

Best Practice

Inline Measurements of Plaster Boards after the Drying Process

Plasterboards are stocked in the warehouse after the production. As they pull in a minimum moisture from the ambient humidity the target moisture has been fixed on 0.2% after the dryer.

TEWS systems deliver reliable results from an in-line installation in the conveyor belt below to passing boards. Our moisture information is transferred directly to the dryer control software. Thanks to our high-speed technology we are able to make up to 20 measurements in the width of each board which even allows eventual wet spot to be found as well as creating in this way moisture (and density) profiles of the single board.

The advantages are apparent in the continuous quality control of the plasterboards, the optimization of the drying process to save energy and to identify defects of the dryer and, of course, the reduction of non-conforming boards.

TEWS for the Inspection of PP Granules (Density) and PVC Powder (Moisture) in the Lab

Compared to a conventional halogen dryer, TEWS offers significant time savings: The sample preparation and measurement procedure with a halogen dryer requires about 6-7 minutes. With a TEWS system this time is reduced to 1-2 minutes (more than 75% less).

With 100 samples per day and 220 working days p.a. the savings sum up to 550 hours p.a. Assuming labor costs of only EUR 25 per hour the savings amount to EUR 13,750. Moreover, the response time for controlling a dryer is reduced significantly as well as the operator waiting time by guaranteeing continuous product quality control.

Areas of Application

Many Kind of Polymers

PVC

SAP

PMMA

Adipic Acid

Rubber

Cellulose Acetate

Fertilizers

Fungicides

Washing Powder

Soap Noodles

Plaster Boards

Advantages of Microwave



Moisture and density measurement



Measurement of core and surface moisture



Simple and longterm stable calibration



Independent of dust or dirt



Helps to reduce CO₂ footprint



Short ROI



ATEX protection possible



Industry 4.0 ready



Online-Cloud-Based support



Worldwide Service

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TEWS
MEASURABLY BETTER



Chemical Industry As a Partner.

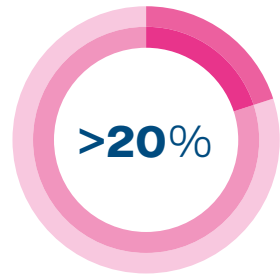
HIGH PERFORMANCE SOLUTIONS



Your production process combined with our patented solutions. The result: the most accurate data about the moisture & density of your products.

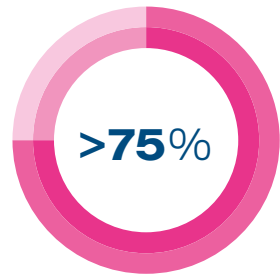
Facts and Figures

Energy



savings – due to improved dryer control

Time



faster – in the lab due to readings within milliseconds

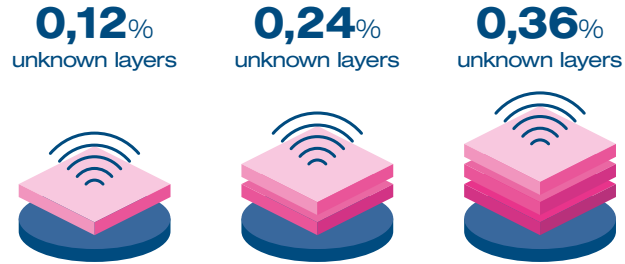
Process Automation



based on online moisture readings

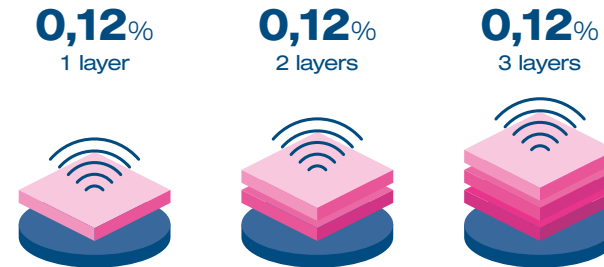
TEWS Measures Moisture and Density Independently

Traditional 1 - parameter - measurement



3 different layers of the same material with a typical 1 Parameter Method: Each layer increases the moisture → **misleading results**

TEWS - 2 - parameter measurement



3 layers of same material show the same moisture, the density is recognized and moisture result compensated → **correct results**

About TEWS

TEWS was founded in Hamburg, Germany back in 1970. Today, the company is owned and managed by André Tews in the 2nd generation of leadership. As the market leader in high performance moisture and density measurement solutions, TEWS is at the center of today's business for almost 50 years, now.

TEWS helps you streamline your processes, giving you the ability to collect and use data by applying a unique patented microwave technique across your production business. When you run TEWS high performance solutions, you run measurably better.

Let's look at your production structure together. And in a new, agile way we exchange, attach, discuss, omit or add knowledge. From this we develop new opportunities together. Bringing them into life brings your business forward at the same time. We call this Co-Improving.

