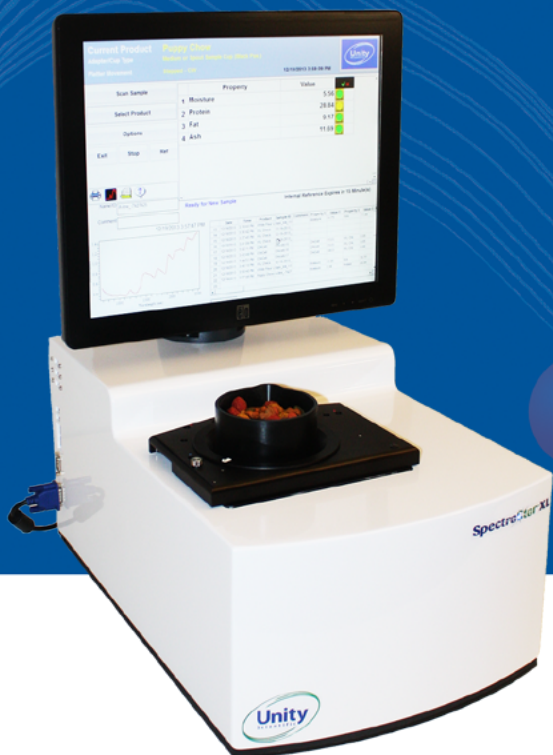


# Flour Analyzer



- 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

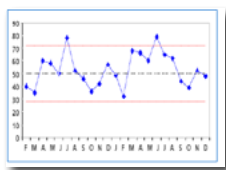


**Monitoring incoming wheat quality**

**Monitoring and controlling the milling process**

**Monitoring final flour quality**

**Test quality of milling by-products**



## BENEFITS

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



## 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.

## SpectraStar XL

The Flour Analyzer is based on the SpectraStar XL, a state of the art stand-alone NIR analyzer optimized for the analysis of ground and unground natural products. The SpectraStar XL is calibrated to NIST traceable reference standard materials and utilizes TRUE NIR™ components for outstanding performance and reliability, providing high uptime, complete confidence and quick payback to the operators.

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.

**SpectraStar™ XL**

# Flour Analyzer

## 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-1400-FLR1  
SpectraStar 1400 XL (Static)  
(1400 nm - 2500 nm)  
Unity Calibrations

### Wheat and Flour Analyzer Basic

US-1400-FLR2  
SpectraStar 1400 XL (Rotating)  
(1400 nm - 2500 nm)  
Unity Calibrations

### Flour Analyzer Deluxe

US-2500-CAN2  
SpectraStar 2500 XL  
(1100 nm - 2500 nm)  
Aunir™ Ingot® Calibrations



## 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.

All Flour packages include the following:

- SpectraStar XL with built in 17" touch screen, prediction software, multi-cup adapter, powder cup adapter, Unity check cell, Unity R99 standard

The **Flour Analyzer Basic** package includes:

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

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

- SpectraStar 1400XL 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 2500 XL and large sample cups US-LGOP-0001
- Full Ingot Calibration package for wheat and flour milling
- 1 year calibration support and guarantee from Aunir™



## Specifications (Full Specifications in SpectraStar XL Brochure)

<b>Technology</b>	Pre-dispersive scanning monochromator with nominal bandwidth of 10 nm (FWHM)
<b>Wavelength Range</b>	1400 - 2500 nm (Basic); 1100 - 2500 nm (Deluxe)
<b>Light Source</b>	Tungsten halogen lamp with MTBF rating of 10,000 hours (User changeable)
<b>Detector</b>	Custom dual cooled, extended InGaAs detectors (2)
<b>Analysis Time</b>	10 - 30 seconds
<b>Data Interval</b>	1.0 nm
<b>Photometric Noise</b>	< 0.02 mAu 1400 - 2500 nm (Basic); < 0.02 mAu 1100 - 2500 nm (Deluxe)

## User Interface

<b>Built-in Computer</b>	Windows® 7 Professional, Solid State HDD, 17" high resolution touch screen monitor
<b>Software</b>	InfoStar™ prediction and data management package
<b>Network Capabilities</b>	OPC Compliant; LIMS Compatible; 5 USB ports, 2 Ethernet (RJ45)

## Dimensions and Power Requirements

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

## Local Contact Information:



### Unity Scientific

117 Old State Road  
Brookfield, CT 06804  
USA

Phone: 203-740-2999

Fax: 203-740-2955

www.unityscientific.com

Email: info@unityscientific.com