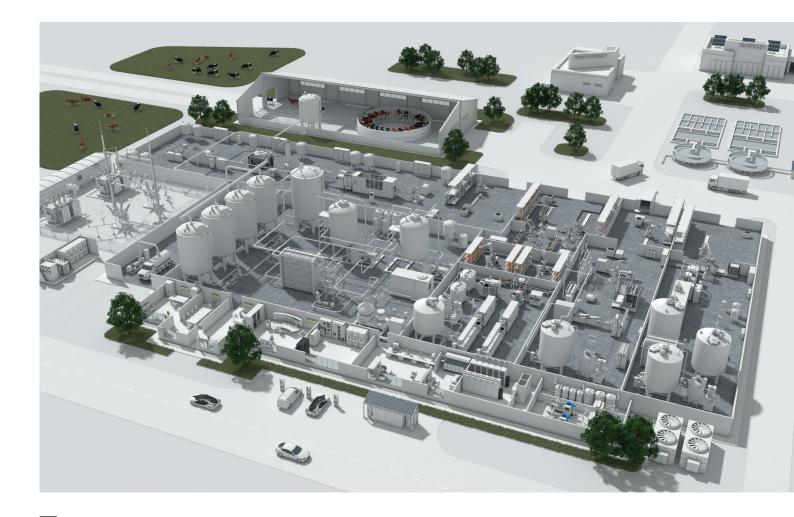


Smart Dairy Solutions

Digitalizing the future



The smart choice for dairy

With global and consumer trends putting increased pressure on dairies around the world, there has never been more incentive to create smarter processes. Producers like you are looking to mitigate business risks, deliver consistent quality and keep costs low. Now more than ever, this requires a bold digital approach: data-driven manufacturing, tighter control and a higher level of automation.

This won't be news to forward-thinking dairy producers. You already know that the cost of inaction is far too high. Product recalls cost an average of \$10-30 million USD and even a momentary cold chain interruption can have a substantial financial impact.

The good news is that thanks to ABB's smart dairy solutions, it has never been easier for dairy producers to control everything.

Working with your facility's needs, our holistic solutions integrate the complexities of data and process management to enable intelligent production, supported by real-time data. Add in complete value chain visibility and your facility has a clear pathway to ensuring product safety, transparency and quality.

Whatever your vision for digitalization, ABB's consultative approach and solutions tailored for your industry means we'll work with you to make it a reality. Together, we can move towards complete flexible, autonomous operations utilizing solutions developed specifically for your demanding industry.

There has never been a better time to release your dairy's untapped potential.

Let's get started.

Digital transformation starts here

Every facility benefits from the precision of digitalized measurement and automation solutions, but to keep critical processes running on time, all the time, dairies need next level control.

Ever-faster turnarounds also demand smarter use of people and resources. Smart dairy solutions can unlock

not only real-time data but intelligently visualize and interpret information sourced from across production, supporting swift, sophisticated decision making.

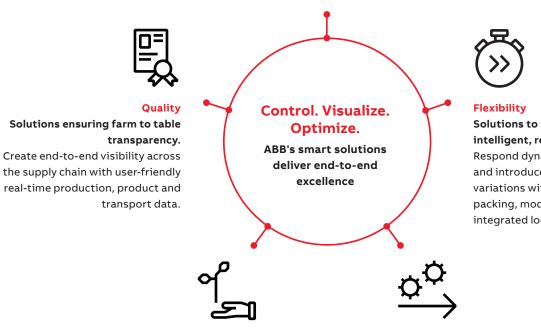
No matter what your facility needs, the solution is here and has never been smarter.



Safety

Solutions that minimize risk to assets, people and product.

Maintain the highest standards of safety, hygiene and traceability with advanced process measurement, predictive maintenance and quality control.



Solutions to help you scale, with intelligent, real-time forecasting.

Respond dynamically to market trends and introduce just-in-time product variations with flexible picking and packing, modular automation and integrated logistics solutions.

Sustainability

Solutions that protect our earth & your margins.

Reduce energy costs, protect water security and meet local environmental regulations with simplified emission monitoring and reporting.

Productivity & reliability

Solutions to ensure reliable power, minimized downtime & optimal profitability.

Operational insights culled from real-time and historical data means better, faster decisions, less troubleshooting and downtime, optimized equipment and reduced total cost of ownership.

Defining the future of dairy, together

Whether you're at the start of your digitalization journey or have firmly established operational goals, ABB has developed smart dairy solutions to support the specific needs of the dairy industry.

Drawing on our deep industry knowledge, ABB offers dairy producers a suite of smart technologies that boldly meet the challenges of Industry 4.0. and create more efficient, flexible operations.



Solutions designed with dairy in mind

ABB's industry-specific smart solutions ensure optimized visibility, planning and flexibility. Now your dairy can mitigate risk across the whole logistics landscape.

Demand forecasting

Accurately forecast and plan for new trends and consumer behaviors using real time retailer and consumer data, artificial intelligence and social media data

· Cold chain tracking

Allows oversight and control of product temperature and location and actively prevents interruption to the cooling process

· Liquid routing

A flexible automated system library to optimize clean in place and product routing functionalities

Silo and tanker management

Allows control, monitoring and ultra-specific insight into raw milk transportation, including product quality. Also enables real-time transport rerouting to different siloes, based on truck location and cargo

The technology providing ultimate control

Empower your people to make fast, data-driven decisions with our broad range of control solutions.

System 800xA

Join up every aspect of production with the heart of all smart dairy solutions: a distributed electrical and safety control system, all in one.

Manufacturing Operations Management (MOM)

Supports end-to-end visibility, orchestration and efficient control of your entire operation. MOM's Manufacturing Execution System (MES) makes production, quality and labor management seamless. And overall equipment effectiveness (OEE) software works to standardize measurement and improve productivity straight out of the box.

ABB Ability™ Genix

The Genix platform applies Al-driven smart analytics to optimize assets, predict cross-enterprise performance and provide actionable insights.

ABB Ability™ Edgenius

A comprehensive cloud-managed edge platform hosted on premise or in the cloud. Connect your real-time OT data at the point of production to deliver plant-level productivity.

Supporting you at every stage

ABB's market-leading industrial control, automation and optimization systems means we can support your dairy's digital transformation at every stage

Our decades of domain expertise and commitment to consultative partnership means we work with your dairy to create a solution that's just right.

So whether you're looking to optimize process and batch control, safety, electrical control, logistics, information or

asset management, it has never been easier to get started. Thanks to our integrative approach, ABB's smart dairy solutions combine with your existing setup, for an effortless first step towards the Factory of the Future.



Let's write the future of smart dairy together

Speak to your local sales representative to arrange a demo of ABB's smart dairy solutions

For more information about smart dairy: campaign.abb.com/smartdairy

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