

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

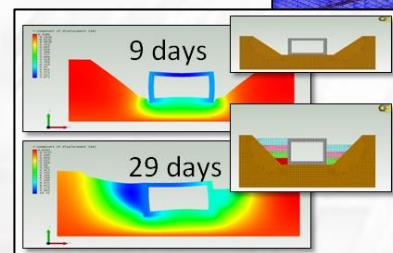
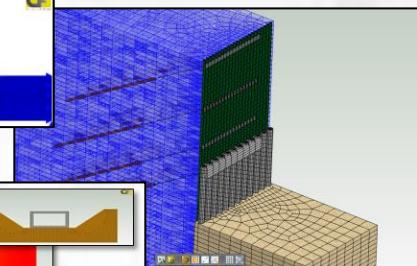
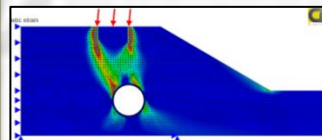
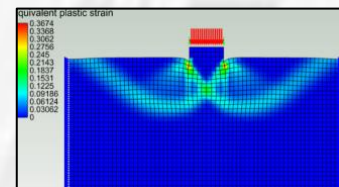
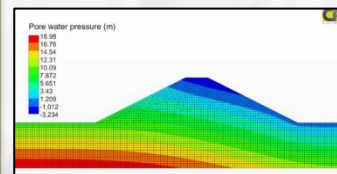
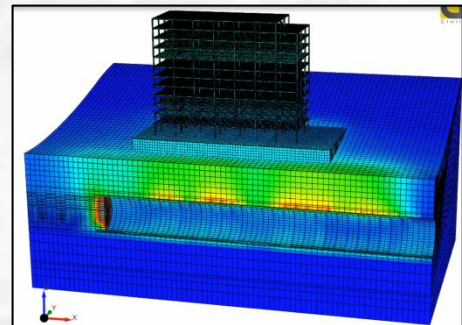
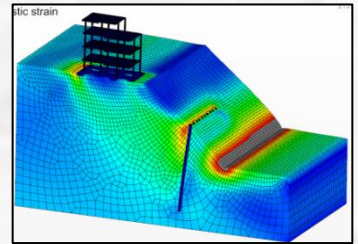
Geotechnics, Tunnels and Mining

“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.



GEOTECHNICAL CAPABILITIES HIGHLIGHTS:

- Nonlinear material behavior laws: 2D and 3D Mohr-Coulomb with variable “c” and “φ”, Cam-Clay (Initial tensile stress), Drucker-Prager, Hyperbolic...
- Transient and Nonlinear evolutive construction process (analysis of construction staging in tunnels)
- Seepage (steady and transient analysis)
- Seepage-Structural coupled analysis
- Time dependent material properties
- Soil-structure interaction analysis
- Initial stresses state of the terrain (Water table, total and effective stresses)
- Multibody advanced contacts (cohesion, static and sliding friction coefficients, ...)
- Slope stability (SRF,...)
- Prestressed reinforced concrete
- Creep and Shrinkage, Cracking (concrete, timber...)
- Non-linear Springs and dampers
- Thermo-structural analysis

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, 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