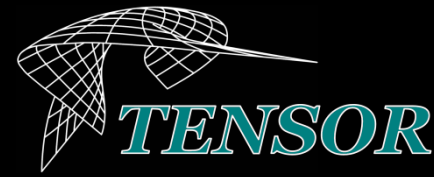




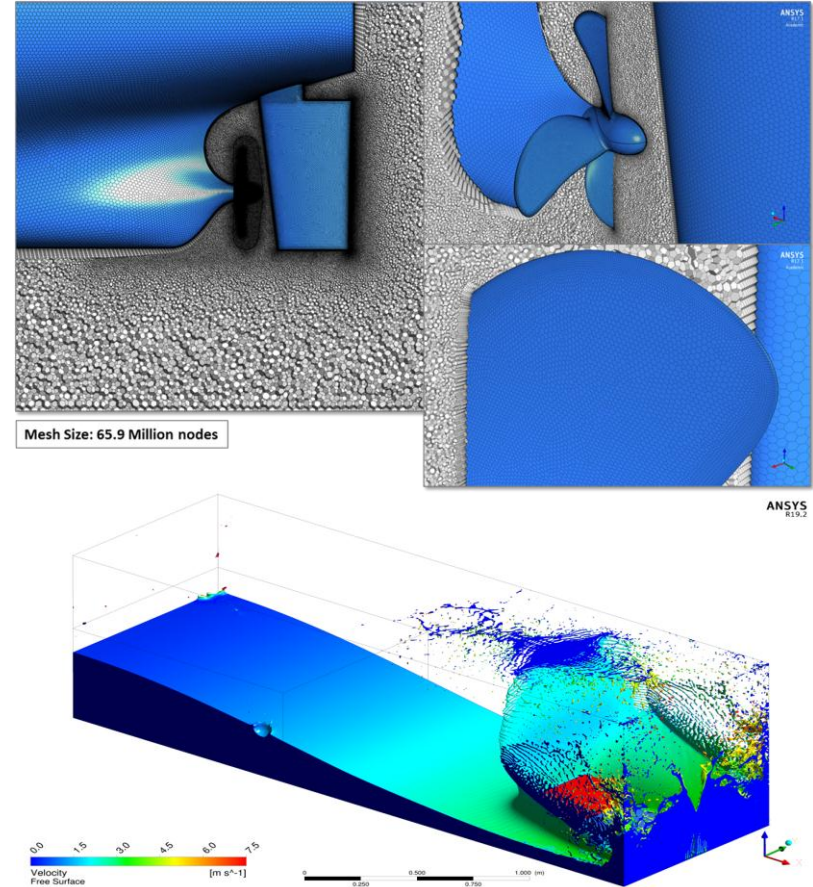
**Outsourcing partner for the CFD & FEA services
& CAE Software Tools**

// CFD and FEA analysis pre-work, simulation and consultancy provider from a highly competent & experienced team at an extremely competitive fixed or time-based fees //

