



AEROMOD
Wastewater Process Solutions

TRITAN™ Belt Filter Press Solids Dewatering Technology



The Tritan™ dewatering belt press provides three belt performance with single belt tracking.

Simplicity is the Tritan™ BFP. The Tritan™ is a cost effective solution combining a rotary drum pre-thickener with a belt press in one unit. This streamline design of the pre-thickener above the belt press reduces the equipment footprint. The belt press offers three belt performance while providing excellent dewatering and a dry cake comparable to traditional equipment. Stainless steel fabrication, two drive motors, five rollers, and a seamless moving belt make this press reliable, operator friendly and low maintenance.

Initial thickening occurs with the first belt on the rotary drum pre-thickener, increasing sludge solids concentration to 4 - 8%. Following pre-thickening, the belt press section of the Tritan™ further removes water from the sludge by uniformly spreading it onto the seamless belt via a series of baffles to promote further gravity dewatering. Final dewatering occurs as the sludge is pressed between the seamless belt and a hollow perforated cylinder covered with the third belt. During this final step in the dewatering

process, the discharged sludge cake can reach solids concentrations of 14 to 18%. Dewatering percentages vary depending upon sludge characteristics. A doctor blade scrapes the sludge from the seamless belt. The seamless belt is then washed prior to returning to the gravity zone area.

The alignment and tension of the seamless belt are automatically controlled using pneumatic actuators. Sensors monitor the operation of the system and send signals to halt operation in the event of a malfunction.

The main control panel provides automatic operation of the sludge pump, polymer dosing subsystems, and often times the sludge cake conveying system. The result is an integrated solution with Ethernet IP communication between the feed pump, polymer system, belt press and cake conveying system.

Three models with different belt widths are offered:

- 500 Series - .50 meters
- 1000 Model - 1.0 meters
- 1500 Model - 1.50 meters

TRITAN Advantages

- Simple design reduces maintenance
- Provides economical dewatering
- Seamless belt design reduces risk of breakage (and accompanying downtime)
- Compact design reduces footprint
- Pre-thickening
- Three belt performance



The Tritan discharges a biosolids cake with a solid concentration of 15-20%.

TRITAN Features

- Five Rollers
- Two Drives
- Three belt performance with single belt tracking
- Common collection to a single drain filtrate
- Long life seamless belt
- Stainless Steel fabrication

