ABB recently won an order to provide a power quality solution for the manufacturing system of a leading dairy company in China. This order marks a significant breakthrough for ABB’s power quality business to enter China’s food and beverage industry, which implies attractive market size and growth potential.

Following the trend of higher automation levels and increasing demand of production continuity in the dairy industry, stable power quality has become a major lever for the company to enhance its operational efficiency. Voltage sags, a threat to the sterile environment of dairy production line, may possibly lead to a waste of raw milk and the extra labor to clean production materials like milk containers. As a result, the production interruption usually takes more than four hours to get resumed, meaning a great deal of time and cost loss for dairy enterprises. Therefore the company decided to upgrade and transform its production line in order to ensure that important loads are immune from voltage sags with power protection devices.

The PCS100 AVC-40, ABB’s Active Voltage Conditioner is a high performance power electronic system specifically designed for industrial and large-scale commercial applications. It responds instantly to power quality events by correcting voltage sags, phase angle errors, unbalance and surges, while providing continuous voltage regulation. At the time of voltage sags and swells, the PCS100 AVC-40 can respond within milliseconds and inject up to 40 percent correction voltage. Thanks to its compact design, it can be easily installed in a machine room or other confined spaces, reducing the demand for additional floor space in the course of design and construction. Moreover, it is featured with a redundant internal bypass system that ensures continuous power supply to loads from utility grid.
“ABB’s active voltage regulator PCS100 AVC-40 has typical applications including high-speed bottling, packaging, dairy processing and other food and beverage production lines,” said Kenny Huang, Sales Manager of ABB’s Power Conditioning business, China. “For this project, our sales team had followed up and provided guidance for technical solutions at the customer site for about one year. Our relentless execution convinced the customer of ABB’s products and service capability, and they finally chose our solution.”

By shortening downtime substantially, reducing wastes, improving product quality, avoiding production losses and lowering the requirements for equipment maintenance, ABB’s power quality products help customers in the food and beverage sector improve their profitability.

In recent years, the global food and beverage industry has developed rapidly and players in the market are speeding up their upgrading and updating to optimize productivity and product quality for higher competitiveness, which opens up new business opportunities for ABB. A research report done by Deloitte shows that the market scale of domestic food and beverage industry, closely related to ABB businesses, will increase from US $1.7 billion in 2013 to more than US $4.1 billion by 2020. The growth will largely come from such segment as dairy products, beverages and meat processing.

To find out more about ABB’s power protection solutions:
Web: www.abb.com/ups
Email: powerconditioning@abb.com