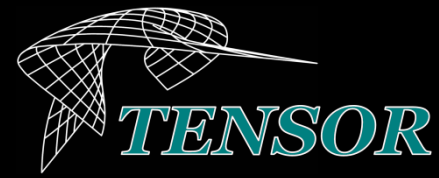
CFD & FEA Services



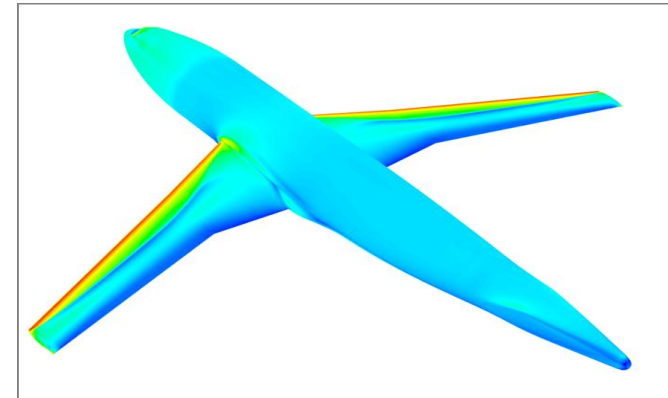
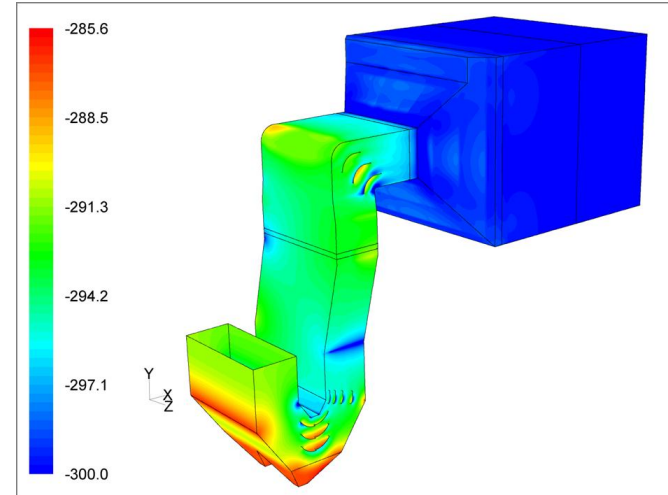
- CFD & FEA numerical modeling & simulation services
- Meshing (using ANSYS software) expertise
- Pre/post processing
- Technical verifications in arbitrage cases (simulation services)
- Engineering solutions provided based on results of simulation



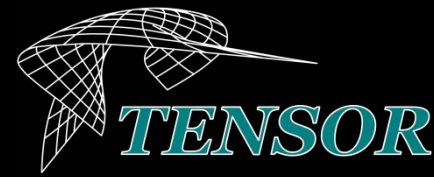
Simulation services: CFD studies



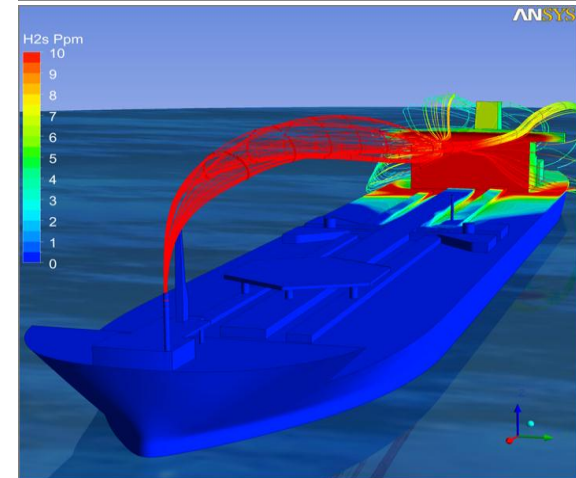
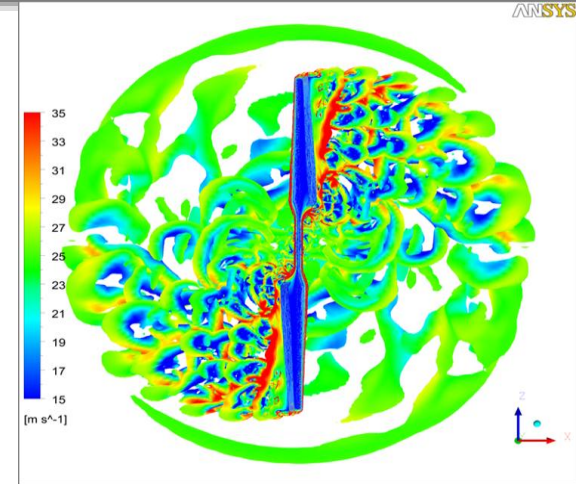
- ▶ CFD studies in automotive industry, oil & gas, maritime industry, aerospace, metallurgy, energy and bio-engineering
- ▶ Thermal analysis studies
- ▶ Analysis of desulphurization & de-dusting equipment (functioning/verification)
- ▶ Gas outlets analysis
- ▶ Electrostatic filters analysis
- ▶ Gravitational separators analysis
- ▶ Multiphase flows analysis
- ▶ Phase-change processes CFD studies
- ▶ UDFs (User Defined Functions) creation to be used in CFD project simulations



