

N I S A -

Suite of Programs for Multiphysics

The world is composed of complex systems. Therefore, a simulation tool must cover as many facets of today's simulation requirements as possible. Such simulation programs are described by the attribute "multiphysics". In addition, NISA includes specific features, with an intelligent user-interface in combination with specific databases allowing for the application in specific fields of industry, e. g. with civil engineering or the design of printed circuit boards.

With its modular design NISA presents a suite of FEM-programs with analysis features for

- Linear and non-linear statics: NISA/STATIC ANALYSIS
- Composites: NISA/COMPOSITE
- Dynamics: NISA/DYNAMICS, NISA/ADVANCED DYNAMICS
- Rotordynamics: NISA/ROTOR
- Rigid-body dynamics, kinematics: NISA/DYMES
- Fatigue analysis and fracture mechanics: NISA/ENDURE
- Optimization: NISA/OPT
- Heat Transfer: NISA/HEAT
- Fluid-dynamics: NISA/3D FLUID
- Electromagnetism: NISA/EMAG
- Simulation of printed circuit boards: NISA/FEAP

FEM in civil engineering, including structural design as per international codes: NISA/CIVIL

The combination of the above-mentioned modules is provided by the pre- and postprocessor DISPLAY, presenting the uniform user-interface for all modules and serving as common database and for the purpose of connecting NISA to the CAD-world.

Due to its modular design NISA offers customized software packages at reasonable prices and can be composed according to the requirements of the most different fields of application.