



Flour Analyzer

EQUIPMENT SERIES



- Wheat, Flour and By-Products
- Ash, Protein, Moisture, Water Absorption and Other Parameters in Under 30 Seconds•
- Ready to go Pre-Calibrated with Unity or Ingot® Calibrations from Aunir™

* Deluxe Model



Process and Quality Control

Fast, accurate analysis is critical for flour millers to optimize the milling process and insure quality of the finished products. Optimizing the process will save the plant time and money and provide very rapid payback. Near Infrared (NIR) analysis is a proven technique designed to provide fast, accurate, and reliable results for the flour milling industry.

BENEFITS:

- Rapid payback
- At-line ready
- Simple to use
- Flexible sample handling
- Easy data integration
- Low maintenance
- ISO 12099 Compliant
- Guaranteed calibrations



The Unity Flour Analyzer is based on the SpectraStar XT, a state of the art hi-performance NIR analyzer optimized for the analysis of ground and unground natural products. The SpectraStar XT contains TRUE ALIGNMENT® Spectroscopy (TAS), a revolutionary technology which monitors the instrument status and precisely calibrates the instrument to first principles. The SpectraStar XT delivers reliable operation and ultimate performance.

The Unity Scientific SpectraStar™ RTW (Rotating Top Window) system gives the ultimate in sampling flexibility and allows the customer to make measurements throughout the milling process.

Plug and Go Calibrations

The Flour Analyzer Basic comes ready to use with Unity calibrations for soft and hard wheat flour as well as ground wheat and includes 1 year calibration support. The Flour and Wheat Analyzer Basic adds calibrations for whole wheat kernels. Protein, moisture and ash constituents are included.

The Flour Analyzer Deluxe is powered by the Ingot® calibration package from Aunir™, world leaders in NIR calibrations. This package includes moisture, fat, protein, fiber, ash, starch damage, water absorption and other calibrations for bread, cake and other flours. Calibrations for whole wheat and co-products are also included. All Ingot calibrations are backed by Aunir's 30 years of experience and include 1 year calibration support and guarantee from Aunir.

- Monitoring incoming wheat quality
- Monitoring and controlling the milling process
- Monitoring final flour quality
- Test quality of milling byproducts



Flour Analyzer

Ready to Use

The Unity Flour Analyzer is robust enough to be used both at-line or in the lab. The system features a long life lamp and no air filter or fan, providing for very low cost of ownership. The built in computer is fully networkable and LIMS compatible, allowing for plant management to immediately access results.

The Flour Analyzer packages includes the following:

- SpectraStar XT with built in 17" touch screen, prediction software, multi-cup adapter, powder cup adapter, Unity TAS Standards

The **Flour Analyzer Basic** package includes:

- SpectraStar 1400XT and medium sample cups US-MPCP-0001
- Unity calibrations for hard and soft flours
- 1 year free calibration support

The **Wheat and Flour Analyzer Deluxe** package includes:

- SpectraStar 2600XT and large sample cups US-LGOP-0001
- Unity calibrations for whole wheat and hard and soft flours
- 1 year free calibration support

The **Flour Analyzer Deluxe** packages include:

- SpectraStar 2600 XT and large sample cups US-LGOP-0001
- Full Ingot Calibration package for wheat and flour milling
- 1 year calibration support and guarantee from Aunir™



HOW TO ORDER

Simply choose the analyzer package below for ready to go analysis of all your flour and wheat samples

FLOUR ANALYZER BASIC

US-14XT-FLR1
SpectraStar 1400 XT (Static)
(1400 nm – 2600 nm)
Unity Calibrations

WHEAT AND FLOUR ANALYZER DELUXE

US-2600-FLR3
SpectraStar 2600 XT (Rotating)
(1100 nm – 2600 nm)
Unity Calibrations

FLOUR ANALYZER DELUXE

US-2600-FLR1
SpectraStar 2600 XT
(1100 nm – 2600 nm)
Aunir™ Ingot® Calibrations

Specifications Table (Full Specifications in SpectraStar XT Brochure)

Technology	Pre-dispersive scanning monochromator with nominal bandwidth of 10 nm (FWHM)
Wavelength Range	1400 - 2600 nm (Basic); 1100 - 2600 nm (Deluxe)
Light Source	Tungsten halogen lamp with MTBF rating of 10,000 hours (User changeable)
Detector	Custom dual cooled, extended InGaAs detectors (2)
Analysis Time	10 - 30 seconds
Data Interval	1.0 nm
Photometric Noise	< 0.02 mAu 1400 - 2600 nm (Basic); < 0.02 mAu 1100 - 2600 nm (Deluxe)

User Interface

Built-in Computer	Windows® 10 Professional, Solid State HDD, 17" high resolution touch screen monitor
Software	UScan™ routine analysis and data management package
Network Capabilities	OPC Compliant; LIMS Compatible; 4 USB ports, 2 Ethernet (RJ45)

Dimensions and Power Requirements

Size	330 x 381 x 508 mm (with display) 330 x 381 x 270 mm (without display)
Weight	18 kg, 40 lbs.; 22 kg, 48 lbs. with monitor
Voltage	100-240 V AC *, frequency 50-60 Hz, Class 1, protective earth

Unity Scientific

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