LABORATORY EVALUATIONS, PILOT TESTING, AND FIELD SUPPORT

Complete services for continuous improvement and flow sheet development

Eriez maintains an assortment of bench- and pilot-scale equipment for both laboratory and in-field evaluations.

With more than 15,000 square feet of dedicated laboratory space and an array of lab and pilot equipment, the Eriez Flotation Division (EFD) has the tools to test and provide detailed process analysis and state-of-the-art solutions for nearly any application.

In addition to testing, technical services are rendered by a contingent of over 15 degreed mineral processing engineers. This experienced team conducts field trials, start-ups, and is available to evaluate process flow sheets and help improve plant performance.

EFD’s battery of test equipment includes:

- Single and multistage column flotation circuits
- Bench top flotation cells
- Pilot-scale columns
- Lab- and pilot-scale HydroFloat Separators
- Lab- and pilot-scale CrossFlow Separators
- Grinding equipment (cone, ball, and rod mills)
- The CPT Mini Pilot Plant
- XRF analytical capabilities
- And more!

A 500-mm pilot-scale column flotation cell installed for in-plant trials.

For more information, visit flotation.eriez.com
ON-SITE TESTING

EFD possesses the most up-to-date qualifications for the design and implementation of large-scale mineral processing applications.

Eriez’ on-site testing services provide quantitative data generated on a demonstration scale in the plant environment. This data can be used for process guarantees.

With an experienced team of process engineers, EFD also excels at improving plant performance by conducting thorough circuit evaluations, determining optimum operating conditions, and finding solutions for common problems.
THE MINI PILOT PLANT

The Eriez Flotation Division offers a more economical method of conducting metallurgical feasibility studies with the CPT Mini Pilot Plant.

Large-scale pilot testing is a multi-million dollar investment and can consume hundreds of tons of ore. These large tests are time consuming, expensive, and may require permitting just to obtain the required sample.

By comparison, EFD’s Mini Pilot Plant runs at a feed rate of only 5 kg/hr using just drill core. This proprietary system simulates plant circuitry and allows various circuits, grind size, and reagent chemistry to be evaluated in a short time period. The Mini Pilot Plant can drastically reduce the expense and time necessary for development and confirmation of a plant flow sheet.

Eriez’ Mini Pilot Plant includes:
- Batch Rod Mill
- Holding Tank
- Feed Tank
- Continuous Flotation Machine (CFM)
- Lab Column
- Reagent Cart
- Pin Mill
- PLC Data Acquisition System

Both Vale (end user) and Xstrata (metallurgical lab) have validated Eriez’ MPP as a reliable means for designing industrial plants.
IN-HOUSE LAB SERVICES

EFD can provide a complete and detailed analysis of most minerals processing applications.

With laboratory equipment ranging from grinding mills to bench-top and column flotation cells, complex plant circuitry can be simulated and tested. Typical tests range from exploratory batch testing to the evaluation of multi-stage flotation circuits.

With analytical capabilities, including a glass fluxer and an XRF (x-ray fluorescence), EFD can quickly conduct in-house assays and improve turn-around time on testing.

Testing and Analysis includes:
- Bench-top batch testing
- Batch milling (ball, rod)
- Continuous milling (ball, rod)
- Steady-state column flotation testing
- High and low gradient magnetic separation
- Plant simulation with the CPT Mini Pilot Plant
- And much more!
WORLD AUTHORITY IN ADVANCED SEPARATION TECHNOLOGIES

Customer-Focused Service Spanning the World of Minerals

Eriez Flotation Division is committed to providing state-of-the-art equipment and process solutions for new and existing projects worldwide. We understand and quickly respond with integrity, competence and effectiveness to the needs of our clients. Our versatility is demonstrated by the diversity of our engineering services and the varying sizes of projects we have successfully completed around the world.

Contact the nearest Eriez Flotation Division office for technical support or design engineering to suit your specific application.

Formerly known as Canadian Process Technologies, Inc., EFD is a wholly owned subsidiary of Eriez Manufacturing Co. Eriez provides advanced testing and engineering services in addition to sparging and column flotation equipment for the mining and minerals processing industries. Eriez, HydroFloat, SlamJet and StackCell are registered trademarks of Eriez Manufacturing Co.