



TESTING AND TECHNICAL SERVICES •



# 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 mulit-stage 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 eriezflotation.com

## **ON-SITE TESTING**

ERIEZ FLOTATION DIVISION

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.















## **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!









### 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



▲ Continuous Flotation Machine (CFM)

Both Vale (end user) and Xstrata (metallurgical lab) have validated Eriez' MPP as a reliable means for designing industrial plants.

















Flotation



Hydraulic Separation



Lab & Pilot Equipment, Testing and Technical Service



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 Ériez Manufacturing Co.

#### WORLD AUTHORITY IN ADVANCED SEPARATION TECHNOLOGIES

Customer-Focused Service Spanning the World of Minerals

The Eriez Flotation Division (EFD) is focused on addressing specialty flotation applications through innovative technology and expert support.

EFD is committed to providing state-of-the-art equipment and process solutions for new and existing projects worldwide. We understand and quickly respond 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.

Our state-of-the-art test lab and pilot facilities in Erie, PA are available to demonstrate and pilot solutions based on your unique needs.

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



Eriez Flotation Division | Canada 7168 Venture St Delta, BC, V4G 1H6 Canada Office: +1 604-952-2300 efdca@eriez.com

Eriez Flotation Division | Brazil Av. Getúlio Vargas, nO 456 - 120 andar Funcionários - Belo Horizonte - MG Brazil Office: +55 31 3281 9108 efdbr@eriez.com

Eriez Flotation Division | Chile Badajoz, 130 Of. 1505 Las Condes, Santiago Office: +56 2 29523400 efdcl@eriez.com

Eriez Flotation Division | USA 2200 Asbury Road Erie, PA 16506 USA Office: (814) 835-6000 efdusa@eriez.com

Eriez Flotation Division | Australia 21 Shirley Way, Epping, Victoria 3076 Australia Office: +61 3 8401 7400 efdau@eriez.com

Eriez Flotation Division | Perú Av. Manuel Olguin 335, oficina 1008 Surco, Lima Perú Office: +51 1 719 4150 efdpe@eriez.com

Website: www.eriezflotation.com





