

■ **TAN** Belt Filter Press Solids Dewatering Technology



The **Trian** dewatering belt press provides three belt performance with single belt tracking.

The TRITAN is a cost effective solution that combines a sludge prethickener with a belt press in one unit. This streamline design eliminates the need for two separate pieces of equipment, reducing the equipment footprint. Simplicity is the TRITAN. This operator friendly belt press offers three belt performance providing excellent dewatering and a dry cake comparable to traditional equipment, but with less moving parts. The seamless belt, together with the drive belt, provides a high performance belt

press with simpler operation and maintenance.

A third belt, covering the rotary prethickener, provides the initial solid/liquid separation, increasing sludge solids concentration to 4 - 8 percent, and sometimes higher. Following prethickening, the belt press section of the TRITAN further removes water from the sludge by uniformly spreading it onto a filter cloth via a series of baffles to promote further gravity dewatering.

Final dewatering occurs as the sludge is pressed between the primary seamless belt and a hollow perforated cylinder covered with a second belt. During this final step in the dewatering process, the discharged sludge cake reaches a solids concentration of 15 to 20%. Dewatering percentages vary based on sludge characteristics.

A blade scrapes the sludge from the seamless belt and returns through a high pressure wash section to be cleaned before reaching the beginning of this continuous operation.

The alignment and tension of the single seamless belt are automatically controlled using pneumatic actuators. Additionally, the main control panel provides automatic operation of the sludge pump and chemical dosing subsystems within the machine. Sensors monitor the operation of the system and send signals to halt operation in the event of a malfunction. In keeping with the high quality standards of Aero-Mod, the equipment is manufactured in 304 stainless steel. Three belt widths are offered:

0.5m (Series 500) 1.0m (Series 1000) 1.5m (Series 1500)

Product Bulletin

TRITAN™ Advantages

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





The Tritan discharges a biosolids cake with a solids concentration of 15 percent to 20 percent.

Flow Diagram

Thickening Belt Seamless Belt Drive Belt

"Three Belt Performance"

TRITAN™ Features

- 1. Five rollers
- 2. Two drives
- 3. Three belt performance with single belt tracking
- 4. Common collection to a single drain filtrate
- 5. Long life seamless belt
- 6. Stainless steel fabrication