps in breweries, dairy applications, etc. • Grain & sugar processing • Unit handling & conveying
Primary switch mode power supply 	The CP-C.1 range offers the latest technology in a compact construction of power supplies. Modern power supply units are a vital component in most areas of the food and beverage industry. ABB pays the utmost attention to the resulting requirements. Innovation is the key to a substantial enlargement of our power supply product program.	<ul style="list-style-type: none"> • Grain & sugar processing • Bottling lines • Dairy applications • Food processing machinery
Motor Control Centers (MCCs) 	Our MCCs are designed for the highest degree of safety and reliability while allowing for the maximum ease of use. MCCs provide food and beverage users with the capability to maximize their uptime in all environments.	<ul style="list-style-type: none"> • Unit handling & conveying • Compressors & air handling • Pumps in breweries, dairy applications, etc.
Condensation solutions 	ABB's condensation solutions including type 316 stainless steel drain adaptors and ball valves can be installed in stamped enclosures to drain moisture and ensure food safety.	<ul style="list-style-type: none"> • Bottling lines • Wet processing facilities • Severe washdowns in meat, poultry, dairy, etc.

Electrification (continue)

Product/offering	Benefits and features	Suggested applications
Vibration resistant fittings & connectors 	Vibration threats are minimized with ABB's Strain Relief Fittings, 90 Degree Fittings, TITE-BITE® Connectors and more. These solutions resist vibration, allow for lateral and axial movement and are available in a variety of materials and temperature ranges.	<ul style="list-style-type: none"> • Food processing machinery & equipment • Dairy applications • Distribution centers • Unit handling & conveying
Stainless steel conduits 	ABB's stainless steel and sand cast aluminum conduits are perfect for food and beverage applications because of their corrosion resistant properties. Sand cast aluminum is especially lightweight, easy to use and has superior corrosion resistant properties. Our portfolio of products are suitable in harsh environments and can even be liquid tight.	<ul style="list-style-type: none"> • Bottling lines • Wet processing facilities • Severe washdowns in meat, poultry, dairy, etc. • Food processing machinery
Russellsoll® interconnection systems 	Complete line of interconnection systems exceeding ULR and IEC 60 309 and IP67 ratings. Range 20 Amp to 600 Amp, durable brass pins, stainless steel hardware and corrosion-resistant housing materials such as PBT. Reliable connections in washdown, corrosive and hazardous environments.	<ul style="list-style-type: none"> • Food processing • Bottling lines • Wet processing facilities • Dry processing facilities • Severe washdowns in meat, poultry, dairy, etc.
SS Cable Tray & SS One Piece Tray 	Stainless steel cable tray offers great yield and creep strength at high temperatures. It's resistant to chemicals at elevated temperatures and has maximum corrosion resistance. The system's open design eliminates moisture buildup and reduces damage to cable insulation during installation.	<ul style="list-style-type: none"> • Food processing • Bottling lines • Wet processing facilities • Dry processing facilities • Severe washdowns in meat, poultry, dairy, etc.
Rotary disconnect switches 	ABB offers the widest and most compact range of disconnect switches in the market. These enclosed manual motor controllers are rotary operated and are suitable for wet and corrosive environments.	<ul style="list-style-type: none"> • Motor lockout/tagout disconnect • Bottling lines • Wet processing facilities • Dry processing facilities • Severe washdowns in meat, poultry, dairy, etc.
Heavy duty safety switches 	The first maintenance free heavy duty safety switch is designed for a variety of food and beverage applications. Its robust design and maintenance free construction ensure smooth and reliable operations.	<ul style="list-style-type: none"> • Main disconnect device • Wet processing facilities • Food processing machinery • Corrosive environments requiring 316 acid proof stainless steel
SRX stainless steel enclosures 	ABB offers a complete line of NEMA 4X, Type 304 stainless steel enclosures that provides superior corrosion resistance in harsh and washdown environments. These enclosures are ideal for use as control panels for food and beverage processing plants.	<ul style="list-style-type: none"> • Milk & dairy processing • General food processing • Bottling lines • Brewery & wine processing • Bakeries
Surge protective devices 	Surge protective devices are designed to protect against transient surge conditions. Surge events can be caused by lightning or load switching and can cause immediate or intermittent equipment failure. ABB's SPDs are designed to protect a variety of applications including critical power facilities, renewable energy and food and beverage manufacturing from these surge events to ensure the highest level of power quality and reliability.	<ul style="list-style-type: none"> • Warehouses • Distribution centers • Food processing machinery & equipment • Unit handling & conveying • Bottling lines
Control panels 	ABB's control panels offer a wide range of features and functionalities for maximum operability. For example, the SMISLINE TP's modular IP20 touch proof bus assembly allows for simple reconfiguration and maintenance, reducing space and installation time. Design changes and future expansion are easily accomplished by connecting additional devices.	<ul style="list-style-type: none"> • Food processing machinery & equipment • Unit handling & conveying • Bottling lines • Power distribution panels





