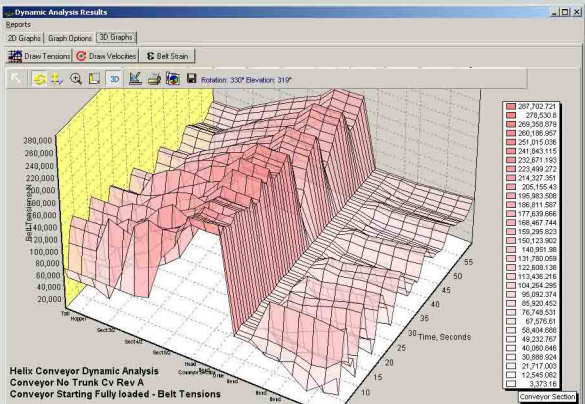


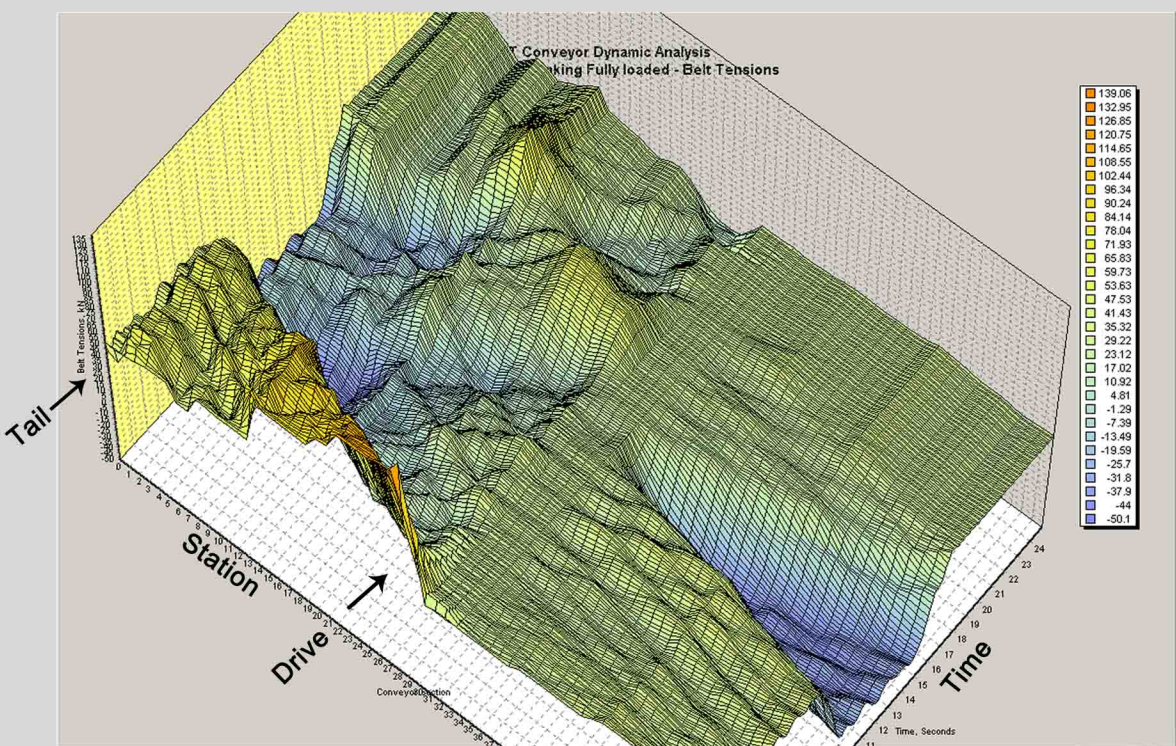
HELIX delta-T

Dynamic Analysis Version

The conveyor dynamic analysis program allows designers to perform full flexible body conveyor design. The new program builds on the strong base formed by the Helix delta-T5 “Static” design program. Designers can model what happens during the starting and stopping of the conveyor and provide detailed graphical output of belt velocities, belt tensions, takeup movement etc. at any point along the conveyor during starting or stopping.

