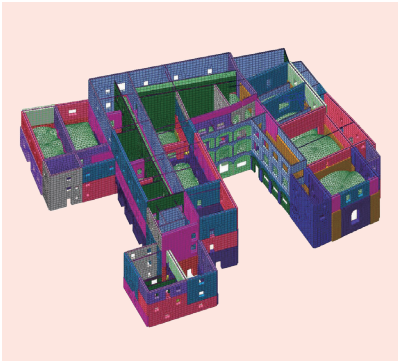


midas FEA NX

Advanced Nonlinear and Detail Analysis System

CAD based
Powerful
Pre & Post
Processors

Excellent
Result
Display
by Powerful
Graphic Engine



Fast
Analysis
optimized
for
64-bit
Platform

Comprehensive
Database of Material
Models

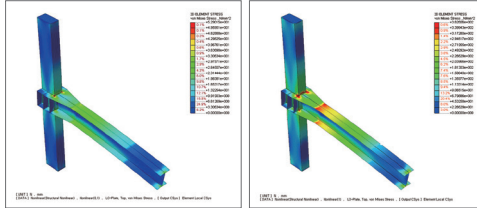


MIDAS IT Tower, 17, Pangyo-ro 228 beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 13487, Korea
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Application Areas

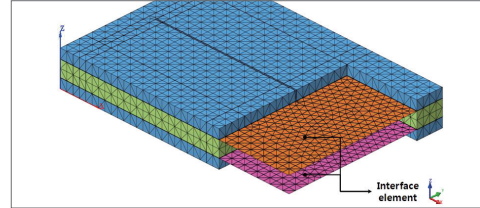
Plastic Analysis in Steel Connection

Examination of stress tolerance according to steel Von-mises model



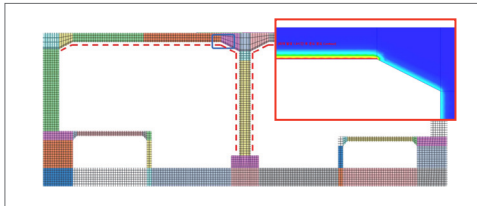
Interface Nonlinear Analysis

Verification of curtain wall type concrete heat-dissipating wall



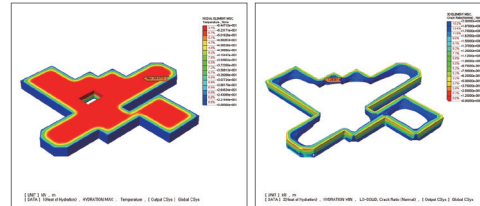
Evaluation of Thermal Damage due to Fire

Evaluate the effect due to high temperature in case of fire in subway station



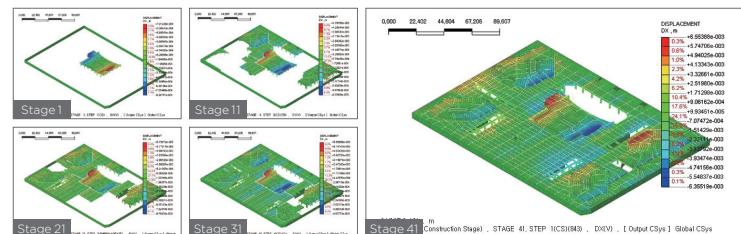
Heat of Hydration Analysis

Heat transfer analysis and thermal stress analysis considering creep & shrinkage



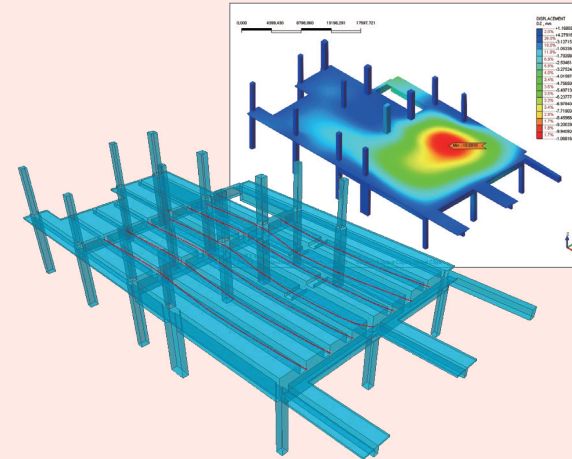
Sequential Verification in Concrete Structure

