

# Titan™

Traction Thickener



**WESTECH®**

# Titan™ Traction Thickener



For high-tonnage / high-torque applications, a WesTech Titan™ traction thickener can be used as an ideal, economical alternative to conventional center-driven, high-rate thickeners.

## Why Choose a Titan™?

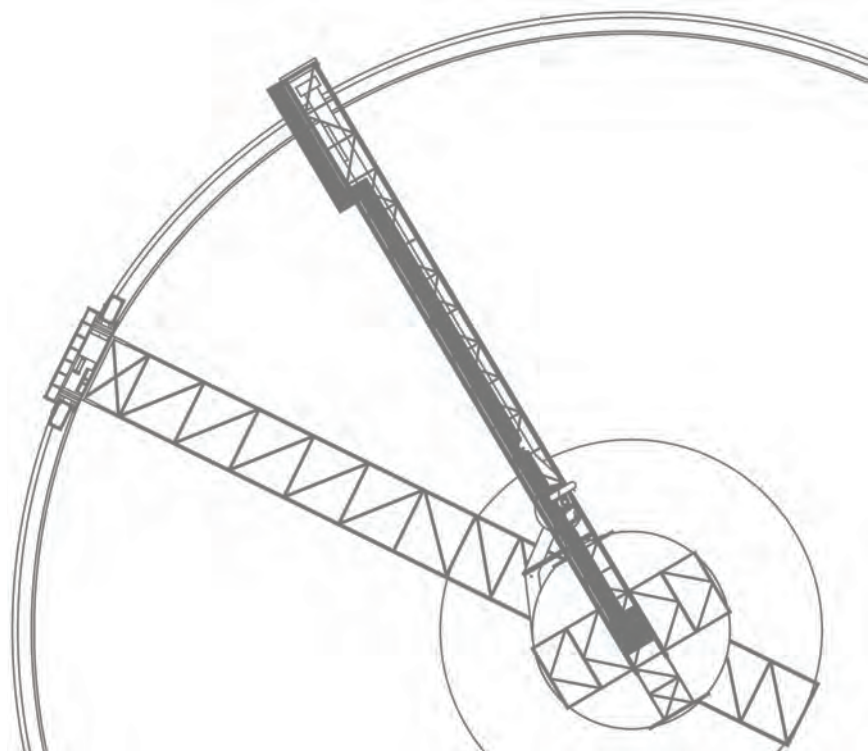
The Titan™ traction thickener processes very high throughputs in a single thickener and cost-effectively provides greater torque in large units.

When sizing a high-rate thickener, one factor that limits the size and throughput in the unit is the available torque. This is particularly true with center-driven, high-rate thickeners. The use of a peripheral drive, like that on the Titan™, takes advantage of the long 'lever arm' of the raking mechanism, instead of being limited by it like a center drive unit.

Experience in sizing, design, and operation of this type of thickener is critical. WesTech has the experience to successfully implement features such as:

- **Traction thickeners are generally larger than 50 m (164 ft) and can be well over 100 m (328 ft).**
- **The thickener tank is an on-the-ground construction.**
- **Feed system designed to manage the high energy of the large flow to properly flocculate and effectively transition the horizontal momentum to proper settling in the tank.**
- **The underflow pumps are located directly under the thickener in a pump room serviced by a subterranean tunnel.**

Consider a WesTech Titan™ traction-driven thickener for your high-tonnage thickening needs.

