



# Computrac<sup>®</sup> MAX<sup>®</sup> 2000XL Moisture/Solids Analyzer

Intermountain Power Service Corporation saved over \$335,000.00 in 2 years by using Arizona Instrument's Moisture Analyzer, the MAX<sup>®</sup> 2000XL!

Intermountain Power Service Corporation, which operates and maintains a coal fired power facility located 80 miles south of Salt Lake City, UT in Delta, UT purchased a Computrac MAX<sup>®</sup> 2000XL in 2006 to assist in the control of their Wet Limestone Flue Gas Desulfurization Scrubbers. In order to minimize sulfur emissions, limestone slurry is used to bind the sulfur dioxide from the flue gas into Calcium Sulfate (synthetic gypsum), that can be easily landfilled. The addition of an antifoam agent is required to reduce the foaming caused by biological matter carried into the scrubber modules by the limestone slurry and makeup water. The addition of the silicon based antifoaming agent in excessive amounts inhibits the oxidation reaction, resulting in a byproduct of Calcium Sulfite. The Calcium Sulfite has a finer crystalline structure which scales piping and equipment, and is extremely difficult to dewater and landfill. To offset this, IPSC added polymer to aid in settling and removal of the scrubber byproducts.

The use of the MAX<sup>®</sup> 2000XL has allowed IPSC to control the usage of defoamer, by providing a means to quantify how much is too much. This in turn has decreased the amount of polymer being used. The statistics of actual dollars being saved is as follows:

In 2005, IPSC used \$329,000.00 in defoamer, whereas in mid-2006, when the company began testing the MAX<sup>®</sup> 2000XL, the reduction in chemical usage dropped to \$252,000.00. In 2007, after a full year of using the MAX<sup>®</sup> 2000XL, the chemical usage dropped to \$88,000.00.

In addition to the MAX<sup>®</sup> 2000XL saving a significant amount of money on the front end, the company was also able to utilize the MAX<sup>®</sup> 2000XL data to control waste solids and reduce polymer usage. The polymer expenses were \$110,000 in 2005, \$127,000.00 in 2006, and \$15,000.00 in 2007.

**MAX<sup>®</sup> 2000XL Advantage** offers these additional features:

- User Login/Tracking
- Balance Verification
- Balance Mode



# Computrac<sup>®</sup> MAX<sup>®</sup> 2000XL

## Moisture/Solids Analyzer



### Additional Features:

- Optional bi-directional communication package for data storage and retrieval from PC and easy programming of multiple instruments
- Ramped temperature programs for quicker test times
- Linked temperature programs determine free and bound moisture
- Firmware stores over 100 test results and includes statistical features to calculate mean, standard deviation and relative standard deviation
- User-programmable target sample weight from 150 mg to 40 g eliminates test variables
- Starting temperatures are programmable in 1°C increments
- Syringe test mode eliminates solvent evaporation and captures accurate start weight
- Nitrogen purge minimizes oxidation of samples and flashing of volatiles
- Foil weight entry mode for paint solids at OEM assembly plants
- Easy setup of product methods to ensure optimum test results
- Flexible ending criteria to ensure accurate test results
- Real-time graph of test's drying curve

### MAX<sup>®</sup> 2000XL Specifications:

Sample Size	150 mg to 40 g
Resolution	Moisture: 0.001 %; Balance: 0.0001 g
Moisture/Solids Range	0.005% to 100%
Dry Weight Range	0-300%
Results Display	% Moisture, % Solids, or % Dry Weight
Ending Criteria	Predict (Auto or Manual), Rate, or Time
Heating Range	25 – 275°C, set in 1°C increments and maintained to ±1°C within the range of 100 - 200°C
Test Parameter Memory	MAX 2000XL: Storage of up to 250 Programs; MAX 2000XL Advantage 4.36: Storage of up to 245 Programs
Program Identification	Alphanumeric and/or symbols; programmable prompts for lot or product ID numbers
Test Result Memory	MAX 2000XL: Data from last 122 tests MAX 2000XL Advantage 4.36: Data from last 108 tests
Statistical Calculation	Mean, Standard Deviation, and Coefficient of Variation
Power Requirements	110-120V~, 50/60 Hz, 1 amp (standby) or 8 amps (heat on), or 210-240V~, 50/60 Hz, 0.5 amps (standby) or 4 amps (heat on)
Interfaces	RS-232 (9-pin standard); Parallel Printer (LPT - PC 25-pin standard)
Dimensions	9.5" H x 12" W x 24" D/235 mm H x 300 mm W x 575 mm D
Weight	32 lbs/13.9 kg
Warranty	Two years, factory parts and labor (one year international)
Marks	U.S. and Canadian Underwriters Laboratory; European Communities - CE

### Accessories:

- Multi-Point Temperature Calibration Module
- Printer
- Bi-directional Communication Package
- Validation Package
- Sample Basket
- Nitrogen Purge Fittings
- Carrying Case