

midas Gen -Plus-	➤ Static Analysis ➤ Dynamic Analysis • Eigen (Lanczos) and Ritz vector Analysis • Response Spectrum Analysis • Time History Analysis ➤ Pushover Analysis ➤ P-Delta Analysis ➤ Buckling Analysis ➤ Thermal Stress Analysis ➤ Moving Load Analysis ➤ Masonry Wall Analysis (Linear/Nonlinear) ➤ Design (Steel, Concrete & SRC) • AISC (LRFD & ASD), CSA S16.1, BS 5950 & Eurocode3 • ACI 318, CSA-A23.3, BS 8110 & Eurocode2 ➤ Section Property Calculator for irregular sections
midas Gen -Advanced-	➤ Static Analysis ➤ Dynamic Analysis • Eigen (Lanczos) and Ritz vector Analysis • Response Spectrum Analysis • Time History Analysis ➤ Pushover Analysis ➤ P-Delta Analysis ➤ Buckling Analysis ➤ Thermal Stress Analysis ➤ Moving Load Analysis ➤ Masonry Wall Analysis (Linear/Nonlinear) ➤ Design (Steel, Concrete & SRC) • AISC (LRFD & ASD), CSA S16.1, BS 5950 & Eurocode3 • ACI 318, CSA-A23.3, BS 8110 & Eurocode2 ➤ Section Property Calculator for irregular sections ➤ Construction Stage Analysis (Time-dependent) • Creep, Shrinkage & Mod. of Elasticity • Tension losses in tendons • Column Shortening • Construction Stage Wizard ➤ Large Displacement Analysis (Cable structures) ➤ Post-tensioning & Prestressing ➤ Boundary Nonlinear Dynamic Analysis (Gap, Hook, Damper, Isolator, Hysteretic System, etc.)
midas Gen -Full Version-	➤ Static Analysis ➤ Dynamic Analysis • Eigen (Lanczos) and Ritz vector Analysis • Response Spectrum Analysis • Time History Analysis

- **Pushover Analysis**
- **P-Delta Analysis**
- **Buckling Analysis**
- **Thermal Stress Analysis**
- **Moving Load Analysis**
- **Masonry Wall Analysis (Linear/Nonlinear)**
- **Design (Steel, Concrete & SRC)**
 - AISC (LRFD & ASD), CSA S16.1, BS 5950 & Eurocode3
 - ACI 318, CSA-A23.3, BS 8110 & Eurocode2
- **Section Property Calculator for irregular sections**
- **Construction Stage Analysis (Time-dependent)**
 - Creep, Shrinkage & Mod. of Elasticity
 - Tension losses in tendons
 - Column Shortening
 - Construction Stage Wizard
- **Large Displacement Analysis (Cable structures)**
- **Post-tensioning & Prestressing**
- **Boundary Nonlinear Dynamic Analysis**
- **Heat of Hydration Analysis for Mass Concrete**
 - Heat Transfer Analysis based on construction stages
 - Convection, Heat Source, Pipe cooling, etc.
- **Material Nonlinear Analysis**
 - Truss, Plate, Plane stress, Plane strain, Axisymmetric and Solid
 - Tresca, von Mises, Mohr-Coulomb and Drucker-Prager
 - Isotropic, kinematic and mixed hardening
- **Inelastic Time History Analysis**
 - Beam element
 - Lumped hinge & Distributed hinge
 - Automatic calculation of yield strength
 - Fiber model
- **Automatic Mesh Generator for Plane Wall and Slabs**
 - Planar Mesh Generation for 2D Elements (Plate, Plane Stress, Plane Strain)
 - Automesh Planar Area (Automatic consideration of internal columns and walls)
 - Mapped Mesh Generation Using 4 Nodes
- **Slab & Meshed Wall Design (Eurocode 2)**
 - Flexural design (Wood-Armer moment)
 - Punching shear check
 - Serviceability check (Stress, Crack width, deflection)
- **GSD (General Section Design)**
 - Draw Arbitrary Cross-sections (RC, Steel, Composite)
 - Moment-Curvature Curves for Different Axial Loads
 - Stress Contours for Combined Loading
 - Capacity Curves (P-M, M-M, 3D) & Capacity Check Ratio (Eurocode)