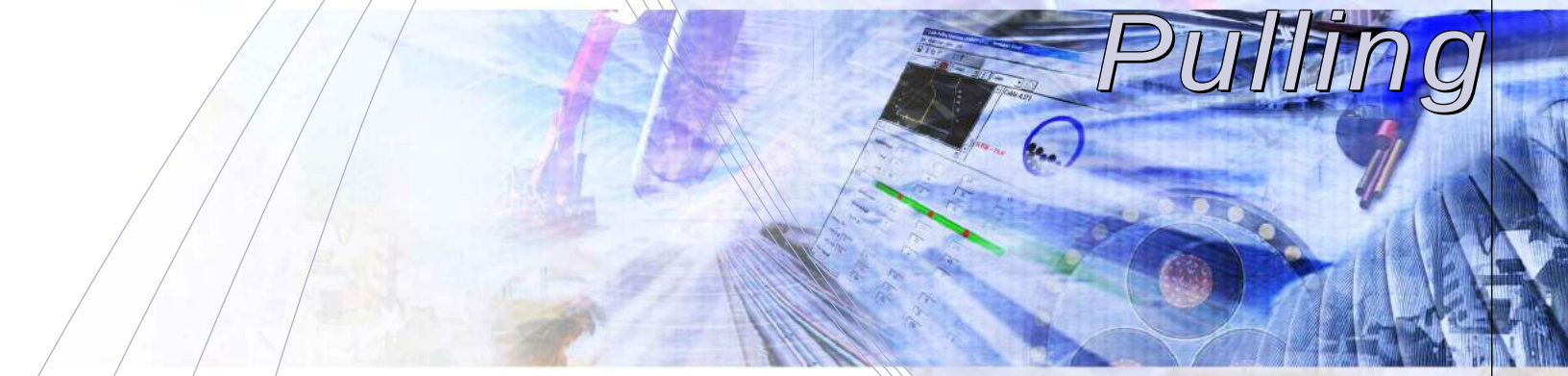
Cable Pulling



Precise
Flexible
Adaptable

Accurate prediction of cable pulling forces is essential for the proper design of cable systems. This knowledge makes it possible to avoid under-estimated and/or over-conservative design practices to achieve substantial capital savings during construction. The Cable Pulling module accounts for multiple cables of different sizes and allows complex 3-D pulling path geometry. A point-by-point calculation method is performed at every conduit bend and pull point. Both the forward and reverse pulling tensions are calculated for determining the preferred direction of pull.

An Essential Tool for Conduit Cable Systems

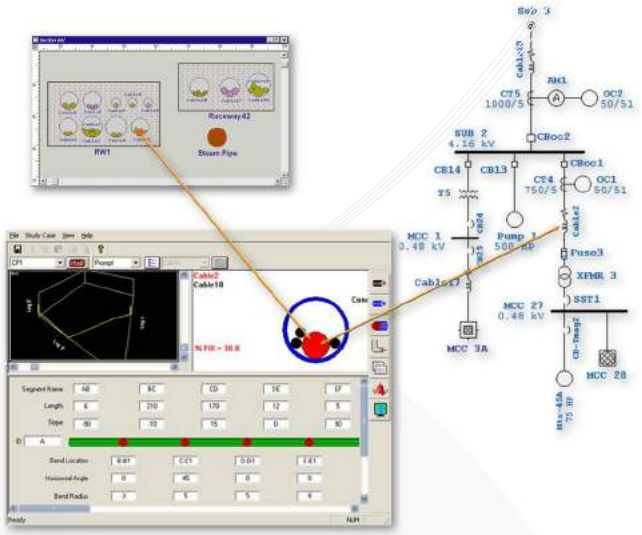
cable pulling

Key Features

Integrated with One-Line Diagram Cables
Integrated with Underground Raceways Cables
Pull Multiple Cables
Allow Any Pull Geometry
Full ETAP Cable Library Integration
Display 3-D Pulling Path Geometry

Flexible Operation

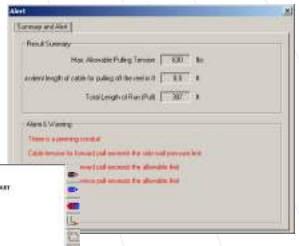
- Calculate forward & reverse pulling tensions
- Calculate pulling tensions at all bend points
- Calculate the maximum tension limited by sidewall pressures
- Calculate the maximum allowable pulling tension
- Compare the maximum tension limitations against the calculated pulling tensions
- Calculate the conduit percent fill
- Calculate the total length of run (pull)
- Cradled & triangular cable configurations

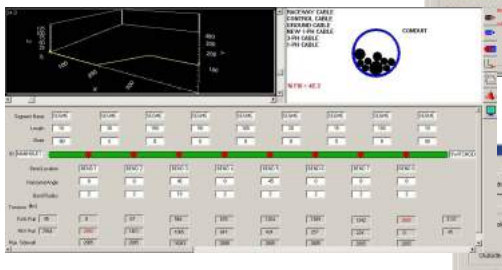


3-D Graphical Display

Capabilities

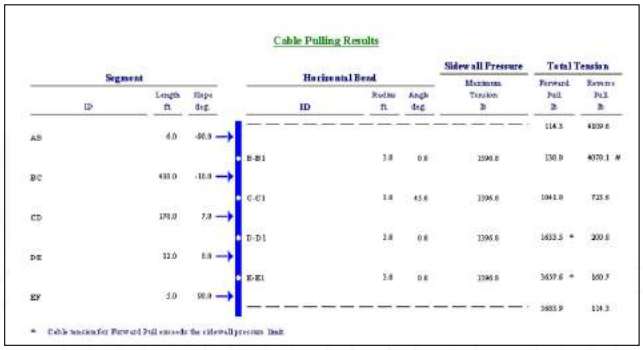
- Provide reduction factors for calculating allowable tension when pulling multiple cables
- Evaluate possible conduit jamming
- Allow segments to have non-zero slopes as well as horizontal bends (non-planer segments)
- Account for the equivalent tension for cables pulled from reels
- Provide tolerance for cable weights & outside diameters
- Summary & alert windows





Reporting

- Fundamental cable pulling results
- Flag cable tensions that exceed limits
- Flag conduit percent fill limits
- Flag non-conforming NEC code requirements
- Graphical display of cable pulling results
- Report sidewall tension, forward pull, & reverse pull including violation flags
- Use Crystal Reports® for full color, customizable reports
- Export output reports to your favorite word processor
- Pulling schematic showing segment & bend plots
- Conduit cross-section showing conduit & cable plots



Unconstrained Segment & Bend Arrangements
Links with Raceway Cables
Links with One-Line Diagrams
Automatic Error Checking
3-D Graphical Display
Dynamic Display of Cables

10 CFR 50 Appendix B • 10 CFR 21 • ANSI/ASME N45.2-1977 • ASME NQA-1
ISO 9001 A3147 • ANSI/IEEE Std 730.1-1989 • CAN/CSA-Q396.1.2-89

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