Construction stage analysis considering concrete shrinkage by temperature loads for 3D podium structure



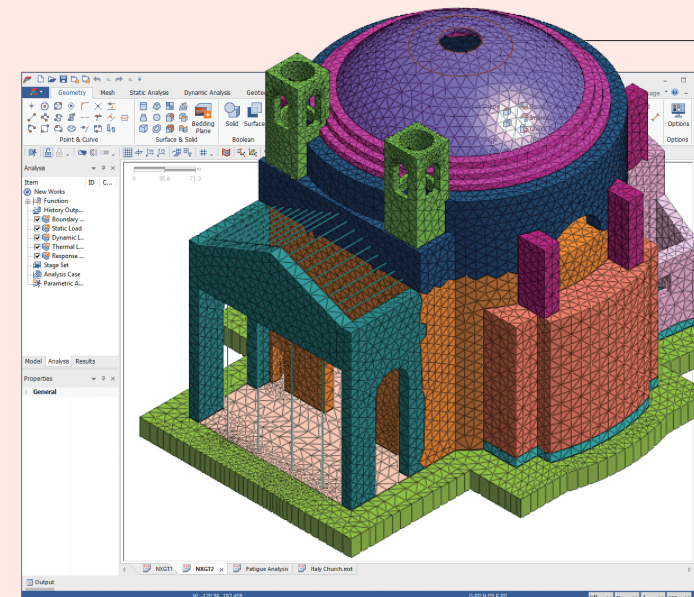
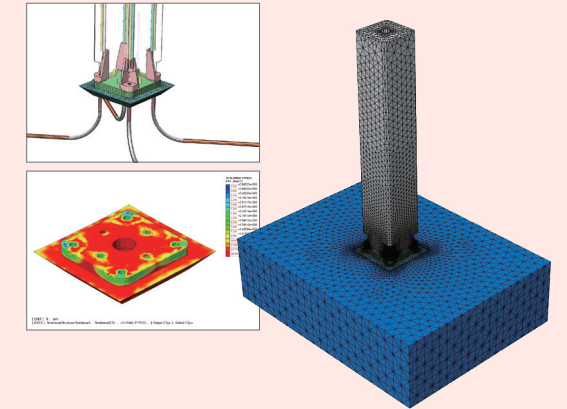
Post-tensioning Slab Analysis

Maximum deflection and column axial force comparison according to the post-tensioning arrangement



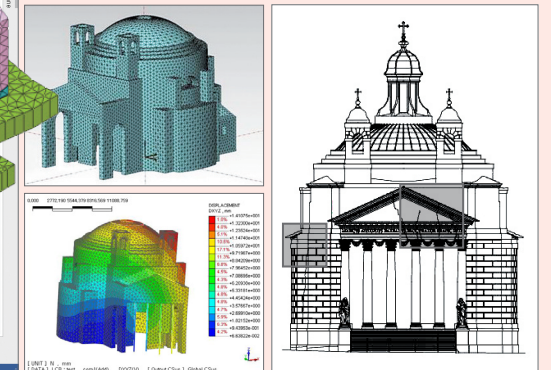
Behavior of PC Columns in High-seismic Zone

