

Tech Note - 90

Why & how to dewater utilizing TITANTubes

What is dewatering?

• **A passive means of separating solids from liquid.**

- *Additionally, the liquid effluent should ideally be free from any contaminants from the sediment and safe for reuse or discharge.*

• **A means of containing the reclaimed solids either temporarily or permanently.**

- *The solids should be sufficiently dry that they can be removed, reprocessed, or sold with minimal need for treatment or left in-situ with minimal future settlement.*

Dewatering Steps

Step 1: Filling

Sludge (dredged material) is pumped into the TITANTube container. Polymers are added to the sludge, which makes the solids bind together and shed the water.

Step 2: Dewatering

Clear effluent water drains from the TITANTube container through the pores in the specially engineered textile. This results in effective dewatering and resulting volume reduction of the contained materials. This volume reduction allows for the repeated filling of the TITANTube container with over 99% of solids are captured, and clear filtrate can be collected and recirculated through the system.

Step 3: Consolidation

After the final cycle of filling and dewatering, the solids remain in the bag and continue to densify due to desiccation as residual water vapor escapes through the fabric. Volume reduction can be as high as 90%, depending on the material being dewatered. When full, the TITANTube container and contents can be deposited at a landfill, remain on-site, or the solids can be removed and land-applied when appropriate. Volume reduction equals money saved!

We Offer

- High flow rate allows residual materials to dewater, whilst containing solids
- Custom manufactured with seaming techniques that withstand pressure during pumping operations
- TITANTubes have pioneered dewatering technology for over 20 years in regard to both custom fabrics and tube designs to ensure the industry's fastest dewatering and strongest tubes.
- Supported by design advice and guidance on polymer use for your sludge
- Over a thousand dewatering projects around the world have used TITANTube units

