About MW 4420

The MW 4420 measurement station is ideal for controlling the quality of many different cigarettes, whether with or without filters, filter-tipped and multifilter.

Based on the microwave resonance technology, the system measures the moisture and density (Mass / weight) of tobacco and rods. What makes the solution unique is that moisture is measured independently of density (and vice versa). Moisture and density can be determined at the same time.

The test station detects moisture, weight and dense-end profile of a cigarette. In addition, the system thus is able to measure charcoal content and triacetin in cigarettes as well as NTRM (foreign bodies) and it can precisely detect the position and condition of aromatic capsules in filters or determine the different sections of a multifilter.

The integrated color touch screen and its self-explanatory user interface allow the system to accurately keep track of results in conformity with ISO 9000. The following details are read and kept: time, date, cigarette brand and make as well as minimum, maximum and average moisture and density values.

Results as mean values, standard deviation, minimum and maximum are shown graphically as an output to the screen and printer. Data can be exported to a USB memory stick for further processing by external programs such as spreadsheets. The Ethernet port allows integration into enterprise network, as appropriate.

Brief Description

Profile measurements of cigarettes, filters, and multi-filters. Sorting, dense end detection, cut position determination, etc. These are the buzzwords which live up to the MW 4420.

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_2 footprint
- Short ROI
- ATEX protection possible
- Industry 4.0 ready
- Online-Cloud-Based support
- Worldwide Service

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TEWS
MEASURABLY BETTER

Cigarette & Filter Inspection System MW 4420

HIGH PERFORMANCE SOLUTIONS

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

TEWS Measures Moisture and Density Independently

Traditional 1 - parameter - measurement

2% unknown layer

4% unknown layer

6% unknown layer

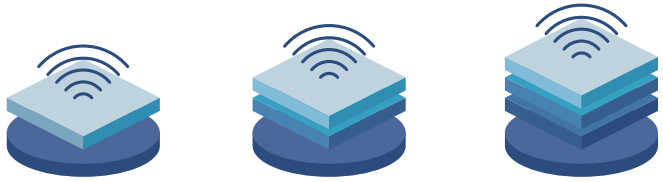
3 different layers of the same material with a typical 1 Parameter Method: Each layer increases the moisture → **misleading results**

TEWS - 2 - parameter measurement

2% 1 layer

2% 2 layers

2% 3 layers



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

Technical Data

The MW 4420 introduces you to high-performance quality inspection measurement for cigarettes and filters.

- Electrical Power Supply: 110 - 230 V AC, 50-60 Hz
- Ambient Temperature: 0 - 40 °C
- Data Interfaces: 1 x Ethernet / 3 x USB
- Measurement Time: 12 cigarettes per minute
- Cigarette Size: Max. length 144 mm, max. diameter 9 mm
- Data Backup: SQL database
- Features: Hopper with a capacity of 200 cigarettes or filter tips (depending on the format; the specification here refers to a diameter of 7.8 mm), 10.4'' (26.4 cm) colour touchscreen

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.