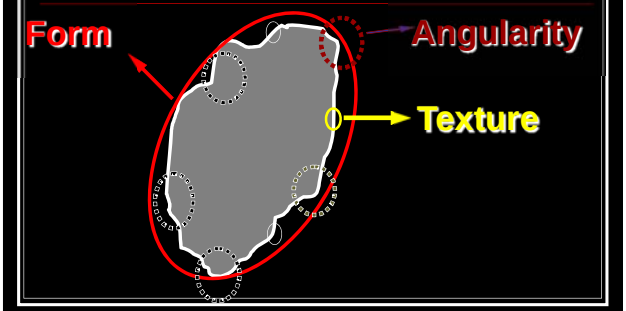
PINE Instrument Company
Test Equipment Division

Aggregate Imaging System

When testing aggregates image is everything

Aggregate Imaging Measurement System (AIMS)

- Characterizes Aggregate Consensus Properties

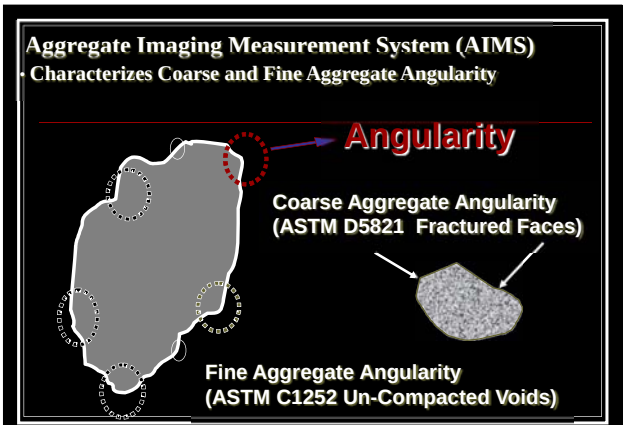


Aggregate Imaging Measurement System (AIMS)

- Characterizes Aggregate Form Properties

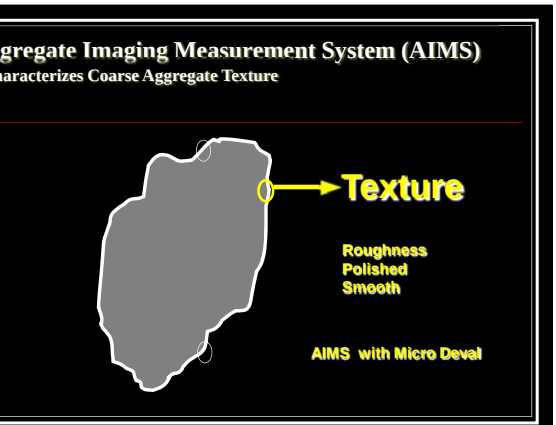
Aggregate Imaging Measurement System (AIMS)

- Characterizes Coarse and Fine Aggregate Angularity



Aggregate Imaging Measurement System (AIMS)

- Characterizes Coarse Aggregate Texture



Original AIMS Unit

Original AIMS Unit

- Developed in an Academic Environment
- Consisted of a Camera, Microscope and XY Plotter
- Complex Design Subject to Mechanical Breakdown
- Ambient Light Could Affect Test Results

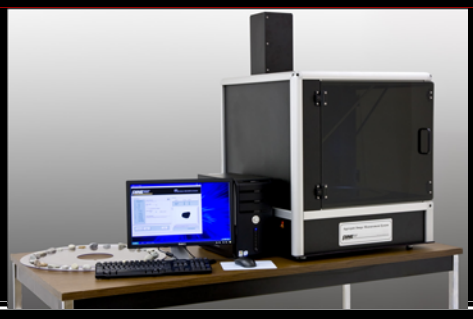
Partnering with Highways for Life Pine develops the new AIMS

- Develop a design that would be commercially acceptable
- Reduce the number of moving parts
- Reduce the affects of ambient light
- Develop AASHTO Procedures for use of the AIMS

Highways for Life

- 5 units developed under the grant
- Ruggedness Study –Texas A & M
- Inter Laboratory Study
  - 32 Labs
  - 27 States
  - 1 Canadian Province
  - Data Evaluated at Texas A & M

The New AIMS



Why use the AIMS

- Eliminates Bias
- Improved Precision
- Data collected and categorized in excel
- Productive Use of Personnel

Test Drive an AIMS

- Floater unit available for short term loan
- Organizations that could not participate in ILS
- Another chance for ILS Participants
- Loan term is 60 – 90 days
- Contact Pine for loan details