



# Mechanical Engineering Industrial Process Engineering

**ANALISIS-DSC**  
DYNAMIC & SECURITY COMPUTATIONS

URL:



March 2020

# ANALISIS-DSC



## Company:

We are a SME engineering service company specialized in **Mechanical** and **Industrial Processes** using **CAE** (Computer Aided Engineering) software tools.

## Engineering services such as:

- Basic Engineering.
- Failure Engineering.
- Analysis and Optimization of Industrial Processes.
- Scale-up/Scale-down Industrial Processes.
- Ventilation Analysis and Optimization (Climatization and Fire Safety).

## Our history:

- **2002** company was founded, as distributors of CAE software.
- **2006** we start offering mechanical and industrial processes engineering services using **CFD** (Computational Fluid Dynamics) software tools.
- **2009** we broaden our engineering services using **FEA** (Finite Elements Analysis), **DEM** (Discrete Elements Modelization) y **SES** (Subway Environment Simulator) software tools.

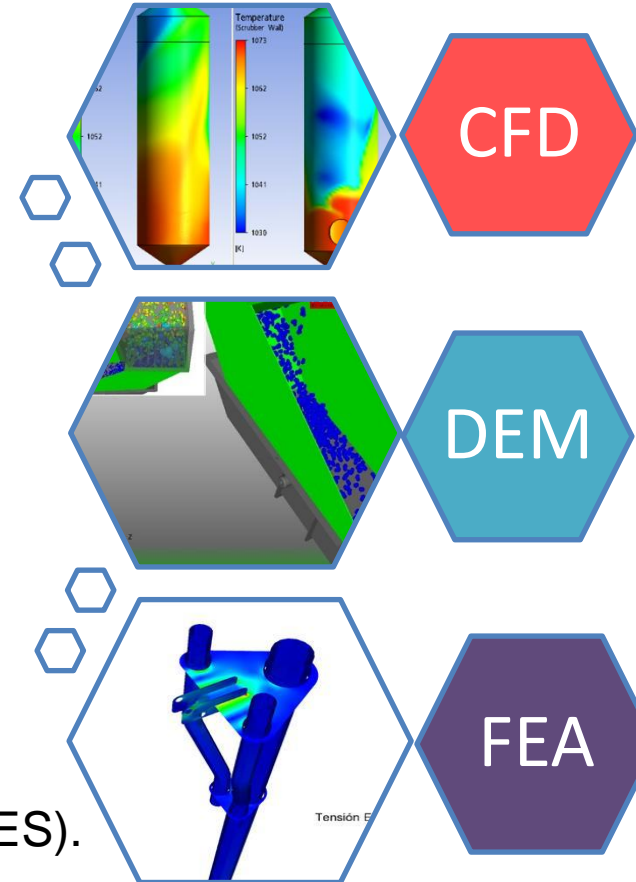
# Engineering Services

## • Applications

- Mechanical-Structural.
- Fluid dynamics.
- Thermodynamics.
- Granular Flows.

## • Tools:

- CAD.
- CAE:
  - Computational Fluid Dynamics (CFD, SPH).
  - Finite Element Analysis (FEA).
  - Discrete Element Method (DEM).
- Specific Tools (Subway Environment Simulator, SES).

