

Cable *EMF*

Cable Magnetic Field Exposure

Mitigate Safety Risks Maintain Compliance Optimize Cable Layout



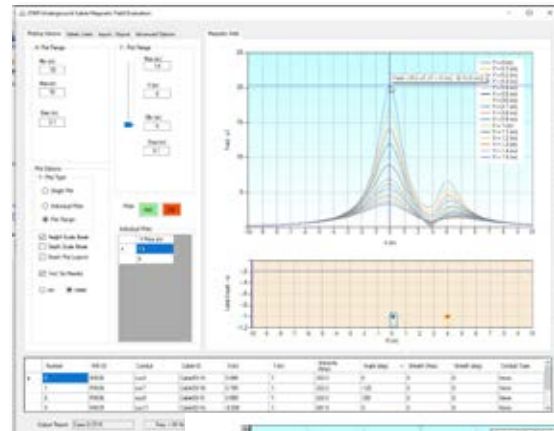
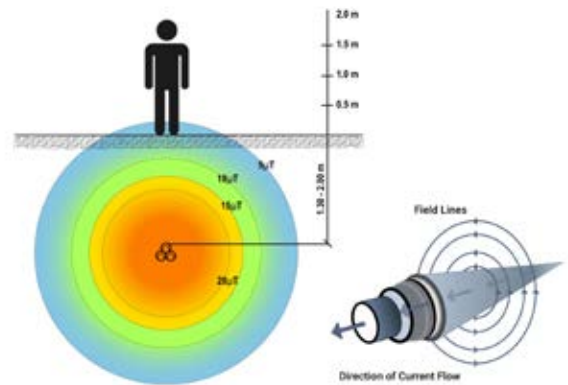
Electromagnetic Field Intensity Evaluation

The magnetic field exposure analysis tool is integrated with the underground cable systems (UGS) analysis module. This tool uses balanced & unbalanced load-flow currents and angles to determine the location of the worst-case magnetic field exposure due to conductors in underground raceways.

- ✓ Comply with local magnetic field exposure regulations.
- ✓ Identify magnetic field intensity for individuals with medical conditions.
- ✓ Optimize cable layout and location to mitigate risks .
- ✓ Evaluate magnetic field exposure due to unbalanced loading conditions.

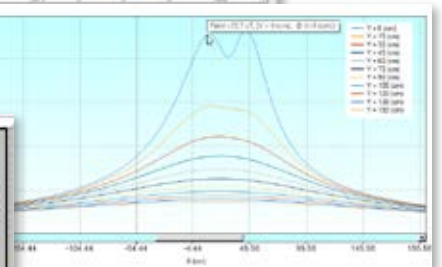
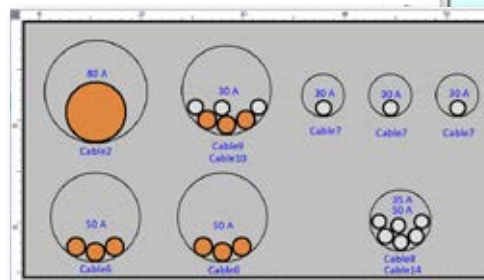
Key Features

- Based on CIGRE JTF 36-0121
- Evaluate field intensity limits per: IEEE C95.1-2019, ICNIRP – 2010 and ACGIH – 2002
- Determine surface magnetic field exposure from underground conductor installations
- Consider 3/C, 1/C, 3-P and 1-P AC & DC conductor currents
- Automatic filtering of ferromagnetic conduits
- Validated against onsite measured magnetic fields
- Handling of various 3-P conductor layouts



Capabilities

- Single-Plot / Multi-Plot / Plot Range
- Raceway Cable Location Depth View
- Graphical data visualization - tooltip results, scale breaks, zoom in/out
- Export evaluation results to SQLite
- Auto-filter selected conductor currents
- Consider ferromagnetic conduits
- Include effect of sheath currents



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