



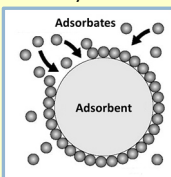
IDSorb™

For Adsorption/Desorption/Absorption Analysis



SYSTEM CAPABILITY

Adsorption is the deposition of molecular species (adsorbates) on a surface (adsorbent). The removal of adsorbates from the surface of an adsorbent is known as desorption.



IDSorb™ (from the IDSpectra™ product line) can be used to accurately determine the levels of adsorption (or desorption) from a wide range of materials. While it is specifically designed to be used with FlyAsh & commercial Air Entrainment Agents (AEAs), it can be expanded and customized to be used with any adsorbate/adsorbent system.

- FlyAsh Adsorption Capacity
- Product Quality Control
- Evaluation of Air Entrainment Agents
- Surfactant & Solute Identification
- Concentration Measurements
- Miscellaneous Research

CONTACT

PHONE: 770-745-5693

WEBSITE: www.phosphortech.com

EMAIL: info@phosphortech.com

MAILING ADDRESS

PhosphorTech Corporation
3645 Kennesaw N. Industrial Pkwy
Kennesaw, Ga 30144

RAPID FLYASH SORPTION ANALYSIS WITH SAMPLE TRANSPORT

INSTRUMENT

MATERIALS

Fly Ash Powders	All Types
Air Entraining Agents (AEAs)	Expandable Database
Liquid Carrier	Filtered Water
AEA Detection Sensitivity	+/- 10 ppm

MECHANICAL

Dispenser Channels	Four (2 samples, 2 reference)
Dispenser 1 Volume	300 ml (user customized)
Dispensers 2-4 Volume	100 ml (user customized)
Typ. Sample Volume/Ash Weight	50 ml/2 grams
Sample Preparation	Instructions & Videos Provided
Sample Transport & Processing	Automated and fast

SOFTWARE & DATA

IDSpectra™ App	Laptop/Tablet
Operating System	Windows 10
AEA Database	Built-in (user selectable)
Measured Spectra	Intensity & Absorbance
Calculated Parameters	Adsorption Capacity & ppm

ANALYSIS CAPABILITIES

Adsorption by Light Absorbance

- Determination of fly ash adsorption of AEAs and other admixtures
- Identification & Comparison of Commercial AEAs with Database
- Generation of UV/Vis Absorbance Spectra

Concentration Determination

- Determination of concentration from absorbance (Beer's Law)
- Measurement of unknown concentrations using calibration data
- Detection sensitivity in the parts per million (ppm) range

Adsorption Analysis

- Determination of AEA adsorption capacity of fly ash powders
- Generation of AEA adsorption isotherms
- General analysis of adsorbate/adsorbent relationships