

## **Holistic Plant Assessment service**

Improve productivity and reduce costs.

The world's population is constantly growing and rapidly urbanizing. These factors drive a demand for an increasing amount, and a wider variety, of food and drink products.

This demand creates greater complexity in food manufacturing processes. Improving productivity, optimizing quality and making the most of resources is tightly linked to a company's profitability.

From digitalization and process improvement to energy efficiency and automation, you need solutions that keep your production sustainable and reduce your maintenance costs while assuring high plant integrity.

We understand your need to optimize your plant's efficiency in order to stay competitive. To help you meet this need, we offer a Holistic Plant Assessment service to improve your food and beverage plant's operational performance. If you want to improve productivity and reduce costs for your plant, while maintaining safety, talk to us.

## Why do you need this service?

ABB's food and beverage experts have a deep understanding of the challenges manufacturers face across the value chain. From discrete components associated with food handling, preparation and storage to the overarching control and enterprise management systems that optimize production processes and plant operations, we can help you identify and prioritize the improvement opportunities available for your plant.

The Holistic Plant Assessment will give you a clear understanding on what to improve in your plant and how to improve operational performance. Our threestep process focuses on solutions to help you:

- · Enhance total cost of ownership and asset intensity
- · Improve water use and energy efficiency
- Reduce maintenance costs and improve productivity

Depending on your needs and circumstances, we can look for opportunities to create value in your plant across any of eight general categories:

- Digitalization
- Water process
- · Power generation and renewables
- Electrification packages
- Energy efficiency
- Power quality
- Process improvement
- Automation and robotics

## What happens during an assessment?

We understand that every food and beverage plant is different. We work with you to ensure we have a good understanding of your plant's activities before we begin your assessment.

We will conduct a pre-assessment three to four weeks prior to our onsite date. This preparation includes identifying the plant personnel to be involved in the assessment, completing a pre-assessment checklist and analyzing the data in order to make the most of the onsite visit. The onsite time to conduct the assessment is typically two to five days. We will begin with a workshop to ensure alignment between your site's leadership team and our assessors. Our team then interviews the relevant plant personnel, conducts shop floor walks and identifies potential improvement areas. On the final day, our team will once again meet with the site leadership team to discuss preliminary findings and prioritize the potential improvement areas identified.

You will be presented a final written report with the findings of the assessment in approximately three to four weeks.

## What happens next?

Our team will work with your site leadership on how to prioritize improvements based on your plant's specific conditions and a high-level benefit to effort matrix. We'll use this to develop a roadmap and business case for the selected improvements.

We have provided this service to food and beverage plants across the world and delivered tangible benefits to customers who followed the recommendations of the assessment. One international food company achieved an average savings of \$300,000 per site each year from new motor technologies and changes in their control philosophy. A beverage company was able to save approximately \$60,000 per year through cooling tower efficiency improvements. And another customer was able to achieve energy savings of up to 30 percent in two compressors in their plant, which account for four percent of the plant's total energy consumption.

If you want to optimize your plant's operations and reduce energy costs, talk to us about your own Holistic Plant Assessment.

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