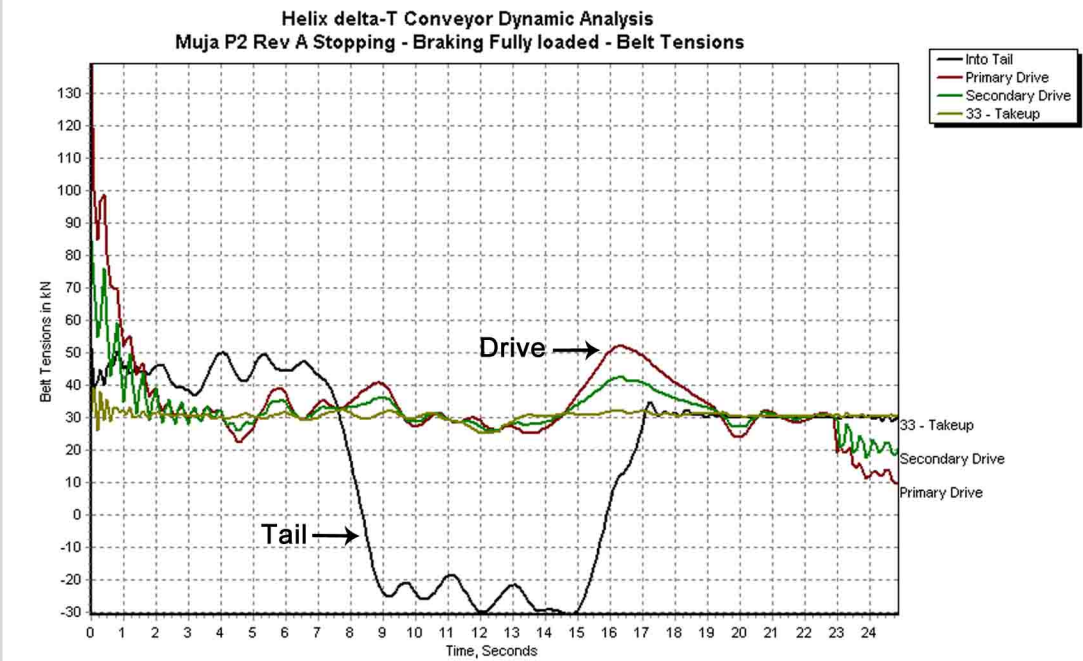


Sample 3D and 2D Belt Tension Graphs



Rotate and view graph from any angle

Conveyor Stopping Fully Loaded - 3D Graph of Belt Tensions



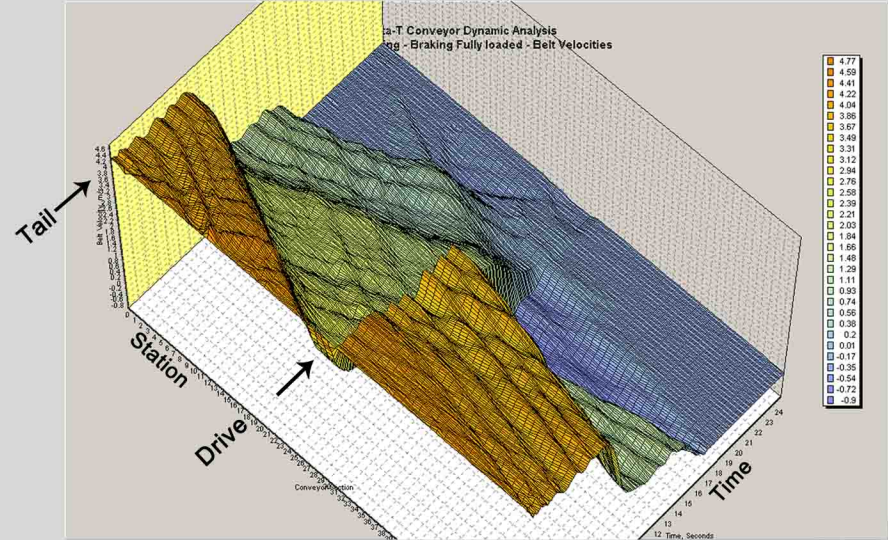
Click any point in list to draw graph

Conveyor Stopping Fully Loaded - 2D Graph of Belt Tensions

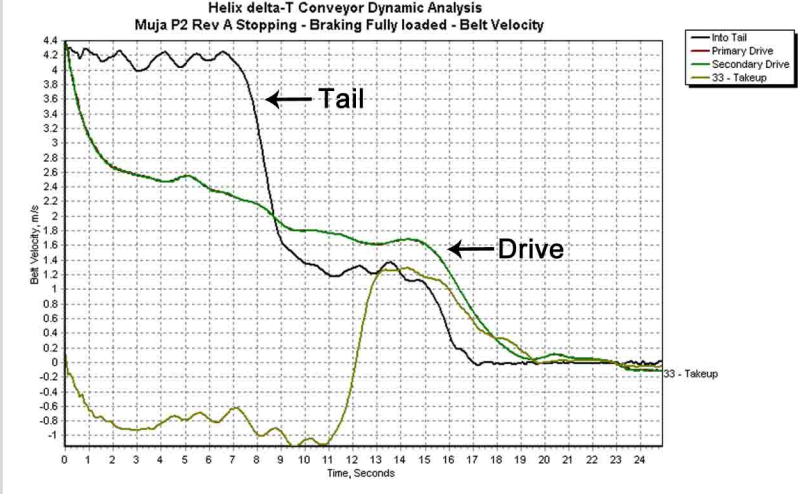
HELIX delta-T

Dynamic Analysis Version

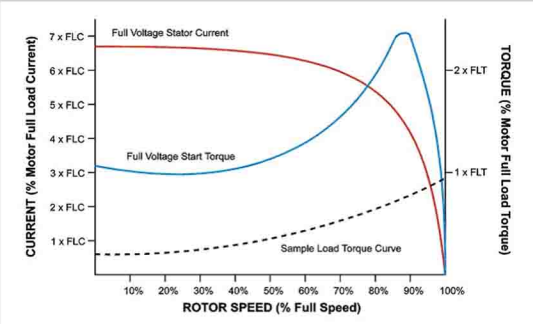
Sample 3D and 2D Belt Velocity Graphs



Conveyor Stopping Fully Loaded - 3D Graph of Belt Velocities

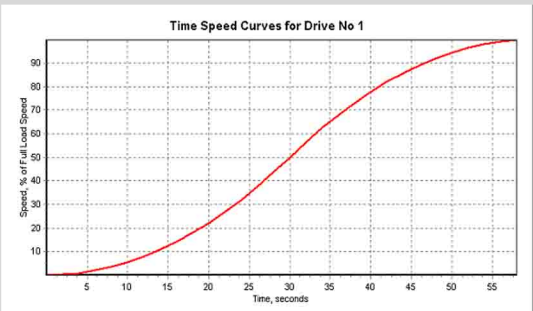


Conveyor Stopping Fully Loaded - 2D Graph of Belt Velocities



Torque Control Start

You can choose to enter a Torque Controlled Drive starting method as shown above or a Time vs Speed Velocity Ramp (S curve) as shown below. Both torque or speed controlled starts can be manipulated to take on any form or shape by the designer, merely by altering the points which form the graphs.



Speed Control Start

delta-T Dynamic Analysis Program Features

- Easily model the belt transient tensions and velocities during starting and stopping of conveyors
- Add torque control or speed control curves on drive acceleration
- Add delay times for multiple drives for dynamic tuning
- Add Flywheels to pulleys to optimise starting and stopping
- Add brakes to pulleys as required
- View takeup movement during starting and stopping
- Perform dynamic tuning by changing start delay times on different drives
- Predict the maximum and minimum Transient Belt Tensions at any point along the conveyor as well as the timing of these transients
- Compare the Dynamic Calculations results with the rigid body static calculations in the delta-T
- Predict the magnitude of transient loads on conveyor structures
- Calculate the torque loadings on gearboxes and couplings during starting and stopping. Eliminate conditions which may cause costly equipment failures

Eliminate potentially disaster and costly equipment failures caused by extreme transient tensions