Underground Raceway Systems helps engineers to design cable systems to operate to their maximum potential while providing secure and reliable operation. The advanced graphical interface allows for design of cable raceway systems to meet existing and future needs by using precise calculations to determine required cable sizes, their physical capabilities, and maximum derated ampacity. In addition, transient temperature analysis computes temperature profiles for cable currents, reducing the risk of damage to cable systems under emergency conditions.
Detailed Modeling Gives Accurate Results

Key Features
- Neher-McGrath Method
- IEC 287 Method
- Steady-State Temperature
- Ampacity Optimization
- Automatic Cable Sizing
- Transient Temperature

Flexible Operation
- Multiple raceways
- Multiple external heat sources
- Optimization of new cables in existing raceways
- Cross-sectional analysis
- Duct banks & direct buried raceways
- Integrated with cables in one-line diagrams
- Integrated with load flow results
- Integrated with cable pulling analysis

Capabilities
- Graphical user interface
- Graphical manipulation of raceways, cables, conduits, etc.
- Drag & drop cables from one-line diagrams
- Cable of different sizes in the same raceway
- Separate phases into different conduits or locations
- Unsymmetrical positioning of raceways
- Transient calculations use a dynamic thermal circuit model
- Option to fix cable size and/or loading
- Grounded/ungrounded shielding
- Calculate thermal R, dielectric losses, Yc, Ys, etc.
- User-defined armor cables
- Unbalanced load factors
- Multiple duct banks & direct-buried conduits
- Place raceways in multiple cross-sections

Plotting
- Transient temperature calculations based on load profile
- Option to display multiple cables simultaneously
- Zoom to any detail level
- Export data to Microsoft Excel
- Line, bar, 3-D, & scatter plots
- Customize text & axes

Reporting
- Flag critical & marginal cable temperatures
- Reports all physical & calculated data
- Use Crystal Reports® for full color, customizable reports
- Export output reports to your favorite word processor
- Graphical display of raceway results

Temperature Analysis
Network Analysis
Tension Analysis