

# SIMATIC ET 200eco

## Veronesi, Italy –

### Animal feed manufacturer modernizes basic materials infeed

#### Requirements

One of the largest European manufacturers of animal feeds, Veronesi S.p.A, Italy, was looking for an efficient solution for modernized automation of their basic materials infeed. Materials infeed is the critical point in production for the animal feed manufacturer. If the flow of materials stops, the entire plant is at a standstill, so it was important to ensure that production continued. The safety regulations for installations in a dust-filled atmosphere must also be satisfied. The greatest challenge, however, was presented by selection of the technical configuration: All sensors and actuators had to be connected to the distributed I/O over the shortest possible connections; this demanded a cabinet-free configuration.

#### Solution

The Swiss system integrator ASE-Bühler AG developed the new plant concept – taking the plant philosophy at Veronesi into consideration: all plant sections are divided into individual sectors. The materials infeed too. This was automated by means of a SIMATIC S7-400 controller. It replaced the aging relay control. The special feature of the new plant is the PROFIBUS architecture. Four PROFIBUS lines run from the S7-400 PLC into the concrete towers containing the silos. A total of 150 SIMATIC ET 200eco stations are connected to the four bus lines which were installed without a cabinet directly in the plant. Control boxes were only required for the repeaters that were installed to support PROFIBUS branches. The connections were implemented using the standardized ECOFAST system with data and power supplied along the same cable.

#### Benefits

Commissioning of the fully automated complete solution was problem-free and implementation was possible during normal operation of the plant. The wiring over the ECOFAST connections was extremely easy, so the retrofit was completed quickly. The new solution supported a cost-saving bus architecture with cabinet-free distributed I/O as well as increased transparency in the automation system.

Since the entire solution originates from Siemens, the cost of training the maintenance personnel has been reduced. In the event of a failure, only one contact partner needs to be contacted at Siemens.