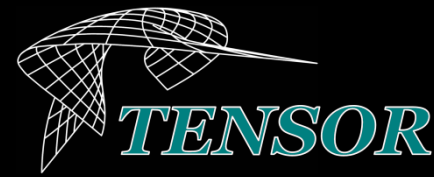
Simulation services: CFD & FEA studies



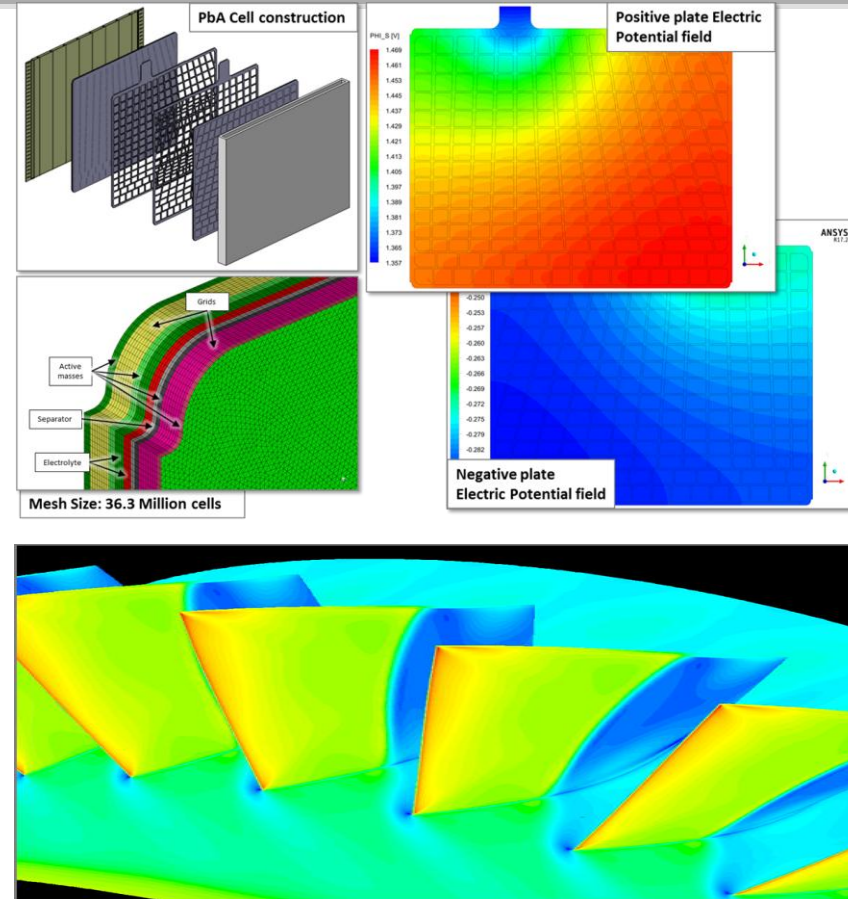
- ▶ Studying product or assembly behavior under worst-case scenarios or in cases that cannot be physically tested or it is very expensive to do it by experiment
- ▶ Rapid virtual analysis of a prototype in different functioning cases
- ▶ Studies regarding fluids distribution and fluids transport
- ▶ Environmental studies (NOx, SO2, CO dispersion, etc.)
- ▶ Heat transfer studies in industrial processes
- ▶ Aerodynamics & Hydrodynamics studies
- ▶ Wind turbine studies
- ▶ Fluid flow in pipe networks
- ▶ Combustion studies



