

CONTROL 
TECHNIQUES

MAJOR TIME, ENERGY AND COST SAVINGS

O. BOUMAN B.V. | COMMERCIAL & MANUFACTURING

DRIVE OBSESSED

HAMMERMILL NOW RUNS UP TO JUST 18 SECONDS

O. Bouman B.V. experienced considerable cost benefits when the Dutch animal-feed supplier switched to a Control Techniques AC drive on one of the company's hammermills. The hammermills are used to reduce the size of the animal feed particles to a specified size to tailor make animal feed 'recipes'.

The Challenge

A feed mix is made from up to 26 ingredients, which is then separated out and particles larger than specification are fed in batches to a hammermill.

Each mill has eight rows of 22 hammers (rotated at up to 3,000 rpm) and meshes of 3mm to 12 mm fitted around the diameter to determine the final particle size. Four hundred varieties of processed feed can then be extruded to the required pellet or nut size for a certain animal feed.

Bouman experienced several problems with direct on line power, it was taking a whole minute to run the mills up to speed and with a fixed speed, it was difficult to make the product fine enough. Due to inertia, the mills took 15 minutes to stop, so downtime could also be considerable.

"Downtime has been cut too. It gives us considerable time savings, plus energy savings and most important, we now have precise speed control for each mix, which improves our product quality. We have been very pleased with the support we've had from Control Techniques and their ability to supply custom-made systems to meet our precise needs."

Joan Van Tilburg | O.Bouman B.V



Overview

- Less downtime & precise speed control
- Energy & cost savings
- Better product quality

The Solution

Ad Van Genderen of Control Techniques local Drive Centre explained the solution to Bouman's problem: "The speed control was a straightforward one for a drive, but the braking required a little more thought.

Conventional braking resistors were out of the question because of the potential hazard of dust explosion - so we agreed to turn a problem into a benefit by feeding braking power through a regen unit back into the plant power supply."

The Benefit

Once fitted, the hammermill runs up to speed in just 18 seconds, with current limited to 250 amps, a major benefit as no peak power charges are incurred.

Even more significant is that the stopping time has been reduced from 15 minutes to just 30 seconds.

