### **About MW 3012**

The High-speed microwave measurement system MW is designed for parallel moisture and density measurement in rapidly moving products - for instance, cigarette rods during manufacture. Up to 40,000 readings per second are available via analog interface. Online measurements in quickly moving threads, yarns, weight measurements of tablets or gelatin capsules using this instrument have also already been performed successfully.

The MW 3012 is used in cigarette making machines also function as a weight sensor for weight control systems and in filter making and combining machines for the measurement of capsule filters or multifilters.

This allows 100% quality control of the measured material.

# **Brief Description**

With up to 40,000 measurement procedures per second, the MW 3012 is a high-performing instrument that supports even the quickest production processes when it comes to moisture and density control.

# **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 CO, footprint



**Short ROI** 



**ATEX** protection possible



**Industry 4.0 ready** 



**Online-Cloud-Based support** 



**Worldwide Service** 

#### **TEWS Elektronik GmbH & Co. KG**

Sperberhorst 10-12 22459 Hamburg Germany





Need for Speed MW3012

HIGH PERFORMANCE SOLUTIONS

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



www.tewsworks.com

**Moisture & Density Measurement** 

# **TEWS Measures Moisture and Density Independently**

### Traditional 1 - parameter - measurement

2% unknown laver **4**% unknown layer

6% unknown layer







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

## TEWS - 2 - parameter measurement

2%

1 layer



2 layers





3 layers of same material show the same moisture, the density is recognized and moisture result compensated  $\rightarrow$  correct results

### **Technical Data**

MW 3012 introduces you to high-speed moisture and density measurement.

- Electrical Power Supply: 110 230 V AC, 50-60 Hz
- Ambient Temperature: 0 40 °C
- · Analog Inputs: Product temperature
- · Analog Outputs: Measured values
- Digital Inputs and Outputs: Control and status signals
- Interfaces: Serial, LAN, CAN, Ethernet CAT

### **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.

