

Hydrocyclone and slurry characterisation testing center



FLS

FLS laboratory testing services

We offer hydrocyclone and slurry characterisation testing services both at our state-of-the-art facility and onsite.

The FLS testing center delivers the quality data you need, forming the cornerstone of proper plant design and optimization projects. To ensure quality service, all characterization and hydrocyclone tests are done through our laboratory facility. As a partner in your success, our services extend to testing onsite!

State-of-the-art facility

Within our fully equipped lab, we house equipment and instrumentation that provides rapid turnaround, quality results and accurate data. As a comprehensive testing facility, we are equipped to handle a wide range of cyclone sizes, from 0.5" to 26". If you have a plan for your site, we offer the capabilities to ensure that you have the best chance to succeed.

Slurry Characterisation

At FLS, we provide comprehensive sample characterization services. If you have a question, we have an answer!

Expertise and support

Our experienced technical staff includes some of the most experienced people in the industry. When it comes to commissioning, troubleshooting, and any other assistance you may require, our technical staff will be there onsite. We will work closely with you each step of the way to ensure successful completion of testing and provide hands on training with cyclone operation.

Convenient onsite testing

We offer onsite testing using our specialized test rigs. We can even send out test or rental units to ensure a smooth testing process right at your location.

This superior combination of facility, equipment, personnel and procedures means you can trust us for all your hydrocyclone testing needs.



Characterisation tests we offer:

Screening tests:

1. Settling vs. time in a graduated cylinder
2. Settling/compaction vs. time in a centrifuge
3. Slurry viscosity
4. Slurry S.G. with hydrometer
5. Dry solids S.G.
6. Supernatant viscosity
7. Supernatant S.G. with hydrometer or pycnometer
8. Supernatant TDS
9. Supernatant pH
10. Tramp oversize solids
11. For liquid/liquid samples:
 - Settling vs. time in graduated cylinder
 - Separation vs. shear by blender
 - Separation by centrifugation
12. Photographs
13. Photomicrographs

Particle Size Distribution (PSD) and % Solids

1. Wet screen at 75 μm (200 M).
Dry and weigh -75 μm fraction.
Dry screen + 75 μm fraction
Wet screen +75 μm fraction (optional)
2. As above plus Malvern PSD on -75 μm fraction

Hydrocyclone testing:

Sump Sizes

- Cyclones ½" and 1" (5-gallon loop)
- Cyclones 1", 2", 3" (15-gallon loop)
- Cyclones 4" – 10" (200-gallon loop)
- Cyclones 15" – 26" (1,000-gallon loop)

Tests we offer

1. Sample preparation and cyclone assembly
2. Sampling and flow rate measurement
3. Sample analysis, 3 samples/ test (screen and % solids and Malvern) (Feed, OF, UF)
4. Data analysis and report

Additional tests:

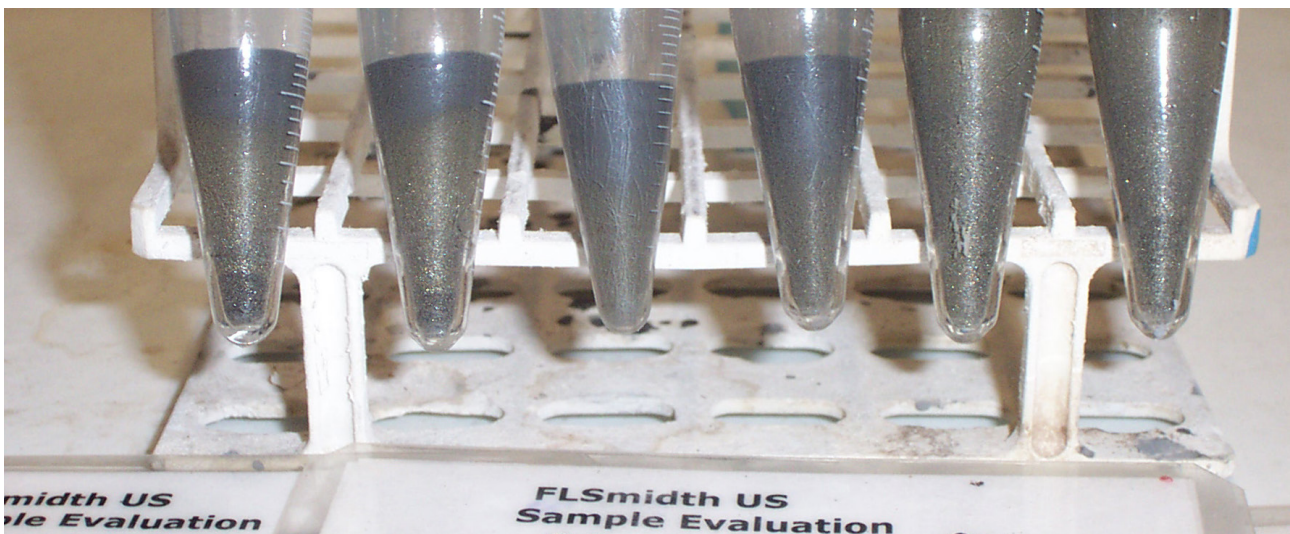
Pressure Change

- 3 samples per change in pressure (Feed, OF, UF)
- Flow rate measurement



Cyclone Configuration Change

- 3 samples per configuration (Feed, OF, UF)
- Flow rate measurement
- Includes fittings or cyclone change.
- Two stage test ₁
- Heated slurry ₂

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1. Offered for up to 10" cyclones.
 2. Heated up to 140 degrees Fahrenheit for up to 200-gallon capacity.



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Contact us

Tucson Facility
5505 W Gillette Rd,
Tucson, AZ 85743

Tel. +1 520 744 8200
FLSK_TUSLAB@FLSmidth.com.



flsmidth.eco/contact

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