



## MEGA SUPERFLOW VIBRATORY CONVEYOR

LAYTON SYSTEMS developed the new LANE MEGA SUPERFLOW VIBRATORY CONVEYOR, which combines a hybridize design of two existing Layton Systems conveyor technologies ... the Super Flow and Triathlon.

### ***Better Control & Improved Reliability***

#### **The Hybrid System**

The hybrid technologies combine the ability to create long conveyors similar to the Layton Systems Triathlon and using the Layton System's Super Flow's two eccentric drives to excite the frame and trough to move product.



Layton Manufacturing Mega SuperFlow is a dynamically balanced, vibratory conveyor. Material is conveyed along the trough in a rapid succession of short hops by the vibratory action of the conveyor. The vibration is generated by a pair of counter-rotating electric motors with unbalanced shafts. The motors (vibrators) synchronize as they come up to speed to produce straight-line motion in the trough.

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The trough on a Mega SuperFlow conveyor is supported and guided by a tuned fiberglass flexure system that is mounted on a base. The two vibrators are also mounted on the base, which is supported on a set of isolation springs. During normal operation, there is minimal motion of the base, and therefore, negligible forces transmitted to the support structure. Because it is a tuned system, the trough stroke of Mega SuperFlow conveyors varies with speed. The higher the speed, the larger the stroke will be.



No more Belts, Pulleys, Bearings and Greasing

## Features Benefits

- Two Eccentric Drives mounted on a frame excites the trough to move product forward
- Layton Manufacturing's dynamically balanced vibrating conveyor Mega Super Flow moves Product through the conveyor trough using vibration to create a rapid succession of short hops
- A pair of counter-rotating motors with unbalanced shafts generates vibration
- The vibratory motors rev up and synchronize to an operating speed, which produces straight-line motion in the trough
- The Tuned Fiberglass Flexure System mounted on the base of the Mega SuperFlow frame supports and guides the conveyor trough
- The drives generate minimal motion and transmit negligible forces to the support structure during normal operation
- The Mega SuperFlow stroke length varies with speed due to the tuned systems i.e., higher speed = longer stroke or vis versa
- All options that Triathlon/ BL offered can be incorporate into the Mega Super Flow

## The New Design

- Improve reliability.
- Reduce maintenance requirements for tuning
- Less spare parts needed to maintain throughout the year.
- Better control
- No more Belts, Pulleys, Bearings and Greasing
- Lower cost of equipment from a purchase and operating basis due to 1/3 less material
- Construction from T-304 stainless steel except hardware that consists of MS Grade 5 or Grade 8 plated (located at base splices and fiberglass flexure springs)
  - For application require all stainless-steel hardware, 17-4 PH stainless steel or titanium are available

## Specifications

- Minimum to maximum widths: 18" to 48"
- Minimum to maximum lengths: 5 ft to 100 ft
- Options:
  - Slide gates
  - Single , double and three lanes
  - Dewatering screen
  - Fine screen
- Pedestals
  - Stainless Steel
  - Steel or painted or power coated
- Voltages / amps: vary based on vibrator size