

QuickField Jump Start seminar

Basic level program

1. Introduction. Problem solving with QuickField
 - 1.1. Main types of analysis
 - 1.2. Finite Element method. Specific and limitations of QuickField
 - 1.3. Types of QuickField licenses
 - 1.4. QuickField system requirements
2. QuickField basics.
 - 2.1. QuickField problem solving stages.
 - 2.2. QuickField problem database
 - 2.3. Problem creation.
 - 2.4. Geometry model creation.
 - 2.5. Physical properties definition.
 - 2.6. Result analysis
3. QuickField analysis types overview.
 - 3.1. Heat transfer: features, static heat transfer example, transient heat transfer example.
 - 3.2. Electrostatics: features, example.
 - 3.3. DC Conduction: features, example.
 - 3.4. AC Conduction: features, example.
 - 3.5. Transient electric analysis: features, example.
 - 3.6. Stress analysis: features, example
 - 3.7. DC and Transient magnetics: features, static and transient magnetic examples.
 - 3.8. AC Magnetics: features, example
 - 3.9. Coupled multiphysic analysis: features, example.
 - 3.10. Electric circuits in AC and Transient magnetics: features, example.
4. QuickField setup and configuring. Structure and components of the installed program.
5. Additional information resources: User manual and Help system. QuickField support site overview. Virtual classroom.

Advanced level program

6. Advanced geometry model definition.
 - 6.1. Geometry export and import.
 - 6.2. Manual mesh adjustment.
 - 6.3. Automatic mesh improvement.
7. Advanced data editing.
 - 7.1. Material libraries.
 - 7.2. Nonlinear dependencies (splines), functions.
8. Advanced result analysis.
 - 8.1. Contours for integral calculations.
 - 8.2. Postprocessor status saving and restoring.
 - 8.3. Harmonic analysis
 - 8.4. Results export. Mesh export.
 - 8.5. Wizards. Impedance and inductance wizards.
9. Addons. Capacitance matrix calculation.
10. Parametric analysis with LabelMover (optimization, tolerance and serial analysis).
11. ActiveField and its applications. Programming with QuickField.
12. Resume.