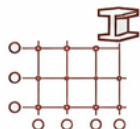




GEN NX OPTIONS CONFIGURATION (Indian Version)

MIDAS GEN NX is a finite element software widely used for modeling analysis and design of vertical structures which include RCC and steel buildings, Industrial structures, and many more. MIDAS GEN NX offers conventional analysis capabilities as well as high end analysis options such as geometric nonlinear analysis, boundary nonlinear analysis, pushover analysis, construction stage analysis, heat of hydration analysis.



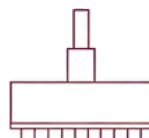
Grid Style Modeling



3D Shape Modeling



Wind Load



Various Types of Foundations
(Isolated, Combined, Raft, Pile)



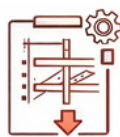
API & Plug in



Plant Structure



Seismic Loading



Detail Design Report



High-performance Pre
& Post-processing



Auto-generation of Mesh



Code Based Design



High-Rise Building

01. Versions

GEN Lite Version

MIDAS GEN NX lite version can handle low and mid-rise RC structures and General Structures such as industrial structures, warehouses, water tanks etc.



Low-Rise Building



Auditorium Building



Water Treatment Plant



Elliptical shaped Wall and Slab



Sports Complex



Cooling Tower



Silo



Plant Structure



Pylon Tower



Airport Hangars

- ▶ Unlimited Nodes
- ▶ Wizards (Frame, Truss, Tower, Tank)
- ▶ Superstructure and Substructure modelling
- ▶ Static Analysis
- ▶ Auto Wind Load Generation (IS 875 (Part 3): 2015)
- ▶ Auto Seismic Load Generation (IS 1893:2015)
- ▶ **Dynamic 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)
- ▶ Section Property Calculator for irregular sections
- ▶ Automatic Mesh Generator for Plane Wall and Slabs
- ▶ **Design (Steel, Concrete)**
 - IS 456:2000, IS 13920:2016, IS 800:2007
 - Seismic detailing as per IS 13920:2016
 - Flexural design (Wood-Armer moment)
 - Punching shear check
 - Serviceability check (Stress, Crack width, deflection)
 - Dynamic Report Generation

▶ Modules Under AMC



MIDAS DESIGN+



MIDAS CAD

- Software Updates
- Technical Support
- MIDAS Academy
- API functionality
- Integration with Excel VBA and Python

GEN Advanced Version

MIDAS GEN NX Advanced version is a super set of MIDAS GEN NX lite version and can handle tall structures, construction stage analysis and advanced non-linear analysis such as time-history, response spectrum.



Tall Building



Nonlinear Analysis

- ▶ Includes Lite version functionality
- ▶ **Construction Stage Analysis (Time-dependent)**
 - Creep, Shrinkage & Mod. of Elasticity
 - Construction Stage Wizard
 - Prestress losses in tendons
- ▶ Column Shortening Analysis
- ▶ Large Displacement Analysis (Cable Structure)
- ▶ Post-tensioning & Pre-tensioning method of Prestress
- ▶ Boundary Nonlinear Dynamic Analysis (Gap, Hook, Damper, Isolator, Hysteretic System, etc.)

Options

- ▶ Heat of Hydration Analysis for Mass Concrete
- ▶ Material Nonlinear Analysis
- ▶ Inelastic Time History Analysis
- ▶ GSD (General Section Designer)

INTEROPERABILITY