Power

Product/offering	Benefits and features	Suggested applications
Substations 	ABB's optimized turnkey substations transform and transmit safe and reliable electricity from conventional and renewable power generation plants to food and beverage facilities.	<ul style="list-style-type: none"> • Bottling lines • Warehouses • Sugar processors
Transformers 	ABB offers a complete line of both liquid filled and dry type transformers for the food and beverage industry. Our transformers have the specifications that the food and beverage industry require for their sensitive processes.	<ul style="list-style-type: none"> • Grain processors • Distribution centers • Bottling lines • Breweries
Microgrid 	Food and beverage facilities require constant, reliable power and ABB's microgrids do just that. We provide a full range of enabling technologies including conventional and renewable power generation, automation, grid stabilization, grid connection, energy storage, control technology, consulting and service for any need.	<ul style="list-style-type: none"> • Warehouses • Sugar processing • Grain processing • Distribution centers • Breweries




Industrial automation, measurement & control

Product/offering	Benefits and features	Suggested applications
ABB Ability™ Manufacturing Operations Management – Manufacturing Execution System (MES) 	Manufacturing operations management tailored to the food and beverage industry - from incoming raw material to finished product. MES delivers improved levels of operations efficiency, productivity, asset optimization and capacity with full traceability and product genealogy across the supply chain.	<ul style="list-style-type: none"> • Food manufacturing • Beverage manufacturing • Packaging & containers • Breweries & bottling lines • Dairy & protein processing • Ingredients & confections • Sugar refining & processing
ABB Ability™ Manufacturing Operations Management (MOM) – Process Intelligence 	ABB Ability MOM Process Intelligence turns data from your industrial plant into actionable information. It supports users working with the overall plant operations in the context of data analysis and reporting. It provides decision-making applications to view and analyze data, such as plant performance, create reports, connect to any data source and secure storage of process data. It connects to control systems and accesses historic data.	<ul style="list-style-type: none"> • Blending operations • Dairy & protein processing • Ingredients & confections • Breweries & bottling lines • Warehouse & distribution
ABB Ability™ System 800xA 	ABB Ability System 800xA is a Distributed Control System (DCS) and process automation platform for batch, discrete and continuous process flow environments including a wide range of I/O offering. 800xA provides extended integration to various industrial, hydraulic and electrical controls, safety systems, instrumentation, asset and device management, data visualization, power management, video surveillance and telecom systems, temperature and climate control systems, database historians and application systems. It included dedicated libraries for dairy applications, for sugar applications, for routing and CIP (Cleaning-in-place)	<ul style="list-style-type: none"> • Batch blending operations • Continuous process flow • Food manufacturing • Beverage manufacturing • Breweries & distilleries • Bottling & fill processing • Dairy & protein processing • Ingredients & confections
Freelance DCS 	Small to medium size (50 ... 1500 IO comfort size), "non-scary" DCS, easy to maintain with Formulation and Basic Historian. Freelance combines the advantages of DCS and PLC: the small footprint of a PLC, together with the full functionality of a DCS. The integrated environment simplifies engineering, commissioning, maintenance and fieldbus management.	<ul style="list-style-type: none"> • Continuous process flow • Food manufacturing • Beverage manufacturing • Breweries & distilleries • Bottling & fill processing • Ingredients & confections




Industrial automation, measurement & control (continue)

