

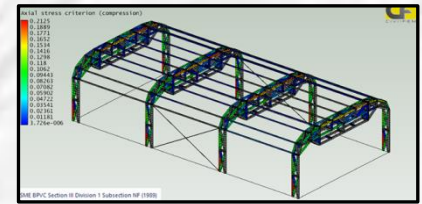
**-CivilFEM makes the difference-**  
 Multidisciplinary Advanced Non-linear FEM Analysis Software

# STEEL STRUCTURAL ANALYSIS

“CivilFEM® works in the same way as you build”:

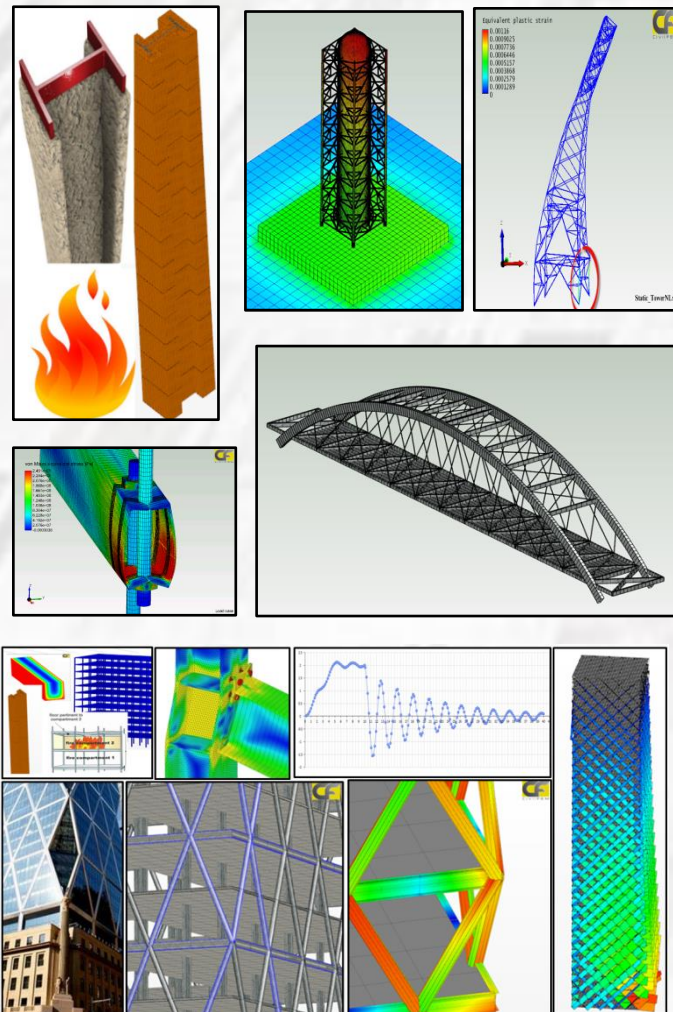
Analyze the entire construction process in a single model:

CivilFEM facilitates the virtual simulation of all the non-linear construction processes in a straightforward sequential way by means of its tools, time-dependent properties and activation and deactivation of materials.



### STEEL STRUCTURAL ANALYSIS HIGHLIGHTS:

- Check & design by the most important Codes and Standards (EC3, AASHTO, AISC, British standard, China standard (GB50017), ASME, Indian standard...).
- Nonlinear static & transient evolutive construction process
- Soil-structure interaction analysis.
- Nonlinear Multibody Advanced Contacts: breaking, glue, cohesion, friction.
- Seismic and earthquake engineering (response spectrum or nonlinear time history).
- Harmonic, modal and response spectral analysis.
- Orthotropic material properties.
- Hardening laws (kinematic, isotropic and combined) and large displacements.
- Non-linear material models, Springs, Dumpers Trusses and Cables.
- Heat transfer (steady and transient analysis)
- Thermo-Structural analysis. Thermal dependent material properties.
- Linear buckling (Eigenvalues), nonlinear buckling and post buckling analysis (Arch Length). Total and partial collapse of structures.



CivilFEM® powered by Marc® is a very powerful and versatile program suitable for all the types of advanced analyses performed in all construction sectors, providing a rich set of tools that streamline the creation of analysis models for Construction, Forensic structural analysis, Dams, Civil engineering, Tunnels, Geotechnics, Mining, Energy, Oil&Gas, Precast, etc.

With its intuitive user friendly interface and pre/post features, it is very easy to learn. The powerful (included) Marc® from MSC® Software non-linear solver aids to solve the most demanding and complex advanced analyses. ©Trademark property of their respective owners