Advanced Aggregate Testing

TWO DAY PROGRAM FOR UP TO 10 PARTICIPANTS

This training program provides a classroom review and hands-on demonstration of various procedures, test methods, and equipment required to be able to properly perform multiple aggregate tests used in the production of concrete. Focus will be on methodology and understanding the results of each test.

**Who should attend:** Supervisors and staff at Testing Laboratories, Aggregate Quarries/Mining/Dredging facilities, Ready Mix Concrete Batch facilities, and Pre-Cast Concrete plants who routinely conduct aggregate testing, including laboratory staff, project managers, Department of Transportation inspectors, or anyone interested in how to properly test aggregates for use in concrete.

**Program Content:**

- **Testing**
  Why do we test? What can we test? When do we test? How do we test?

- **Advanced Aggregate Testing**
  Classroom and Laboratory hands-on training; Best practices and tips; How to interpret the results and identify common errors

- **Use, Maintenance, and Calibration of Equipment**
  How to properly use equipment; How to maintain and routinely calibrate equipment

- **ASTM Standards**
  These test methods will be included in the classroom and the hands-on training in the laboratory:
  - AASHTO T112/ASTM C142 – Clay Lumps and Friable particles
  - ASTM D4791 – Flat & Elongated Particles
  - AASHTO T19/ASTM C29 – Bulk Density and Voids
  - AASHTO T113/ASTM C123 – Lightweight Pieces
  - AASHTO T176/ASTM D2419 – Sand Equivalent Test
  - AASHTO T304/ASTM C1252 – Uncompacted Void Content

These specifications and test methods be discussed:
- ASTM C33 – Standard Specification for Concrete Aggregates
- ASTM C88 – Soundness of Aggregates
- ASTM C131 – LA Abrasion
- ASTM C666 – Resistance of Concrete to Rapid Freezing and Thawing
- ASTM C1260 – Potential Alkali Reactivity of Aggregates
- ASTM C1567 – Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate
- ASTM C1778 – Reducing the Risk of Deleterious Alkali-Aggreated Reaction in Concrete
- D2419 – Sand Equivalent Value of Soils and Fine Aggregate

**Instructors:**

- **Michael Morrison,** Manager, Certification Program Development, has over 35 years of experience in the cement and concrete industry.

- **Rusty Owings,** Resource Center Manager, has over 20 years of experience in the design and construction industry.

*This is a training session ONLY and ACI certification is NOT part of this program.*

**Cost** – This training program is offered for $329 and includes Program binder for best practices and Study guide for Aggregate Testing Technician Level 2.

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