

Inframatic 9500

NIR Grain Analyzer

Official Approvals:
NTEP 13-112
LNE-27380
NMI 15/1/5
and more...



Whole Grain



Networking



Grain Intake



Flour

Industry Standard Technology Made Better

Perten
INSTRUMENTS
a PerkinElmer company

Accurate and Robu

Perten Instruments is the number one company in grain quality testing and has produced Near Infrared grain analyzers for 30 years. The Inframatic 9500 is the most advanced Inframatic model, and offers the best accuracy available.

It is reliable, robust, and built to meet the requirements of grain handling operations. It analyzes a wide range of grains and oilseeds for moisture, protein, oil and many other parameters in less than 30 seconds.



The IM 9500 uses industry standard near-infrared transmission to analyze samples, but innovates with several key components. As a result the IM 9500 is more accurate, more stable over time and requires less maintenance than other analyzers.

Single Block Optics The monochromator is machined from a single block of metal, with a rigidity of structure not available in other instruments. It makes the instrument more accurate by being less sensitive to vibration and changes in temperature that disturb the light path of older design instruments. It also means that all instruments are produced identical as there is no assembly of parts, just the high precision machining. Additionally, it makes the instrument more economical to own as a single block monochromator has a much longer lifetime than other designs.

NIST Wavelength Standard All instruments are standardized at the factory to a NIST wavelength standard (National Institute of Standards and Technologies). This means that all instruments use the true wavelength scale, and hence give the same results when analyzing the same grain samples.

Reference Pellet Check Sample
By analyzing the certified pellet check sample, users can be certain that the instrument hardware is performing to specification and has not changed. It provides a traceable performance record.

Combine these features with true networking capabilities, essentially unlimited results storage, Windows connectivity, low cost of ownership, and contemporary styling, and the IM 9500 is simply the best instrument available.

st by Design.



1. Select



2. Pour



3. Remove

Designed for Users

The large color touch screen with its intuitive menus makes it easy to operate the instrument and to read analysis results – even from a distance. The user interface is designed to make analysis as rapid and secure as possible. All the operator needs to do is to select the type of grain to analyze and pour it into the funnel. No manual settings or changes are necessary.

Test Weight Module

The IM 9500 can be equipped with a Test Weight Module that becomes an integrated part of the instrument. Results are displayed along with the other parameters – no manual intervention required. A large sample volume is measured (600 ml) making the results very accurate closely matching the traditional method. The IM 9500 can be ordered to include the Test Weight Module from the factory.

Calibrations and Approvals

With 30+ years of experience with NIR and calibration development, we have the tools and expertise to develop, maintain, and update global calibrations. Standard available calibrations are included with the instrument at time of purchase. The IM 9500 is officially approved for use in grain trade in several countries such as – Australia (NMI 15/1/5), Germany (PTB 11.26/13.01), USA (NTEP CC No. 13-112), France (LNE-27380) and more.

NIR Networking



In grain trade it is critical to have complete control over the calibrations used in each instrument and to be able to monitor and optimize performance in virtually real-time. This can be done by using Perten Instruments' comprehensive network platform, NetPlus Remote. Through NetPlus Remote the administration of the network is accessible 24 hours a day.



Accessories

The available accessories increase the utility and value of the IM 9500. They provide added functionality and convenience.

Reference Pellet Check Sample The Reference Pellet Check Sample verifies the IM 9500 matches factory standards. Each Reference Sample has been certified by Perten and is supplied with official limits. Immediately confirm the state of the analyzer at any time. The sample can be used as a check sample, and is suitable for use up to one year from purchase.

Flour Module The Flour Module provides the added capability of measuring flour samples. Measure multiple parameters including moisture, ash and protein. For flour millers this turns the IM 9500 into a flexible analyzer used both for grading incoming wheat and monitoring the milling process. The Flour Module consists of two cells and a loading station. To analyze flour simply fill a cell using the loading station, close it and insert it into the funnel of the IM 9500. It's easy, rapid and accurate.



Small Sample Cell Also with limited amount of sample it is now possible to make a fast and accurate NIR analysis. With its adjustable pathwidth it is possible to analyze all types of small grains.

Ticket Printer Print results after each analysis directly from the IM 9500 using this rapid thermal ticket printer. It connects to the IM 9500 via USB and uses standard paper rolls available at most well-stocked office suppliers.

Specifications

Products: Wheat, Wheat flour, Barley, Corn, Soybeans and many others

Parameters: Moisture, Protein, Oil, Hectoliter weight/Test Weight (optional) and many more

Analysis Time: ~25 s without HLW/TW

Sample Size: 400 ml (600 ml with specific weight module HLW/TW)

Subsamples: Up to 16 per sample

Analysis Principle: Scanning grating, transmittance

Wavelength Range: 570-1100 nm

Size (W x D x H): 485 x 390 x 370 mm (485 x 390 x 510 mm with HLW/TW)

Weight: 34 kg (40 kg with HLW/TW)

Regression options: PLS (Partial Least Squares), ANN (Artificial Neural Networks), HR (Hönigs Regression), Classification

Interfaces: Ethernet, 4 USB ports

Display: 12" LCD color touch screen

Protection: Dust and humidity protected