

# Bishop Solids Management Solutions: Bench-scale and onsite performance testing



## Accurately model dewatering performance and lifecycle savings

Simple, bench-scale tests can quickly and accurately model the performance and anticipated savings of large-scale **Bishop Solids Management Solutions**. Performed by experienced Bishop Water technicians, the tests help identify the best chemical conditioning program to accelerate and maximize dewatering and containment of slurry materials. These can include organic or granular materials such as fines, silts and clays.

Bishop Water technicians can calculate the anticipated savings of capital and operating costs for full-scale systems, taking into consideration the cost of chemicals, electricity, and hauling/disposal for dewatered solids. Because **Bishop Solids Management Solutions** incorporate a passive dewatering process, its lifecycle costs are typically far lower than complex, energy-intensive mechanical systems such as centrifuges or belt presses.

The environmental and economic benefits of a **Bishop Solids Management Solution** can be further demonstrated using a proven carbon footprint calculator. This tool shows the reductions in greenhouse gas emissions and the carbon footprint over the life of the project and illustrates both energy and cost savings in comparison to conventional mechanical processes.

From simple jar testing to onsite pilot systems, the tests provide important performance parameters:

- Ideal polymer or coagulant and optimal dosage;
- Volume and rate of filtrate released from the material;
- Percent total solids (dry weight) attained;
- Time needed to achieve required percent total solids (dry weight);
- Quality of filtrate and ability to achieve regulatory requirements;
- Retention of contaminants such as BOD, TSS, phosphorus, nitrogen and metals such as lead, copper, nickel, chromium, cobalt and more.



Bishop Water technicians can perform a comprehensive range of laboratory or onsite tests to validate and optimize chemical conditioning and dewatering performance of **Bishop Solids Management Solutions**.



### Rapid Dewatering Test (RDT)

A small-scale jar test to provide a quick, initial evaluation of polymer performance with the ideal Geotube® container for site solids. Technicians often start with this test to select the appropriate polymer and demonstrate the anticipated solids retention.



### Pressure-Geotube® Dewatering Test (P-GDT)

This advanced testing process simulates actual pumping pressure used to fill a Geotube® container and accurately models dewatering performance of chemically conditioned sludge.



### Geotube® Dewatering Test (GDT)

Using a smaller version of a standard dewatering container, the GDT provides results that more closely demonstrate actual dewatering performance than RDT. It can be performed quickly in the lab or onsite.



### Mobile Dewatering System (MDS) Pilot

Validate real-life operation and performance of a **Bishop Solids Management Solution** with an onsite pilot system. The MDS includes all components of a full-scale system and can handle up to 20 cubic metres of solids to fully demonstrate the economic, operational and environmental benefits.

Contact us to arrange a dewatering performance test for your organic or granular materials.



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