

GLOBAL WEB STORY, APRIL 4, 2018

Reliable and safe power supply for biscuit production guaranteed



Romania's S. C. Croco safeguards its increased food-production capacity with more uninterruptible power supply units from ABB.

— 01 The maximum production capacity is 93 tons per 24 hours of biscuit products such as Brezel, Crackers, Sticks and Petit Beurre.

For many years, ABB has been supplying equipment to the food and beverage industry. ABB has invested in extensive R&D and customer collaboration to launch products, solutions and services that help the industry become safer and more efficient. In fact, as part of its Next Level strategy, ABB is placing special focus on this sector to support customers achieve their sustainability, operational and financial targets; by embracing digitalization; customers will benefit daily from predictive, condition-based maintenance, with a focus on reliability.

A significant example of this close collaboration with the industry was demonstrated by an order for an uninterruptible power supply (UPS) system from S. C. Croco S.R.L. in Romania. CROCO S.R.L. is the Romanian leader for such well-known biscuit products such as Brezel, Crackers, Sticks and Petit Beurre and has been established in the market since 1994.

Cristian Bucur, managing director for ABB's Romanian UPS channel partner, Power Back-up Services S.R.L., explains: "Croco invested 6 million euros in 2014 and 2015 to ramp up its biscuit production capability to 93 tons per day. In 2017, the company planned a new investment of 8 million euros to expand the production facility. The factory currently employs more than 400 people to keep this

24-hour, three-shift production going. But customers seem to have a very sweet tooth, and increasing demand led Croco to decide to double production capacity, with concomitant requirements for more electrical power and associated power protection measures."

Croco's production was operating with two power distribution transformers fed from two different power lines. Both of these power feeds were on the same public grid, which meant any problems – such as blackouts or power surges - could knock out the entire biscuit production line. This was a potentially expensive issue, since unfinished goods must be thrown away and the production line must be reset and restarted. Not only that, but 30 to 60 minutes' worth of production could be lost.

In 2014, the customer had already installed two ABB 400 kW PowerWave 33 UPS devices in parallel configuration to ensure a reliable supply of clean power to the original production line. Now, with production doubling, this power safeguard needed to be enhanced. For that reason, Croco purchased two more 400 kW PowerWave 33 parallel systems from ABB. Each UPS is equipped with two strings of 50 battery blocks with 100 Ah batteries and DC independent breakers are used for each battery string.



01

—
01 PowerWave 33, an online double conversion UPS, delivers continuous power availability to network-critical infrastructures of both data centers and process control environments.

—
02 CROCO S.R.L. is the Romanian leader for well-known biscuit products such as Brezel, Crackers, Sticks and Petit Beurre and has been established in the market since 1994.

The new units had to be installed in the same room as the original UPS, where space was very limited. This situation required the engineers to design a special Kunstmann battery cabinet and resize the previous UPS devices to create more space. The small footprint of the PowerWave 33 also helped matters.

To help Croco embrace digitalization and benefit from predictive, condition-based maintenance, ABB is working on a UPS remote monitoring solution specifically for this customer.



02

Bucur concludes: “Discussions started in March 2017, the contract was signed in August, and the job was all done by mid-November! The customer had chosen ABB because of his very good experience with the previous installation, especially with ABB’s local partner. Croco can continue now to rely on the same technology, which is superior in terms of efficiency, quality and service. Additionally, the small footprint of the ABB PowerWave 33 and the customized DC battery cabinets were key selling points during negotiation.”

In all, Croco now has 1.6 MW of backup power, and the consumer’s supply of biscuits is guaranteed.