

# Designing the future of Food and Beverage

For complete digital solutions, talk to us

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Improve end-to-end performance

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- Optimize production processes
- Drive the future of smart and safe operations

# The Food & Beverage landscape is changing

Producers have never faced such intense pressures.

Maintaining a competitive edge in the complex Food and Beverage industry requires a strategic mindset. In addition to the pressures of serving a growing global population, each day you are faced with balancing fierce consumer demands. Your global customers expect quality, variety and clear sustainability practices — but all this must be delivered via optimized, cost-efficient production.

Producers need the flexibility to increase production, implement shorter batch cycles, and decrease time to market. Now, more than ever, a flexible and reliable approach requires a digital solution.

It's time to take control.



# Staying ahead of the trends

Analyzing the KPIs that matter most in a shifting consumer and economic landscape allows forward-thinking producers to address new consumer concerns around safety and sustainability and create more cost-efficient manufacturing processes.

No matter what challenge you're facing, ABB offers the expertise and broad portfolio to transform end-to-end operations, across power, automation, digitalization and beyond.



Safety Improving food safety through traceability Preventing product recalls Building consumer trust around allergens



Optimizing production & yield

# Facing your challenge in partnership

With our deep industry knowledge, integrated solutions and lifecycle services, ABB works with you at every stage. No matter where you are in your transformation journey, we work to meet your challenges together.



## The right approach

You can rely on ABB to unlock the right solution for your plant. We work in direct partnership with you to develop the services, solutions and processes to achieve your business goals.



### The right people

ABB works with a wide range of industry specialists and partners. It means that no matter your challenge, our technology and services can help. Our collaborative philosophy means everything we do is embedded with the experience and knowledge of the best people in your sector.

We can even reach beyond ABB to better meet your needs. We routinely work with technology partners, external machine builders, value providers, integrators, distributors and logistics sites to create integrated solutions that work for you.



## And the right expertise

As a global company, ABB is supported by 8,000 experts in R&D centers around the world. This gives you access to continual innovation and the latest developments in industrial automation.

# Operational Transformation Consultancy (OTC)

Through our structured Operational Transformation Consultancy (OTC) program, ABB offers your plant a comprehensive on-site assessment.

- A holistic analysis of your plant's strengths and weaknesses across power, automation and digitalization
- Identifying challenges and potential for operational improvements
- Providing you clear, actionable opportunities in our post-assessment report

### The benefits

- Discover and unlock value in your processes
- Reduce production costs
- Increase productivity, flexibility and reliability in your assets

### The proven results



### Up to

20%

# A broad and connected portfolio

As your food and beverage industrial partner, ABB Industrial Automation integrates smart technology across the broadest global portfolio.

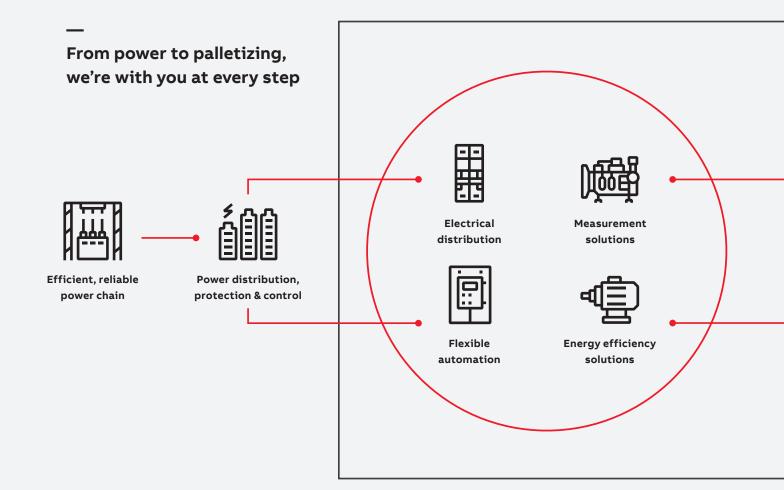


### **Connecting smart solutions**

From enterprise planning through to the shop floor, manufacturers must be enabled with the tools to both turn vast amounts of data into actionable information and run production lines as effectively as possible.

Driven by Big Data, Industrial Automation (IA) is crucial in addressing growing industrial complexities. However, it also requires an experienced partner to connect the dots, implementing IA's full capabilities across multiple domains and contexts.

ABB have a range of digital and automation solutions that can help to increase production intelligence, improve resource use, quality, compliance, and enable agile manufacturing & optimization.



## Key digital solutions

### System Libraries

- Built by domain experts for domain experts, Application libraries are available for a range of sectors, including sugar and beverage
- Created in collaboration with major process and equipment suppliers for accurate, effective reporting
- Smarter filters reduce complexity, so it's even easier to quickly respond to production problems and extend functionality

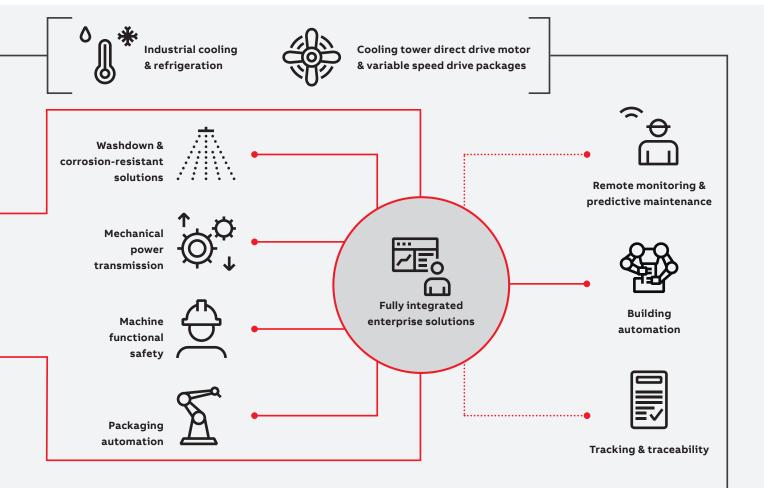
### MES (Manufacturing Execution System)