Product/offering	Benefits and features	Suggested applications
AC500 PLC 	AC500 Multiple fieldbus opportunities and motion control library support the food and beverage applications from raw material handling, to processing. Creating Solutions with PLC, HMI and Drives with one engineering tool.	<ul style="list-style-type: none"> • Food processing machinery • Unit handling & conveying (pick, pack, fill, material handling and labeling) • Pumps in breweries, dairy applications, etc. • Grain elevators • Mixing/blending • Bottling & fill processing
Panel 800 	User-friendly, intuitive and ergonomic operator panels for process automation systems that combine slim, space-saving dimensions with a comprehensive range of advanced functions.	<ul style="list-style-type: none"> • Batch blending operations • Continuous process flow • Food manufacturing • Beverage manufacturing • Breweries & distilleries • Bottling & fill processing • Dairy & protein processing • Ingredients & confections
CP600 and CP600-eCo, CP600 sanitary design 	Control panels with wide range of screen sizes dedicated for machines and systems requiring high operation performance, ease of use, versatile visualization and/or representative design.	<ul style="list-style-type: none"> • Unit handling & conveying (pick, pack, fill, material handling and labeling), • Pumps in breweries, dairy applications, etc. • Grain elevators • Mixing/blending • Bottling & filling machines • Packaging & palletizing machines • Sanitary design for industrial machines like cutters, mixers, grinders, emulsifiers for manufacturing of meat, poultry, seafood
SCADA 	Local process control is enabled by ABB's supervisory control and data acquisition technology. SCADA incorporates remote monitoring, maximizing power usage and more, enabling food and beverage facilities to operate optimally and efficiently. The control system provides users with a comprehensive view of the plant and can seamlessly consolidate and rationalize plant data.	<ul style="list-style-type: none"> • Blending operations • Batch blending operations • Packaging & containers • Breweries • Grain processing


Process automation, measurement & control

Product/offering	Benefits and features	Suggested applications
Sensors & analyzers 	ABB offers a full range of flow, pressure, temperature and level solutions certified for direct contact with food. The high levels of quality and consistency demanded in food and beverage applications call for not only accurate and reliable instrumentation equipment, but safe performance one can depend on.	<ul style="list-style-type: none"> • Pasteurization • Boiler houses • Water treatment • Mixing/blending • Control rooms • Filling lines • Evaporators • Cold storage
Recorders & controllers 	ABB has a wide variety of both paper and paperless recorders as well as single and dual loop controllers for the food and beverage industry. Our recorders feature both paper circular chart and the latest paperless video-graphic touchscreen technology. Our ControlMaster controllers provide the clearest and easiest to understand displays in the industry. Available in both panel and field mount, making food and beverage process control easy.	<ul style="list-style-type: none"> • Pasteurizers • Retort applications • Cold storage/freezers • Milk tanks/silo storage • Humidity monitoring • Carbonation control • Packaging
I/O clustering 	For communication between controllers throughout food and beverage plants, ABB's I/O clustering solutions enable connectivity for a wide range of process controllers from ABB as well as other suppliers. ABB's I/O system is highly modular and supports industry standard field bus protocols.	<ul style="list-style-type: none"> • Beverage & dairy • Grain processing • Dairy processing • Packaging • Bakery applications

Safety and protection

Product/offering	Benefits and features	Suggested applications
JOKAB safety products 	Our full line of JOKAB sensors, switches and other safety control devices have been engineered to operate in the harshest environments while complying with and many times exceeding machine safety standards. We offer machine safety products that are IP69K washdown rated and can be used in a wide temperature range.	<ul style="list-style-type: none"> • Bottling lines • Warehouses • Sugar processors
AG cable ties 	ABB's cable ties are innovative products made of FDA-compliant, fungal inert materials and are blended with bacteria-resistant additives. This new technology will vastly improve safety in food and beverage manufacturing environments making it easier for customers to comply with food safety regulations.	<ul style="list-style-type: none"> • Sugar processors • Wet processing facilities • Grain processors • Warehouses
Other safety & protection products 	Other ABB products that provide safety and protection in food and beverage environments include explosion proof lighting and enclosures as well as emergency lighting and central battery systems.	<ul style="list-style-type: none"> • Warehouses • Distribution centers • All F&B facilities from raw material allocation to distribution of the final product

Service

Product/offering	Benefits and features	Suggested applications
Service 	With a global installed base and domain expertise, our services improve operational efficiency, reliability and performance of your systems and equipment across the complete lifecycle while lowering environmental impact. ABB offers Global Support Centers providing 24/7 phone response, monitoring centers and on-line support.	<ul style="list-style-type: none"> • All F&B facilities including bottling lines, warehouses, sugar processors and more • ABB can service ABB products and competitor products

Talk to us

Our expertise in every segment, from sugar production to beverage bottling, means we understand that everyone's needs are different. We take the time to get to know your business and unique challenges before providing our recommendations.



Ready to talk?

No matter the challenge, when it comes to food & beverage, we can find the solution, together.

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