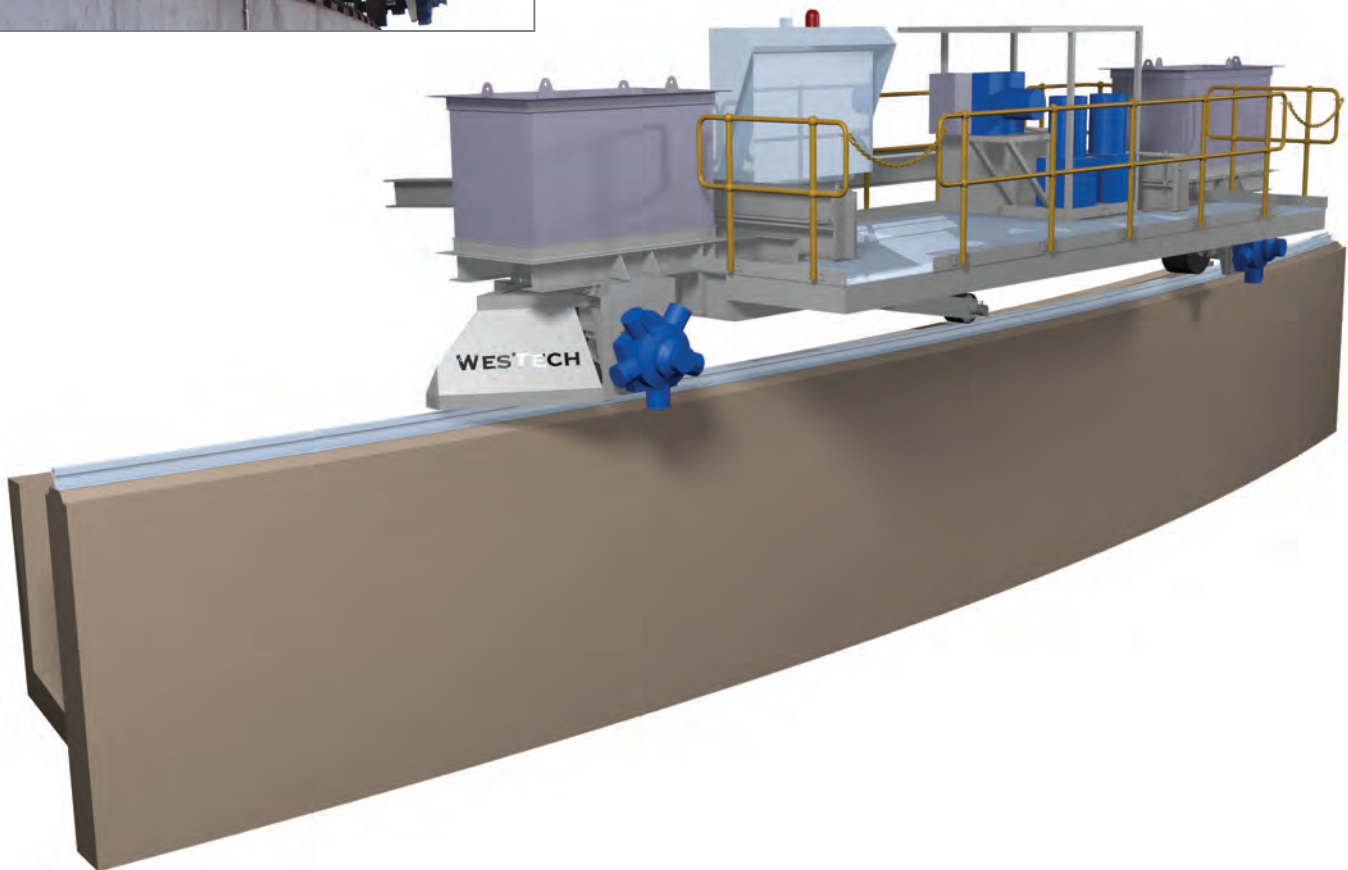






## Traction Drive

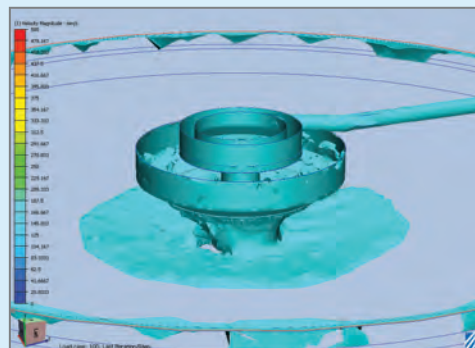
Some of the largest thickeners in the world use a traction-driven mechanism. The mechanism has a central column that serves as a pivot to a rotating rake arm that spans to the periphery of the tank. The arm is connected to a carriage (traction drive) with motorized wheels riding on the circumferential track, typically on a rail. The solids are raked to the center discharge as this tractor runs along the peripheral track. There is an access bridge from the outer wall to the central column which often supports the feed line to the central feedwell.



## EvenFlo™ Feedwell

### Optional Feedwell to Maximize Performance

A properly designed feedwell should provide energy dissipation as well as even distribution of the feed into the thickener. WesTech's EvenFlo™ design consists of a two-part feedwell system. An inner chamber converts the feed energy into a concentric radial flow for optimal mixing of flocculent and solids in all areas of the main chamber. The main feedwell chamber then evenly distributes the feed into the sedimentation zone of the thickener.



*WesTech's EvenFlo™ Feedwell provides optimal flocculation conditions and even distribution of solids in the thickener.*



Represented by:

**WESTECH**<sup>®</sup> Tel: 801.265.1000  
westech-inc.com  
info@westech-inc.com  
Salt Lake City, Utah, USA

© WesTech Engineering Inc. 2015