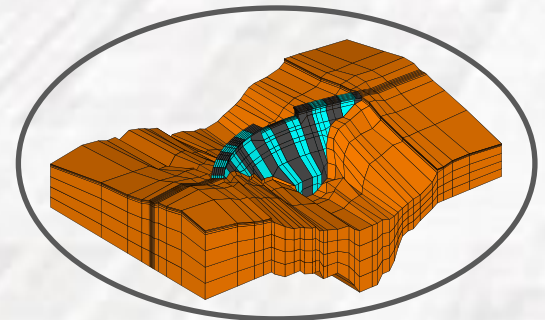


**-CivilFEM makes the difference-**  
 Multidisciplinary Advanced Non-linear FEM Analysis Software

# DAM ANALYSIS

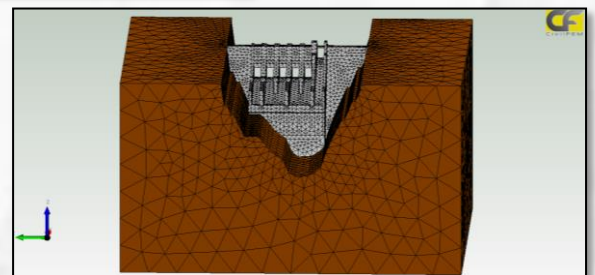
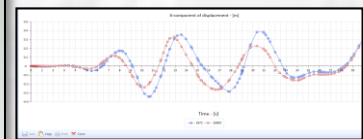
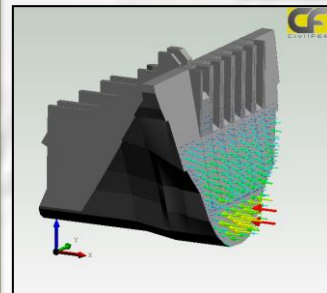
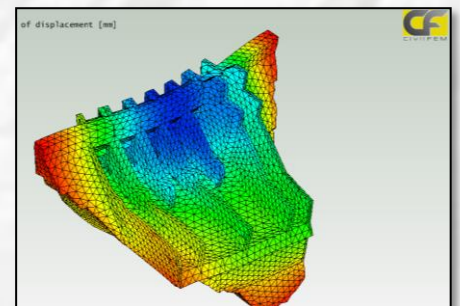
“CivilFEM® works in the same way as you build”:

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.



**DAM CAPABILITIES HIGHLIGHTS:**

- Transient and nonlinear evolutive construction processes
- Heat transfer (concrete mass curing)
- Thermo-structural analysis
- Multibody advanced contacts (cohesion, breaking, glue...)
- Seepage (steady and transient analysis)
- Time dependent material properties.
- Hydrodynamic Masses (modal, spectral and transient)
- Nonlinear full transient analysis
- Concrete Creep and Shrinkage
- Concrete cracking
- Initial stresses
- Prestressed reinforced concrete (beams, shell and solids)
- Soil-structure interaction analysis
- Nonlinear material behavior laws: Drucker-Prager, Mohr-Coulomb (cohesion and variable friction angle) and Cam-Clay (Initial tensile stress)



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, CAE, 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