- ABB's powerful control system allows effective orchestration and execution of automated operations
- With real-time data visibility, status reports and insights, management and operators have full end-to-end access across all automated plant activities, from raw materials to output

### ABB Ability™ Genix Suite

- Our newest solution brings together the power of all ABB's automated solutions
- Genix makes data better, improving end-to-end decision-making and driving value in new directions
- 360-degree visibility for prediction and optimization
- Integrates with existing equipment and technology so you can mine information across the widest range of sources





# Deep domain expertise

We work with operatives from every segment to ensure that the complexities you face are understood at the deepest level. From sugar production to beverage bottling, our solutions are created to provide deeper, actionable context to raw data.



### Dairy

Delivering a simple glass of milk has never been so complex, as dairy producers must balance some of the industry's strictest safety standards with spiraling energy, raw material and logistics costs. That's why dairy makers are turning to ABB's automation solutions to bring products to market with efficiency and uncompromising safety.



Sugar

Whether you run a sugarcane refinery or a beet mill, increasing energy costs can quickly offset profits. ABB works with you to ensure end-to-end efficiency and reliability.



# Beverage

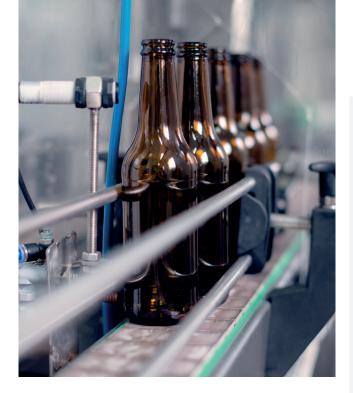
Consistency is everything for global brands. Consumers expect their favorite beverage to taste the same, regardless of where it was bottled. This requires precise process control and repeatable, standard solutions. ABB helps beverage makers achieve that all-important consistency while lowering production costs and providing greater packaging flexibility.



# Agriculture

Writing the future of smart agriculture means exploring new ways of tackling old problems, like irrigation and energy distribution. Innovative digitalization solutions like integrated operations, AI-driven environment control or even methods of "listening" to plants' chatter, offer growers innovative opportunities for safer, sustainable farming.





# Enhanced performance for a leading beverage producer

### The challenge

One of Chile's largest breweries needed to expand the capabilities of its existing ABB system to manage the operation of its new beer filter.

The brewery wanted the solution to provide plant-wide information so operatives could monitor the new filter's performance and identify areas to reduce wastage.

#### **ABB's solution**

An expanded ABB Ability™ 800xA solution meant that with the help of additional unique measurement tools, the brewery could operate an integrated system. This meant operatives could control the entire production process from one place.

In addition to installing the highest standard in beer filtration monitoring equipment, ABB fitted the new filtration control system within the plant's current DCS. This effectively merged the supervision and management of manufacturing flow.

#### The outcome

With the installed add-ons, ABB was able to meet the partner's every need. After the installation was complete, the client recorded a productivity increase of 10% and up to 5% rise in overall quality.

"The expansion of the existing system represents a vote of confidence in ABB's work and the ABB Ability™ 800xA solution"

Client quote

### Digitalizing a world-class sugar plant

#### The challenge

A major global sugar producer is in the process of building a pioneering greenfield project in Egypt. The new plant needed a full digital infrastructure to support the production of 900,000m<sup>3</sup> tons of premium white sugar annually.

#### **ABB's solution**

ABB will install ABB Ability ™ System 800xA to digitally control the entire operation.

The system will serve as a common operations platform to support all digital technology upgrades as the plant evolves. This will be backed up by the first commercial use of the new ABB Sugar Library, a comprehensive software databank of all sugar process applications.

Built with the collaboration of major process and equipment suppliers and sugar manufacturers, the new sugar library ensures the very latest process control philosophies are incorporated into production. With components for control and supervision units complete and ready for use, the whole system is easily adapted to address specific user needs.

#### The outcome

With the inputs from ABB Sugar Library, the plant will be one of the most data-driven sugar production sites in the world.

The customer will have complete DCS scope for all sugar processing, allowing tight control on production, consumption, losses and costs.

"In terms of the technology on offer, backed by expertise, ABB will provide in practice what others could not execute"

#### Client quote



# Talk to us

Digital solutions are widely recognized as vital to the future of Food and Beverage. Marrying digital innovation and deep domain expertise is the key to creating a robust, long-term competitive advantage.

ABB's decades of experience in industrial transformation has taught us that achieving sustainable success lies in a tailored, end-to-end approach.

ABB's specialist knowledge and broad power, automation and robotics portfolio make us the natural partner for your plant. Our market-leading industrial control systems and unrivalled commitment consultative partnership means we can support at every stage of your plant's digital transformation.

So, if you're ready to face the future of food and beverage with confidence **Talk to us**.

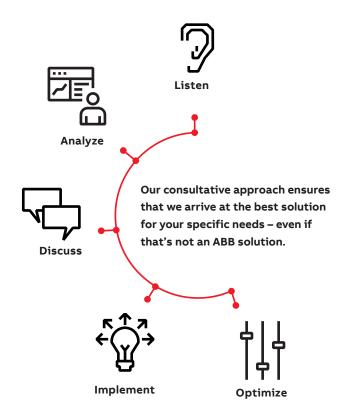






ABB Process Industries

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