



Online NIR (Near Infrared) as a Quality Analysis Tool in Grain Industry: A Closer Look

NIR technology has been widely used as a quality analysis and monitoring tool in the grain industry. They are in benefit of farmers, millers, and bakers; since their ability for combining numerous analysis together with instant and accurate results.

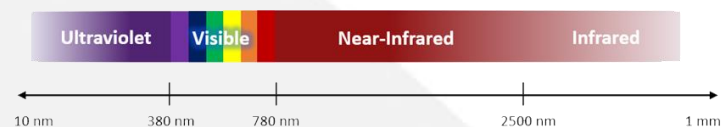
Starting from the grain intake, NIR analysis is safely used to evaluate the crop and product quality in mills. It is an instant method for protein, humidity, ash, etc analysis in grain, as also being used for the sedimentation, gluten, starch damage, and water absorption analysis in flour.

NIR devices has different versions of laboratory, mobile and online analyzers.

Compared to the other laboratory methods, NIR devices offer functionality, mobility, and also traceability with online systems.

Near Infrared Technology

NIR spectroscopy is based on the absorption of electromagnetic radiation at wavelengths in the range 780–2500 nm; makes it an alternative, non-destructive and rapid technology for food analysis.



Laboratory NIR

Online NIR (Near Infrared) systems are able to incorporate with the main PLC, that allows real-time quality monitoring in production.

NIR Online measuring points can be easily installed at above conveyors or conveying pipes, to detect any quality deviation during the continuous flow.

Benefits

Real-Time Monitoring

The software provides a real-time quality monitoring system, by using multiple measurement points.

Precision

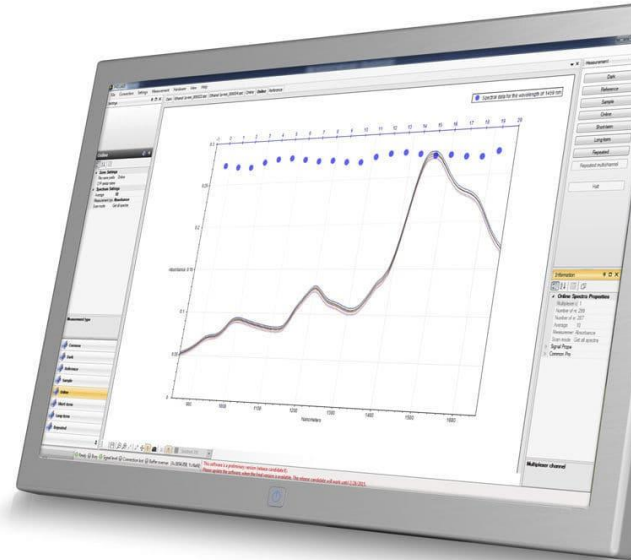
Accurate results can be obtained by setting the optimum tolerance margins.

Traceability

It is possible to determine any quality loss related to processing conditions.

Reliability

Online devices can be calibrated or upgraded automatically for consistent results.



Online NIR measuring devices and software

As Alapala, we follow the latest technologies, and we provide NIR analysis systems for milling industry with our solution partners.