Analysis of joint by cyclic load with nonlinear behavior of steel and concrete

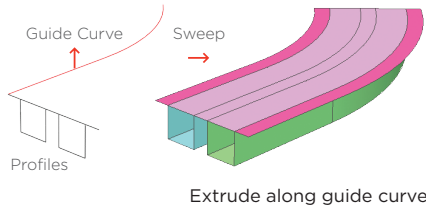


Crack Analysis of Masonry Structures

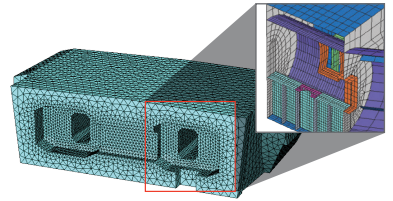
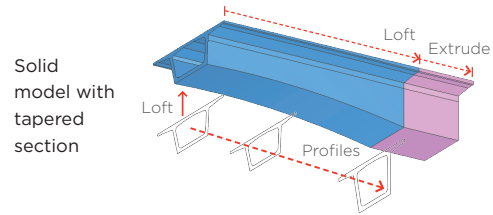
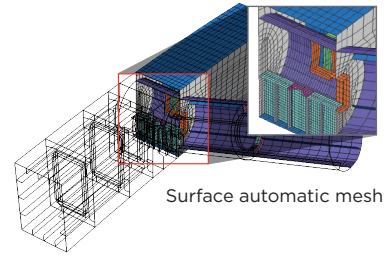
Verification of crack progress with Smeared Crack Model



**CAD based
Geometry
Modeling**



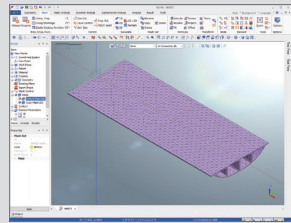
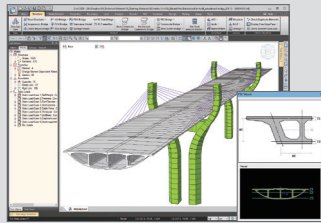
**Auto-mesh
Generation and
Size control**



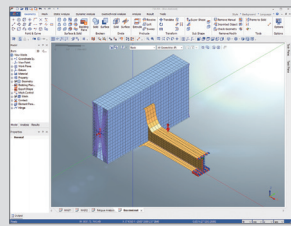
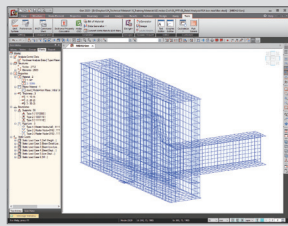
**Powerful
Pre & Post Processor**

**Direct Data
Transfer with
midas Gen / Civil**

Frame to plate /
solid conversion
for detail analysis



Geometry, load and
boundary conditions
converted into
midas FEANX for
advanced analysis



**High-end Analysis
Capabilities**

Crack Analysis

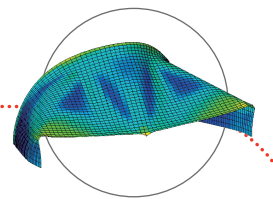
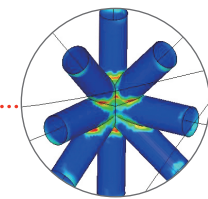
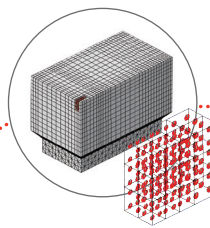
- Smearred crack model
- Interface nonlinearity
- Crack pattern and element status

Static Analysis

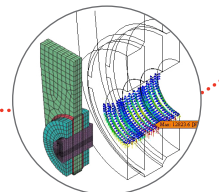
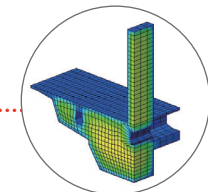
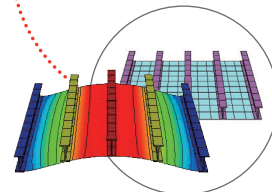
- Linear static analysis
- Construction stage analysis

Nonlinear Analysis

- Plasticity models: von Mises, Tresca, Mohr-Coulomb & Drucker-Prager
- Geometry nonlinear analysis
- Hardening behaviors



midas FEANX



- Eigenvalue/response spectrum analysis
 - Linear time history (mode/direct methods)
- 1D/2D equivalency linear analysis
- Nonlinear time history + SRM coupled

- Heat transfer analysis based on construction stages
- Convection, heat source, pipe cooling

- 2D & 3D contact analysis with material and geometry nonlinearity
- Contact Type : Welded, General, Bi-directional Sliding, Rough, Breaking-Weld

Dynamic Analysis

Heat of Hydration Analysis

Contact Analysis