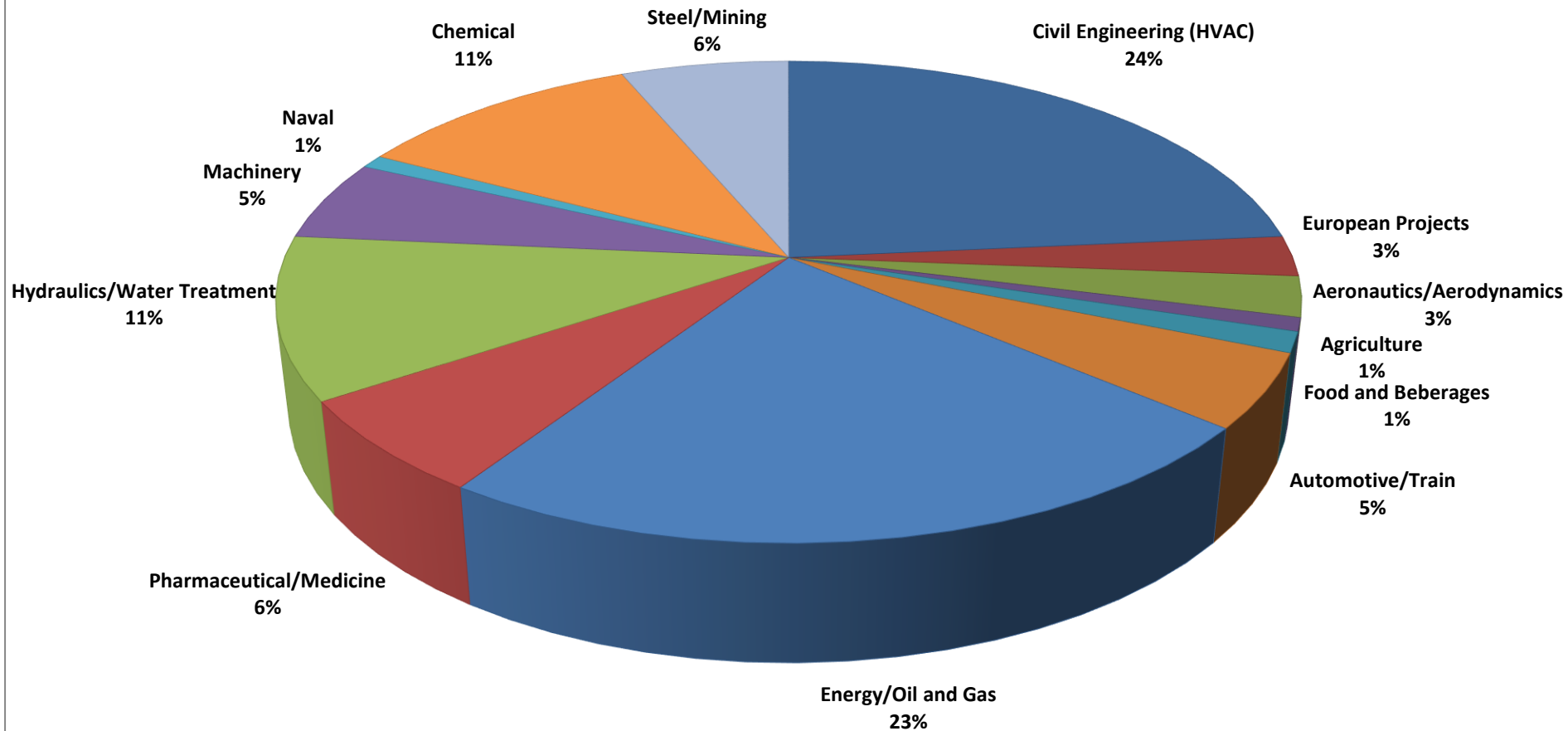


# Engineering Services



We have long term experience with more than 200 projects developed.

## PROJECTS DEVELOPED BY SECTOR



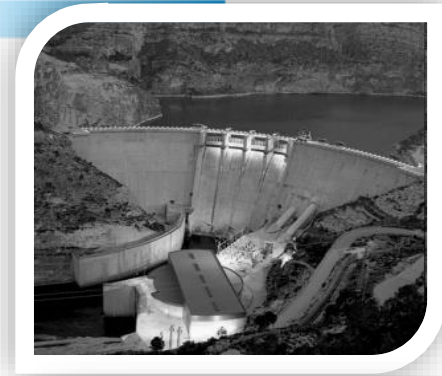
# Engineering Services

## Optimization/Improvement of Industrial Processes:

- Pressure Drop Reduction.
- Heat Transfer Improvement.
- Ventilation and Climatization Studies.
- Multiphysics (gas/solid/liquid) mixing time.
- Chemical reactions.
- Aerodynamic Loads Reduction.
- Gas distribution, combustion and particle emission.
- Solid particle transport and drying.

## Design of Industrial Equipments/Products:

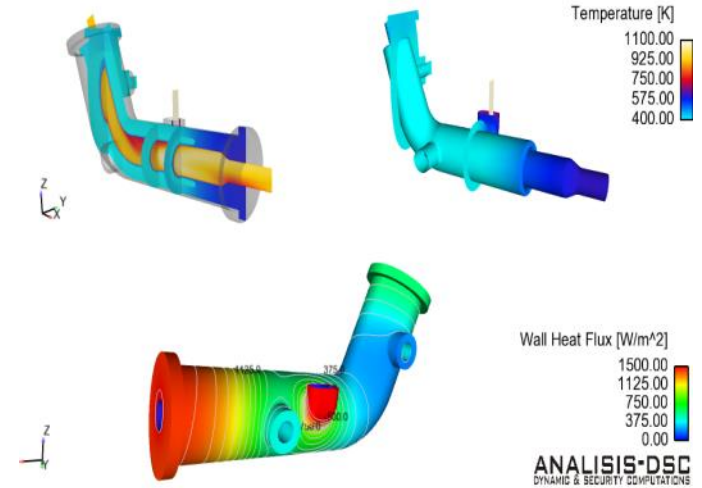
- Prototype Development.
- Design Scale-up.
- Basic Design Engineering.
- Experimental results validation.



# Engineering Services

## Damage equipment analysis:

- Erosion.
- Breakdown.
- Thermo-mechanical stresses.
- Corrosion.
- Cavitation.
- Vibration.
- Fatigue.



## Contingency analysis (Incidents/Accidents):

- Particle and contaminants emissions.
- Explosions.

## Fire safety in civil engineering:

- Fire safety systems (Temperature and smoke dispersion).
- People evacuation.

## Ventilation/climatization in civil engineering:

- Comfort evaluation / Ventilation systems.



# R&D



We are a R & D orientated and focused company so that we can become your technological partner. We participate in R+D projects, national (CDTI, MINECO, etc.) and European (Horizon Europe, H2020, Eranet, etc.). European R&D Projects:



Chemical, mining,  
ceramical and  
pharmaceutical  
sectors



Detergents



Bioenergy



Solar thermal  
energy



NANOPAT:

Chemicals,  
nanomaterials



Agriculture



Heat pumps –  
solar thermal  
energy storage



Mining



Agriculture


We are interested in participating as partners in other European projects in areas such as: Water, NMBP, Energy, Biorefineries, Batteries, etc. In case you would be interested in presenting a European proposal with us, please do not hesitate to contact us.

# Contact

If your company is interested on additional information about our services, do not hesitate to contact us at:

 [www.analisis-dsc.com](http://www.analisis-dsc.com)

 [info@ analisis-dsc.com](mailto:info@ analisis-dsc.com)

 **+34 914 614 071, +34 914 284 802**

 **ANALISIS-DSC**

**C/ Fermín Caballero, 54 S. S. 1.1**

**E28034 Madrid, SPAIN**

