Moisture Measurement in the production of wood pellets

Döscher

realised with MoistureScan

One of the biggest wood pellet manufacturer in Germany has been fitted his three production plants with moisture measurement systems from Döscher & Döscher. For controlling the process several MoistureScan Systems are used to measure the moisture of the saw dust and wood strands at various steps of the production process.

Measuring points are

- at the outlet of the dryer
- the outlet screw conveyor of the mixing vessel
- the distributor screw before the pellet press.

The measuring instruments are to be mounted on the external wall of the screw or conveyer system without disturbing the product flow. Small color fluctuations as well as the different particle size of the wood particles do not affect the measurement due to the color and size independence of the MoistureScan technology. Thus a very exact and long-term-stable measurement is ensured. The measuring instruments gather both surface and core moisture of the saw dust utilizing microwaves that penetrate the product completely.

MoistureScan



integrated in the outlet screw conveyor of the mixing vessel



integrated in screw conveyor (inner view)



integrated in the distributor screw











Optimisation of the parameter moisture in the production of wood pellets

Döscher

on a view

Moisture measurement system

 MoistureScan and MoistureScan XT for temp. up to 140 °C

Technology based on

Microwave-system with two parameters

Particularly suitable for

Bulk materials (wood chips, pellets)

Way of installation

measures directly in the product flow

Measurement/gauging

 measures without heating in milliseconds, independent of density

Characteristic

- independent of density and weight of the wood chips/pellets
- independent of colour, structure and surface of the wood chips/pellets
- measures the core and surface moisture of the wood chips/pellets

Advantages

- exact and fast measurement
- simple calibration
- excellent long-term-stability
- fast and punctual recognizing of disturbance
- on-line support possible

Use of the product

- Your production is continuously informed in a timely manner
- Your production costs will be reduced
- Your rejection will be minimized
- Your product quality will be achived





