

# Inframatic 9500

NIR Grain Analyzer



Whole Grain



Networking



Grain Intake



Flour

Industry Standard Technology Made Better

# Accurate and Robust

*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 latest 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 one minute.*



**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 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.

## Accessories

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



**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 or added at a later date.



### 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.

**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.



## 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 – Germany (PTB 11.26/13.01) and Australia (NMI 15/1/5).

## NIR Networking

When grading grain it is important to have complete control over the calibrations used in each instrument and to be able to monitor performance in virtually real-time. By using Ethernet, cable or Wi-Fi, the administration of the network is accessible 24 hours a day – regardless of firewalls or the location of the instruments. A large number of Inframatrics are operated in networks globally.

## Perten Support

Through our extensive group of trained distributors and direct offices, Perten provides unparalleled support of our instruments. It starts with instruments engineered to meet the needs of our customers and the demands of the environments in which they are used. It extends to the software provided for routine operation, networking and remote administration (TeamViewer), and – ultimately – installation and training. Your purchase of an instrument is the beginning of our relationship – not the end.

## Specifications

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

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

**Analysis Time:** ~50 s

**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)

**Interfaces:** Ethernet, 4 USB ports

**Display:** 12" LCD color touch screen

**Protection:** Dust and humidity protected