

TEWS

MEASURABLY BETTER

TEWS – 49 Years of Tradition and Innovation

Figures and Facts

- 2nd generation, family owned company
- 30 years the leading company of microwave moisture and density measurement
- 55 highly professional employees
- 4 locations worldwide
- Operating worldwide

TEWS MW Technology – A Success Story

Around **6,000** TEWS microwave moisture and density measuring devices have been sold up to now

- 60% are process instruments (3,600 units)
- 40% laboratory devices (2,400)

Vast majority of these TEWS devices are still in regular operation

Why Buy a „TEWS“?

Different Case Studies Chemistry

- ✓ 20% energy savings (on average) – due to improved dryer control
- ✓ 75% time savings (on average) – in the lab due to readings within milliseconds
- ✓ 100% long-term stable calibration curve
- ✓ 100% process automation – based on online moisture readings

Why Buy a „TEWS“?

- ✓ Measuring of **surface and core** moisture
- ✓ Precise measurement of **density/weight**
- ✓ Far **more amount of material** is being measured
- ✓ And, a much **higher precision** will be achieved
- ✓ Quality Improvement
- ✓ High speed with up to **40.000** measurements per second

MEASURING METHOD

Property	Near Infrared (NIR)	TEWS-Microwave Resonance
Mode of operation	Analysis of optical spectral lines	Measurement of resonance shift and attenuation
What can be measured	Moisture, fat, protein, sugar etc.	Moisture & Density
Contact with product	Non-touching	Touching
Depth of penetration	Surface only	Core
Calibration	Complex (modelling)	Simple
Moisture range	Limited, depending on product	Limited, depending on product

INTERFERING FACTORS

Contactless measurement	✓	⚠
Varying sensor filling level	✓	✓
Independent of salt content of product	✓	✓
Varying product density	✓	✓
Independent of small changes in composition and natural changes	⚠	✓
Varying product color	⚠	✓
Varying product surface structure	⚠	✓
Varying temperature	⚠	✓
Dust / dirty atmosphere	⚠	✓
Black product (light absorbing)	⚠	✓
Ambient light	⚠	✓

TEWS

Chemistry (powders, flakes, granules, fibers, pellets, boards)

— WHERE TO USE

Areas of Application.

Many Kind of Polymers	PVC	SAP	PMMA
Adipic Acid	Rubber	Cellulose Acetate	Fertilizers
Fungicides	Washing Powder	Soap Noodles	Plaster Boards

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