## **PROCESS**



# Cereals moisture measurement for dryer efficiency

#### APPLICATION

A customer in the Food industry was looking for solutions to improve dryer efficiency and fuel consumption.

The drying process is considerably important for the final product quality and material processing. Dryer systems can be placed in different parts of the process, according to specific requirements, e. g. before material processing to comply with recipe specifications or between the material processing and packing areas.

To control the dryer performance, some parameters indicate whether it is necessary to adjust the process settings.

### PROCESS DATA

Industry: Food

Material: Cereals (wheat, corn, canola)

Moisture range: 10 - 20 %

Installation: Hopper after dryer

Function: Dryer efficiency control



#### SOLUTION

Specifically developed for online moisture measurement of bulk solid materials, the M-Sens 2 is very accurate, reliable, robust and easy to use; essential requirements for the purchase decision. The sensor was installed on the hopper directly after the dryer, where material flow occurs constantly and in homogenous conditions. Using the industrial communication protocols enables the generation of different calibration curves according to each material, providing very high accuracy.

Depending on the material processed, the PLC switches the calibration curve automatically, making the procedure as easy and transparent as possible. The fuel consumption was additionally reduced as a result of the moisture information.



- Optimization of dryer efficiency
- Reduction of fuel consumption
- Control of processing velocity
- Compliance with moisture set point
- Quality optimization

Monitoring for Powder, Dust & Gas

M-Sens 2