

Standard Package	➤ 2D and 3D Linear Finite Element Analysis ➤ Element Library • Line Type: Truss/Beam/Tension Only/Compression Only • Plane Type: Flat Shells/Plane Stress/Plane Strain/Axisymmetry • Solid Type: Tetrahedron/Wedge/Hexahedron • Embedded Reinforcement Element • Linear Interface Element (Elastic & Rigid links) ➤ DXF 2D & 3D (Wireframe), STEP & IGES Import options ➤ Data exchange between FEA and DIANA ➤ Geometry Modeling including Curve, Surface, Solid and Advanced Modeling ➤ Mesh Generation including Automatic and User Controlled ➤ Linear Static Analysis ➤ Construction Stage Analysis ➤ Buckling Analysis ➤ Heat ➤ Transfer ➤ Creep and shrinkage (Including Ref. Codes) ➤ Post-processing • Contour and Iso-surface Plots, Diagram and Vector Plots • Clipping, Slicing, Partition Visualization, Animation and Flying View • Numerical Result Probes, Tags and Tables
Full Package	➤ 2D and 3D Linear Finite Element Analysis ➤ Element Library • Line Type: Truss/Beam/Tension Only/Compression Only • Plane Type: Flat Shells/Plane Stress/Plane Strain/Axisymmetry • Solid Type: Tetrahedron/Wedge/Hexahedron • Embedded Reinforcement Element • Linear Interface Element (Elastic & Rigid links) ➤ DXF 2D & 3D (Wireframe), STEP & IGES Import options ➤ Data exchange between FEA and DIANA ➤ Geometry Modeling including Curve, Surface, Solid and Advanced Modeling ➤ Mesh Generation including Automatic and User Controlled ➤ Linear Static Analysis ➤ Construction Stage Analysis ➤ Buckling Analysis ➤ Heat ➤ Transfer ➤ Creep and shrinkage (Including Ref. Codes) ➤ Post-processing • Contour and Iso-surface Plots, Diagram and Vector Plots • Clipping, Slicing, Partition Visualization, Animation and Flying View • Numerical Result Probes, Tags and Tables ➤ Dynamic Module ➤ Linear Transient Analysis ➤ Modal and Spectrum Response Analysis ➤ Steel Nonlinear Module ➤ Geometrical Nonlinear Analysis ➤ Pasticity Models (von Mises & Tresca) ➤ Hardening behaviours: isotropic ➤ Fatigue Analysis Module ➤ Goodman & Gerber criteria ➤ Rainflow Counting & Mean Stress Correction

- **Life Cycle and Damage Results**
- **Heat of Hydration Module**
- **Parametric Study Wizard for Dimension/Material Construction Stage Variation**
- **Concrete Nonlinear module**
- **Total Strain Crack Models**
- **Nonlinear Interface Material Models**
 - Discrete Crack, Dilatancy Crack, Bond Slip, Coulomb friction and Combined Cracking-Shearing-Crushing
- **Plasticity Models (von Mises, Tresca, Mohr-Coulomb & Drucker-Prager)**
- **Static Contact Analysis**
- **Static contact analysis (2D and 3D models/Material and Geometry nonlinearity)**
- **Fluid Dynamic Analysis**
- **2D Computational Fluid Dynamic Analysis**