OpenTower® Designer

Communication Tower Design Software to Increase Efficiency

OpenTower Designer enables you to design communication towers faster than ever before. With precision modeling that integrates state-of-the-art graphics with the ability to automate detailed and predictive design from the ground up, OpenTower Designer gives you a realistic digital view of how towers look in the field.

With built-in collaboration capabilities for tower owners, tower designers, and professional engineers, OpenTower Designer improves your existing workflows with solutions developed with the tower lifecycle in mind. OpenTower Designer offers faster, more cost-effective 3D visualization for easily modifying and reanalyzing existing towers, maintaining accurate models, creating 3D renderings of equipment and feedlines, updating and modifying existing assets, and creating new towers from the ground up.

STREAMLINE YOUR TOWER DESIGN WORKFLOWS

Tower designers can use OpenTower Designer’s modern scenario analysis workflows and modification layer capabilities to optimize their models and create a single source of truth for the entire tower lifecycle. The application’s built-in foundation module incorporates all the design functions you will need, from creating shapes to incorporating asset data, eliminating the need to toggle between various applications.

IMPROVE YOUR EFFICIENCY IN TOWER MODELING AND DESIGN

OpenTower Designer enables you to streamline your next tower project and efficiently design tower models such as lattice towers and guyed masts, as well as equipment including antennas, mounts, and linear appurtenances.

COMPLETE PROJECTS FASTER WITH AUTOMATIC SCENARIO CREATION

OpenTower Designer saves time and helps you complete projects faster through automatic scenario creation, a feature that combines geometric layers, equipment grouping, and loading criteria. Tower designers can create physical models by applying hierarchical modification layers with revision history on top of the base geometry by using built-in business logic. This capability automatically creates scenarios in accordance with United States, European, or Australian design standards.

LEVERAGE A LIBRARY OF PANEL TYPES AND ANCILLIARY EQUIPMENT

OpenTower Designer allows you to leverage a comprehensive library of panel types and ancillary equipment to create structures quickly. The solution automatically generates loads for any number of directions with user-defined topographic configurations, quickly performs design checks, and creates reports with virtually any output – from structure data to loading analysis results and design capacities for members and bolts.

An active scenario showing discrete and linear appurtenances.
OpenTower Designer At-A-Glance

/user experience
• Configurable XML file creation for developing customized libraries
• Built-in, extensible bracing types that support external configuration
• Includes panel bracing, torque arms, and truss legs
• High-fidelity graphics and model creation
• Modern graphical environment that delivers realistic model visualizations
• 3D tower models with discrete and linear appurtenances drawn to scale
• Precise visualizations of equipment positioning
• Feed line visualizations at any elevation
• Visualizations of linear attachments

/scalability
• Robust, customizable equipment library
• Built-in support for all major equipment manufacturers
• Includes antenna, dish, tower mounted equipment, feedlines, and attachments

/engineering
• Define member connections with various bolt patterns
• Support for pre-defined bolt configurations
• Automatic consideration of the effects of connections on member design calculations
• Automatic checking of connection efficiencies
• Define external loading
• Define cluster formation of linear ancillaries
• Define miscellaneous ancillaries including resistance ancillaries

/design tower foundations (TIA codes)
• Design tower foundations for tower legs and guy support points
• Includes pad-pier, drilled pier, guy anchor foundations, and mat foundations
• Automatic design of the most critical load cases for varying criteria and foundation ratings

/interoperability
• Import MStower Jobs into OpenTower
• Import TNX geometry files
• Export to .OTXML for creating iModels

/standards
• TIA, AS1170.2, AS 3995, AS 4100, CSA -S37 -18, BS EN 1993-3-1:2006 with UK National Annexed, and PLG07