



Helix

T E C H N O L O G I E S

Helix Technologies Pty Ltd
ACN 074 844 303
P.O. Box 610
Morley 6943
Western Australia
tel +61 8 9275 0635
fax +61 8 9275 0615
Email:
sales@helixtech.com.au
<http://www.helixtech.com.au>

22 March 2010

To whom it may concern.

Training for Conveyor Design Program - Helix *delta-T 6*

Dear Sir/Madam,

Thank you for your enquiry about training for the Helix *delta-T* Conveyor Design Software. We are pleased to offer the following:

Technical Training for Helix *delta-T* software

We can offer staff training which covers the following:

Static Conveyor Design

- § Installation of software
- § Building a Basic Conveyor model in Delta-T6
- § Using Equipment Database
- § Equipment Selection for Belts, Motors, Gearboxes, Brakes, Fluid Couplings, Idlers, Pulleys and Shafts.
- § Rationalising Belts, Pulleys, Drives for optimum spares holding
- § Setting optimum Takeup mass / tension for drive traction, analysing belt slip
- § Vertical and Horizontal Curve Design
- § Pulley and Shaft Deflection calculations
- § Idler Bearing life and shaft deflection calculations
- § Skirt, Hopper and Belt Feeder Pull-out forces
- § Discharge Trajectories
- § Starting methods and settings for Fluid Couplings, VVVF Drives, Wound Rotor Motors and the effect on the conveyor
- § Braking and stopping conveyors
- § Flywheels and Inertia effects
- § Conveyor Holdbacks

Horizontal Curve Design

- Horizontal Curves & Belt Drift Theory
- Calculating Banking Angle for Fixed Belt Drift
- Calculating Belt Drift for fixed Banking Angle
- Horizontal Curve Graphs

Dynamic Analysis

- Belt Data Input, Damping Factors
- Torque Speed Starting
- Velocity Ramp Starting
- Dynamic Calculations
- Delay times, Flywheels, backstops
- Dynamic graphs - interpretation
- Fine tuning design
- Velocity Ramp Braking control
- Constant Torque Brakes
- Variable Torque Brakes
- Dynamic Holdback force calculations

The Training course covers both theoretical content and provides formulae and techniques used to arrive at the answers, but it also uses a real conveyor model which can be one that delegates are all familiar with.

The duration of the training is usually two days to cover the subjects listed above, including the Dynamic Analysis module. A shorter one day course with only an introduction to dynamic analysis is available too.

At the end of the training course, the delegates will have completed the design of a number of different conveyors and this design can be applied to real jobs, so that progress is made on an actual design project.

Cost

The cost of the training course depends on where it is held. We can provide a fixed price on request. The price includes the provision of software for up to eight delegates for the training course. The offer does not include provision of a training venue or provision of computers for the training or for travel and accommodation expenses for the trainer or for the delegates.

Please feel free to contact me should you require any further information.
Yours faithfully,



Peter Burrow
Director