

## **INNOVATING AT ALL LEVELS**

# THE PERFECT TOOL TO CONDUCT YOUR PROJECT



**PROJECTS** 



**CAPABILITIES** 



**BENEFITS** 

Seismic analysis and advanced design of Industrial buildings, high rise buildings and sport stadiums, Nuclear, Wind and Thermal power plants., off-shore and marine structures, Bridges, (concrete, steel, cable, etc...),tunnels, foundations, piles, and much more...

User friendly and easy to learn environment to perform advanced simulations quickly and accurately project and design. Checking and design according to codes. Parametric macros and scripts with Python, Multilanguage.

Increasing quality and stability of project and design solutions. Save time in the construction process by shifting. Improve cost/performance factors by optimizing the structural material and considering nonlinear world behavior.

## **FOR PROFESSIONALS**

Only professionals like you know how many hours of calculation, research and reviewing are necessary to erect a bridge or build a dam. This is why your jobs require more than just a software for design and calculation of structures. What Ingeciber offers you, is a quality synergy for all the Civil Engineering projects that you come across.

## **UNIQUE SOLUTION**

CivilFEM <sup>®</sup> with the powerful nonlinear solver Marc <sup>®</sup> inside means an unique solution targeted to the Civil Engineering and NPP worldwide market, allowing to seamlessly go from simple analysis level to complete nonlinear construction phases simulation level. Only one software for all your civil engineering needs.



## **CHECK OUT ALL CIVILFEM CAPABILITIES**

## CivilFEM® INTRO

Cad Geometry Import / Export | Cross-section and Material Library Multi-language interface | Escalar and Vectorial Parametric modelling Path History Results | Macros with Python | Static, Modal, Spectrum Harmonic, Linear and Non-linear transient analysis | Linear buckling Advanced Contacts with friction | Springs, cables and tendons Large deflections and strains | International Codes

## CivilFEM® ADVANCED

Time evolutive construction analysis | Concrete creep and shrinkage | Nonlinear buckling | Post/pre-stressed tendon definition, tensional losses, deviatory forces Slope stability | tunnel Tools | Nonlinear reinforced concrete | User crack data Automatic foundation stiffness | Soil mechanics, retaining walls wizard Piles and micropiles wizard

Includes CivilFEM® Intro Capabilities

## CivilFEM® EXPERT

#### Crack propagation analysis

Transformation from solid model to Shell model Laminated material (composites, mixed structures, etc...) Thermal Transfer: Steady analysis/Transient analysis. Seepage analysis: Steady analysis/Transient analysis Includes CivilFEM® Advanced Capabilities.

## CivilFEM® NPP

Checking & Design according to NPP Codes: AISC ASD, AISC LRFD, ASME BPVC Sect.III Div.1 SubSect NF, ANSI/AISC N690. LRFD Provisions, ANSI/AISC N690 ASD provisions, ACI 349, ACI 359, ITER Structural. Design Code for Buildings, ETC-Code.

Add on to any CivilFEM®.

