

X^{grain} Near Infrared Grain Analyser



Professional near-infrared grain and flour analyser for determining the ingredients of whole grains, oil seeds and flours with built-in Test Weight Module

Infracont has been developing and manufacturing near-infrared spectrophotometers for the grain and milling industries for over 30 years. The decades of experience and professionalism ensure the reliability and accuracy of the XGrain grain analysers.

Easy to use

The Infracont XGrain grain analyser is very easy to use for the average user. Whole grain samples can be analysed with XGrain without sample preparation and handling. The instrument automatically adjusts the path-length for samples of different kernel sizes.

The XGrain has a large, 8" diameter high-resolution and bright touch-screen interface. The user interface of the software of the instrument is clear and easy to understand, so it's easy to handle and does not require any pre-qualification. The measurement process, after selecting the crop to be measured, consists of only three steps: load the sample into the hopper, then press the measurement button and empty the sample from the drawer at the end of the measurement.



Innovative unique infrared optics Single Beam Compensation System

The Infracont XGrain has a scanning grating monochromator inside which provides the highest measurement accuracy. Infracont's unique optical configuration called Single Beam Compensation System (SBCS) ensures XGrain's excellent short and long-term stability.

What are the benefits of SBCS?

- very few moving parts, much simpler construction
- smaller size, lighter weight
- there is no need for regular maintenance (eg. lamp replacement, because the lamp illuminates only when the instrument is measuring, which ensures a very long lifetime)
- low service requirement
- less power, less heat, high light intensity
- no temperature dependency and warm-up time: the instrument can be used immediately after switching on



Built-in printer

Infracont XGrain has a built-in thermal printer, so the instrument can automatically print a receipt of the measurement in any number of copies right after the analysis. In addition, previous measurement results and measurement statistics can be printed out later as well. Besides the results, other measurement parameters (e.g. the date and exact time of the analysis, sample ID or the name of instrument owner) are also printed to the receipt.

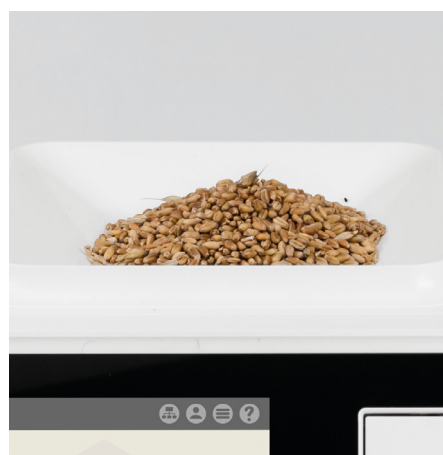
Built-in hectolitre weight module

Infracont XGrain's built-in hectolitre weight module allows you to test specific weight and other quality parameters in one step. As a result, there is no need for a separate chondrometer and the time spent on separate hectolitre weight measurements can be saved. Hectolitre weight results are printed to the receipt along with other content parameters.

Calibrations

Infracont has been continuously improving its calibrations for over 30 years, so we have a large number of calibration databases with samples from different continents, countries, crop years, varieties, etc., which ensure the robustness and accuracy of the calibrations. All of our whole grain calibrations are available in the Infracont XGrain grain analysers.

Infracont XGrain analyser is also suitable for measuring analysing flour and other powdered or ground samples (eg. soymeal, soybean expeller meal, corn meal, corn grits, etc.). A separate flour cuvette is required to analyse these samples.



InfraCloud - Cloud-based Internet connection

Infracont XGrain - with an Internet connection available at its operating site - is accessible by the InfraCloud application from a remote computer, phone or tablet. After the analysis, the results are uploaded to the InfraCloud database and can be displayed in a browser of a phone, tablet or computer. Historical data can also be viewed and downloaded. In addition, there are a number of other functions available for remote device management.

Technical data:

Power supply:	100-240 VAC/12V/10A
Power consumption:	50 VA
Dimensions (W x H x Depth):	350x430x330 mm
Weight:	13 kg
Analysis time:	~1 min.
Measuring surface:	40 cm ²
Path-length:	4 - 33 mm (automatically set)
Sample quantity:	~ 300 cm ³ (for wheat analysis incl. test weight)
Operating temperature range:	10 – 45 °C
Optics:	Scanning grating monochromator with SBCS
Wavelength Range:	790-1064 nm
Wavelength Accuracy:	0,1 nm
Wavelength Reproduction:	0,02 nm
Detector:	Si PIN photodiode
Source:	Halogen lamp (12V/20W)
User interface:	Capacitive touch screen
Display:	8" 1024x768 colour TFT
Embedded computer and operating system:	Toradex Colibri iMX6DL, Linux
Printer:	Built-in graphic thermal printer
Connections:	3 x USB 2.0 port; LAN; WIFI