



NIR analysers for at line optimization of minced meat mixtures

NON DESTRUCTIVE DETERMINATION IN REAL TIME OF:

± **1.5%**
PROTEIN

± **1.2%**
MOISTURE

± **3%**
FAT

FRAUD*

*Sensitive to adulterations as low as a 3% of foreign material concentration

Accuracies in the comparison with official methods:

- Protein: Kjeldahl Method. ISO 937:1977
- Fat: Soxhlet Method. ISO 1443:1973
- Moisture. Gravimetry. ISO 1442:1997



BENEFITS OF REAL-TIME ANALYSIS:

- Standardization of the production process.
- Analytical results obtained in few seconds.
- Reduction of lab analysis.
- At line control of parameters in **critical points** (CPPs: Critical Process Parameters)
- Quality verification of the incoming raw material.
- Objective decisions taken in real-time.
- Higher profitability thanks to a more effective process.
- Improvement of brand perception: **innovation, efficiency and differentiation.**

The **quality** of the product does not only depends on a proven **recipe** and an optimized process but also, of the **changing circumstances** wherever they take place.

CAPACITIES

ACCURACIES IN THE COMPARISON WITH OFFICIAL METHODS:

MATRIX	MOISTURE (% WEIGHT)	PROTEIN (% WEIGHT WS)	FAT (% WEIGHT WS)	CHLORIDES (% WEIGHT WS)
MINCED MEAT	1.20	1.50	3.00	-
CURED SAUSAGE	1.20	1.50	3.00	1.00
NO CURED FRESH MEAT	1.20	1.50	1.00	1.00

%Weight WS = % Weight in Wet Substance

WHY CHOOSE VISUM NIR...

- It is based on at line infrared spectroscopy, a **reliable, robust** and **affordable** technology.
- The same device is capable to determine **multiple parameters in different matrices** just in few seconds in different control points.
- It is a turning point in food security, allowing the **Early Anomalies Detection (EAD)**
- We provide **turnkey solutions** and develop **bespoke applications**.



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INLINE



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