

Case note

ABB machinery drive saves £20,000 for gluten-free baker



An ABB machinery drive installed by the Village Bakery's own staff is saving the company over £20,000 in energy costs each year.

The Village Bakery (Nutrition), based in Wrexham, Wales, UK, is the most advanced gluten-free facility in Europe, manufacturing around 250,000 loaves a week. A major part of its process is a depositing line, which is a conveyor-based system that divides the dough into the correct weights to make various rolls and loaves.

The company originally began production with a single depositor, but has optimized its operations with the addition of a second depositing line.

The Village Bakery saw potential for boosting the efficiency of the new line by improving its speed control. Savings of £10,000 per year were expected, including savings on materials, such as greasing agents for the loaf tins. "The old drive was so slow and inaccurate that the machine had to start spraying the greasing agent before it 'saw' each tin," says Christien Jones, director and projects engineer.

Savings double what expected

An ABB machinery drive, with high ingress protection to IP66, was chosen. Designed to be quick and easy to install, the drive was installed by the Village Bakery's own staff. The improved speed control brought by the new drive is saving the Village Bakery £20,000 per year, double what the company had expected.

Savings are made in a number of ways, one of the more obvious being a 10 percent reduction in tin greasing agent. More accurate control means that more of the greasing agent ends up in the correct place.

The ABB machinery drive can also optimize the speed of the conveyor to match the size and throughput of different products more accurately. In this case the unit is programmed with four different speeds, leading to savings of around 25 percent in the running costs for the line.



ABB machinery drive with IP66 protection class allows the bakery to be frequently hosed down.

The new depositing line has reduced downtime at the bakery, since production staff can shut down each line independently for cleaning without halting production. With IP66 protection class, frequent wash downs are no problem for the ABB machinery drive.

According to Jones, the drive has been “a roaring success”. He also praises the support that ABB has provided for the bakery: “The technical backup was great, and ABB is always ready to help.”

Challenges

- Accurate speed control needed for new depositing line

Solution

- ABB machinery drive with IP66 protection class

Benefits

- £20,000 savings in annual running costs
- 10 percent saving in greasing agent
- Quick and easy to install
- Reduced downtime
- Optimize speed of line to match production
- Easy cleaning due to high protection specification

For more information please contact:

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