

HELIX delta-T

for Windows

BELT CONVEYOR DESIGN PROGRAM



HELIX delta-T

... is a powerful computer software package developed to assist materials handling design engineers and equipment suppliers in belt conveyor design and optimisation.





Powerful OpenGL 3D modelling of the conveyor and terrain

Helix Technologies' research and development of this software began in 1992 and **delta-T** now has many hundreds of users throughout the world who depend on the program to provide consistent, accurate and cost effective belt conveyor design.

New features ...

HELIX delta-T <u>new version</u>

- New Sketching facility to quickly add pulleys, hoppers and drives to your conveyor
- Powerful OpenGL 3D modelling of the conveyor and terrain
- New Database system compiled directly into the program stores thousands of conveyor equipment components
- Completely New design report formats over 50 reports can be generated easily, with excellent presentation of the design.
- Calculation to ISO and CEMA standards with auto friction factor calculation

CONVEYOR DESIGN PROGRAM

- Improved equipment database for Belts, Idlers, Motors, Gearboxes, Fluid Couplings, Brakes etc.
- Export design reports directly to MS Word® Excel® or PDF® file formats
- Belt Tension calculations for Running, Starting and Braking including accelerating and stopping
- Estimating and Costing schedules for all conveyor equipment from civil & electrical to conveyor
- Design any length conveyor with unlimited number of drives, pulleys and loading points

New Horizontal Curve Calculations

New Horizontal Curve Calculation routines – belt drift and banking angle calcs, with live on-screen feedback about radii.

New scale drawing system for live feedback on Vertical curve radii – just drag an intersection point on the screen and the vertical curve is redrawn in front of you so that you can see immediately if you can fit the radius into the geometry.



Equipment Databases



Estimating and Costing schedules for all conveyor equipment from civil & electrical to conveyor components

housands of equipment items from leading
anufacturers are listed – or add your own data,
ncluding copy and paste from Excel®

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Design Output Reports

delta-T has more than 60 design reports which can be viewed, printed or exported to other applications. These reports range from a design summary report to detailed reports about the conveyor equipment such as the Belt or Idlers report. Some of the report titles are listed below:

- Design Summary
- Profile Input Data and Sketch
- 3D Model of Conveyor
- Belt Tension Summary and Belt Sag
 - Running Full
 - Running Empty
 - Inclines Loaded
 - Declines Loaded
 - Starting Full
 - Starting Empty
 - Braking Fully Loaded
 - Braking Empty
 - Coasting Fully Loaded
- Coasting Empty
- Conveyor Dynamics
- Drive Traction Report
- Conveyor Drives
- Vertical Curves
- Horizontal Curves
- Conveyor Belt
- Idlers
- Pulleys & Shafts
- Gear Boxes

- Discharge Trajectory
- Hopper Pull-out Force
- L10h Bearing Life
- Conveyor Equipment Costing and Estimating
- Equipment Schedules for Belts, Idlers, Pulleys, Motors, Gear Boxes etc which can be emailed to suppliers for pricing or archived for project record purposes.



Quick Calculations

The Quick Calcs menu allows you to perform useful calculations, including:

- Concave Curve Radius
- Convex Curve Radius
- Discharge Trajectory
- Hopper / Feeder Pullout Forces
- L10h Bearing Life

and more ...



Program Documentation & Software Support

delta-T is supplied with a comprehensive Operating and Instruction Manual, including a Quick Start Guide to get you up and running quickly and easily. Step by Step instructions will guide you through data capture procedures, how to sketch the conveyor and enter profile data and then how to interpret the design reports. Valuable tips on Conveyor Design Optimisation will assist you to produce technically sound, well engineered materials handling systems.



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On-Line Help

The program is supplied with a fully integrated context sensitive help system. Just press F1 and help relating to the current input or output topic will be displayed. A comprehensive Search facility and index will ensure that you do not waste time looking for information about the program. All formulae and calculation methods are detailed in the manual and help file.

Technical and Software Support available through Annual Support Contract

System Requirements

To run the **HELIX delta-T** version 5 program you need:

- Personal computer with Pentium II or higher microprocessor.
- 32 MB of RAM. More RAM preferred.
- 40 Mb of Hard Disk space.
- CD ROM disk drive.

- Microsoft Windows 95[™], 98, 2000 or NT 4, Windows XP or later version.
- 800 x 600 or better resolution VGA monitor. Higher resolution preferred.
- Printers, plotters and networks supported by Windows 95 or later.



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