

Considerable saving of energy and process optimization during glass-, ceramics and porcelain production with LIEBHERR Litronic-FMS II.

Job-Report

Production and drying plants are used worldwide to produce and dry different materials like quartz sand, soda, recycled glass, kaolin, feldspar, ceramic powder and many other materials. For most of all drying and production processes the exact monitoring of the material moisture is decisive for the quality of the finished product. A further important factor for drying plants is the enormous energy consumption during drying, which causes main costs for the users.

Considerable economizing potential with exact moisture measuring.

By using an optimal working moisture measurement system as well as direct communication with the control system of the plant best necessary target values can be reached. There is an enormous potential of saving energy in most existing plants. For some of our customers it was possible to save up to 20 % of energy by using our FMS II. This means a considerable amount of money at the end of each month/year. The payback period for the purchase costs of the Litronic-FMS II was more often than not a year.

Customer benefits:

- Exact determination and monitoring of product moisture content
- Reliable proceedings
- Transparency and process analysis by recording of all data
- Fully automatic drying process

Realization:

One, two or more sensors are be used to detect the moisture content of the material. Up to 16 sensors can be installed with one electronic module. Due to different interfaces (e.g. 4-20mA, Profibus,...) the Litronic-FMS II can be connected directly with the control system. The sensors can be installed in material chutes, belt conveyors, silo outlets,.....

40 measurements each second allow an exact accuracy also within high conveying speed. The sensor measures into the material and not only on the surface. This ensures good and reproducible results.

Upon request we would be glad to send further information or references.



Litronic-FMS II:
Sensor, electronic module and software.



Quartz sand measuring for a customer, saving of more than 20 % energy costs!