etap®

Ground Grid Systems

Quickly and accurately design and analyze ground protection

The Ground Grid Systems module enables engineers to quickly and accurately design and analyze ground protection. Flexible design methodologies allow for quick auto-designed layouts or very detailed schemes. High efficient multi-core parallel calculation allows fast analysis of irregular large-scale renewable applications. Color-coded graphical plots provide impressive results.

Ground Grid Systems

Accurately and efficiently design and simulate small to very large grounding systems with various geometry using ETAP's field-proven grounding safety analysis software.

Conductor & Rod Optimization

Automatically determine the optimal number of conductors and rods based on economics to meet design objectives for step and touch potentials tolerable limits.

- IEEE 80 & 665 standards
- Designs based on safety and cost
- Generate & compare uniform or two-layer soil model
- 3-D graphical interface views
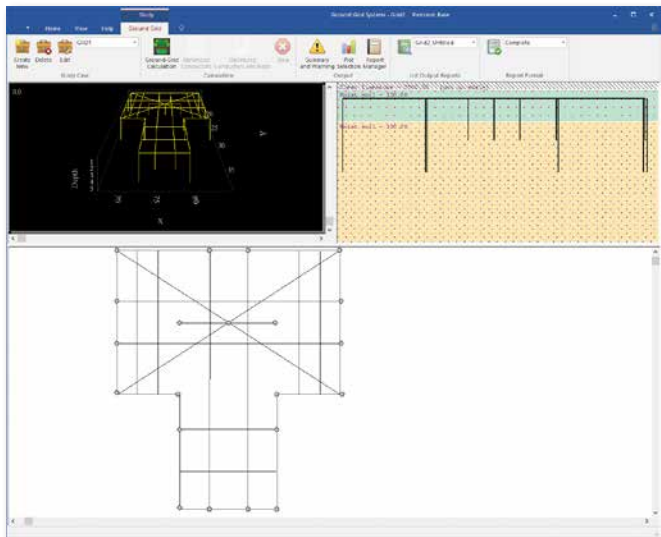
Soil Resistivity Calculator

Convert field measurements into appropriate soil models using the ground resistivity calculator and perform safety assessment in an integrated application.
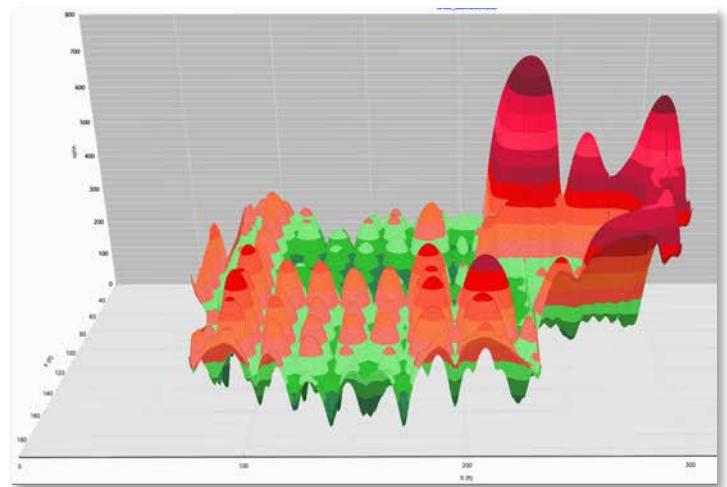
- Soil resistivity measurement interpretation
- Soil model estimation based on field measurements
- RMS error reporting & comparison
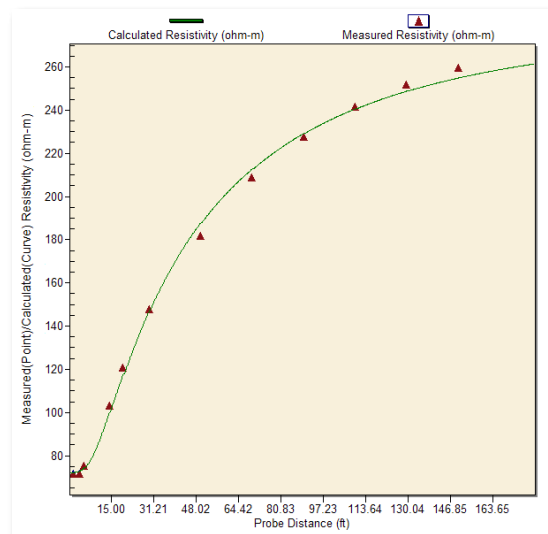
Finite Element Analysis

Calculate and visualize step and touch potentials against safety limits to design and analyze large irregular-shaped grounding systems utilizing multi-core parallel processing for faster computation time.

- Handling of large complex grounding systems
- Analysis of fragmented earthing mats
- Irregular configurations
- Plots for step, touch & absolute potentials
- Graphical display of over-limits