The future of Food & Beverage

To write the future of electrification in Food & Beverage, talk to us
Food & Beverage is changing

The Food & Beverage industry is under constant pressure to adapt and evolve to meet consumer demand. Manufacturers need to work at increasing production, variety, quality, and efficiency – or risk being left behind.

Electrification is fundamental in keeping up with the Food & Beverage industry's evolving practices. ABB's vast experience and broad portfolio means we are the partner that can power and digitalize your future. From source-to-socket, we ensure that your plant runs on safe, smart, and sustainable electrification solutions.

Find out how we can help you meet these industry challenges:

- Digitalization
- Safety
- Reliability
- Sustainability
- Efficiency
Electrification that connects your plant to everything

As pioneering leaders in digital solutions, we’re uniquely positioned to support your digital transformation. Our ABB Ability™ platform extends from device to cloud to enable comprehensive connection.

For a smarter plant:

- Remote monitoring & operations
- Energy management & predictive maintenance
- Cyber asset management
- Condition monitoring

---

Case study
Digitalizing a sugar plant for better energy management - Brazil

A sugar processing plant needed to improve power quality and efficiency in their plant, and stop costly and disruptive downtime. They turned to ABB for help, so they could avoid penalties from their power utility.

We optimized power usage with plant connectivity

Our solution was to digitalize the plant’s energy monitoring system with an authentic load-shedder combined with a customized substation management unit. This allows engineers to view feeders’ load profile and manage energy more strategically.

As a result, the plant received a return on its investment in less than seven months. With better power management, downtime was minimized and contracted limits were no longer exceeded. This meant the plant avoided costly penalties and significantly increased system performance.
Electrification to ensure plant safety for everyone

Plant safety is so much more than meeting food quality standards. It’s about implementing the best safety solutions across all aspects of production.

For a safer plant:

- Food safety
- Personnel safety
- Machine safety
- Electrical safety

A leading F&B manufacturer relied on ABB to transform its approach to sanitizing wall-mounted equipment. The traditional equipment offsets they used trapped food and water, creating a breeding ground for bacteria. Contaminated products can cost up to $30 million USD to be recalled. This manufacturer needed a new solution to keep their process clean.

ABB developed a new solution - the Bacteria Resistant Offset. With stainless steel material and a rounded-edge design, wall equipment can be easily removed for a more thorough cleaning process without creating gaps that trap debris.

We delivered an innovative sanitation solution

The result was a vastly improved standard of food safety. The high risk of contamination was removed, protecting consumers and eliminating the risk of reputational damage and product recalls.
Electrification that maximizes reliability

Production downtime can have a major impact, not only on costs but also reputation. We create plant-wide peace of mind by increasing operational predictability and guaranteed uptimes.

Case study
Preventing downtime and waste at a leading dairy facility - New Zealand

A dairy manufacturer that produces 22 billion liters of milk annually wanted to minimize production downtime. They turned to ABB for help to prevent short-term voltage sags that meant time and huge quantities of dairy products were being wasted.

We delivered a fail-safe supply

ABB’s solution lay in an active voltage conditioner. Its easy-install, compact design requires no energy storage, maintaining 99% operating efficiency. This solution mitigates voltage disturbances, prevents product waste and eliminates cut out over power quality events.

As a result, the protected area of the plant achieved maximized power efficiency, maintaining operations through five power quality events, saving around 28 hours of downtime each time and returning on investment in just four months.
Electrification for a plant that’s truly sustainable

Global demand for greener production lines means sustainability is essential, both for the planet and your bottom line. We can help you improve efficiencies, reduce downtimes and meet your sustainability goals.

For a sustainable plant:

- Energy efficiency
- E-mobility
- Digital solutions

Case study

Launching eco-friendly power solutions for a global dairy manufacturer – Middle East

One of the world’s leading F&B manufacturers wanted to kickstart their renewable energy program and reduce a heavy dependence on diesel generators. Located in one of the world’s harshest climates, the plant needed a renewable solution that could function in extremely high temperatures.

We powered a cost-saving renewable solution

We implemented a customized plug and play renewable solution, specially designed to withstand extreme weather conditions. In common with all ABB solar solutions, project risk and expense were significantly reduced by pre-testing all equipment in our factories and shipping to site in one unit.

Our complete solution provided energy availability from a single source, saving the atmosphere from 9800 tons of CO₂ every year as well reducing their energy bill, providing greater profitability and self-reliance for the customer.
Electrification that optimizes efficiency

Whether you’re looking for energy, equipment or process efficiency, our vast portfolio and expertise can make it happen. Our solutions ensure fast, cost-saving decisions over energy usage.

For a sustainable plant:

- Smart protection & control
- Energy usage & control
- Overall equipment effectiveness
- Reduced total cost of ownership

Case study
Maximizing efficiency in cheese production – Italy

An outmoded Italian cheese producer talked to ABB about finding a way to maximize efficiencies in their plant. We partnered with them to transform and update their equipment, so they qualified for a digitally-driven 140% amortization scheme from the Italian government.

We helped visualize operations

We implemented a digitally enabled distribution control system. And, by connecting a range of LV and MV devices to the system, the customer is able to visualize energy demand and maintain system health across the plant.

As a result of our electrification solution, the customer can access actionable insights from across their plant, empowering them with the information they need to cut costs and avoid unplanned downtime.
Services for electrification

Plant assessment optimizes your investment

Safety
Comply with updated legal regulations and corporate policies
Improve safety for operational personnel

Energy Efficiency & Energy Management
Improve power quality & protection
Reduce energy consumption
Power factor correction
Efficient network protection
Efficient network balancing

Asset Performance & Optimization
Reliability & life cycle (obsolescence) management at optimum cost
Safe-guarding and life time extension of asset investment
Upgrading of assets to current state of the art
Improve efficiency of own maintenance personnel

Digitalization
Remote control & monitoring of assets
Power management
Making sites & assets fit for future
Performance benchmarking of sites
Improve efficiency of own maintenance personnel

Consultative Approach and on Site Support

MySiteCondition Asset and Risk Assessment
Electrical Plant Assessment to evaluate the status of the equipment and the relative risk of failure and/or malfunctioning to prevent damage to people and production stops

Network Analysis
Short Circuit Calculations, Arc Flash Studies. Advise on how the network is performing and the relative optimization

Training, Procedure Developments and Engineering Studies
Complete and modularized program to assist the customer in any phase to develop his own competence as well as advising on how to maintain and optimize the plants

Installation and Commissioning
Full assistance from the beginning and for all the next steps

Plant assessments = starting point for improvement actions
Distribution Solutions Service

Our offering to support the entire asset lifecycle

Life Cycle Services
Reliability

Support agreements (Power Care)

Replacement
End of life services
Retrofit
Upgrades
Extensions
Engineering and consulting

Advanced services (Smart Asset Management)

Installation and commissioning (I&C)

Training
Spares and consumables
Maintenance
Repairs

ABB Ability™
Predictability

Stand-up and maintenance services
Availability
Talk to us

We are the partner that can power and digitalize your future. Together we can ensure your plant reaches full production potential, preparing you to tackle tomorrow’s challenges, today.

Our industry-wide expertise has taught us that every segment has specific needs, from sugar production to beverage bottling. That’s why we take time to get to know your plant’s unique challenges before giving our recommendations.

Ready to talk?

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

CONTACT US