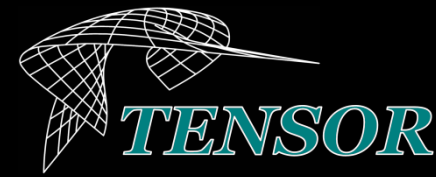
Simulation services: CFD & FEA analyses



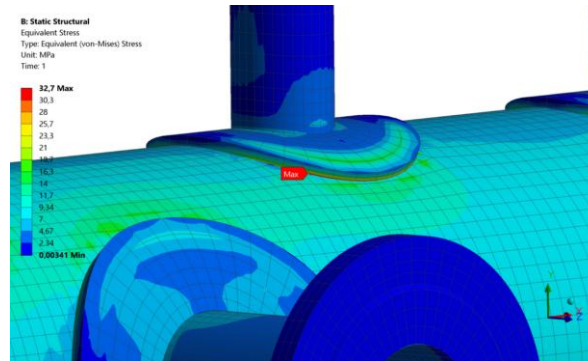
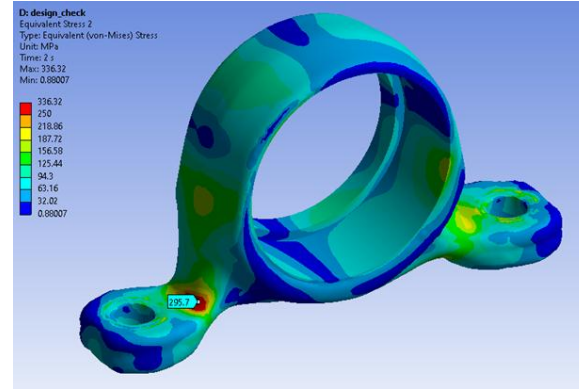
- ▶ Fluid-structure interaction analysis
- ▶ Sloshing studies
- ▶ Continuous casting analysis
- ▶ FEA (Finite Element Analysis) studies
- ▶ Fitness for service analysis
- ▶ Fracture mechanics
- ▶ Structural optimization analysis
- ▶ Turbo-machinery studies (CFD & FEA)
- ▶ Seismic studies
- ▶ LNG transport studies
- ▶ H2 related studies
- ▶ Pb & Li-Ion batteries related studies



Simulation services: Structural Analyses

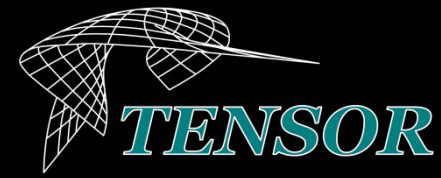


- ▶ Structural Static Analysis; Nonlinear Structural Analysis
- ▶ Modal Analysis; Harmonic Analysis
- ▶ Transient Dynamic Analysis
- ▶ Response Spectrum Analysis
- ▶ Buckling Analysis; Composites



- ▶ Shell Analysis and Cross Sections
- ▶ Rotor Dynamic Analysis
- ▶ Thermal Analysis
Coupled Field Analysis
- ▶ Metal Fatigue Analysis
- ▶ Contact Technology
- ▶ Weld Modeling
- ▶ Fatigue life estimation
study Beam and Pipe
Cross sections

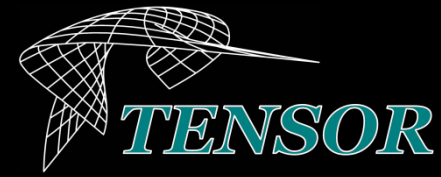
Who we are?



- +25 years in providing CAE software and simulation services
- Dedicated and flexible team of PhD engineers, experts in CFD and FEA modeling and numerical simulation
- Complex projects delivered in various industries like automotive, energy (wind, oil & gas, nuclear, thermal, hydro), maritime, aerospace, pharma, metallurgy etc.
- Based in Bucharest, Romania, Tensor has been delivering projects in Europe and also to other continents through general contractors



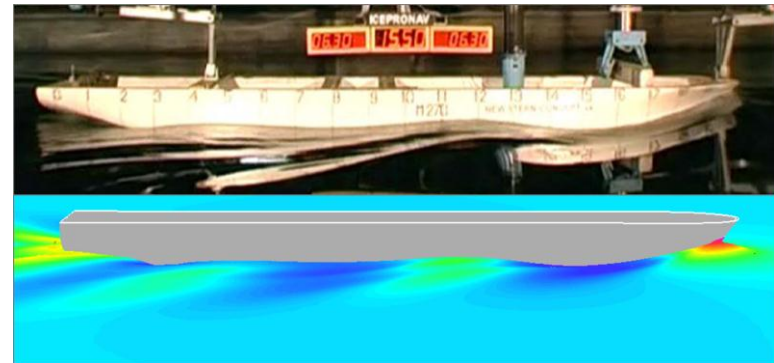
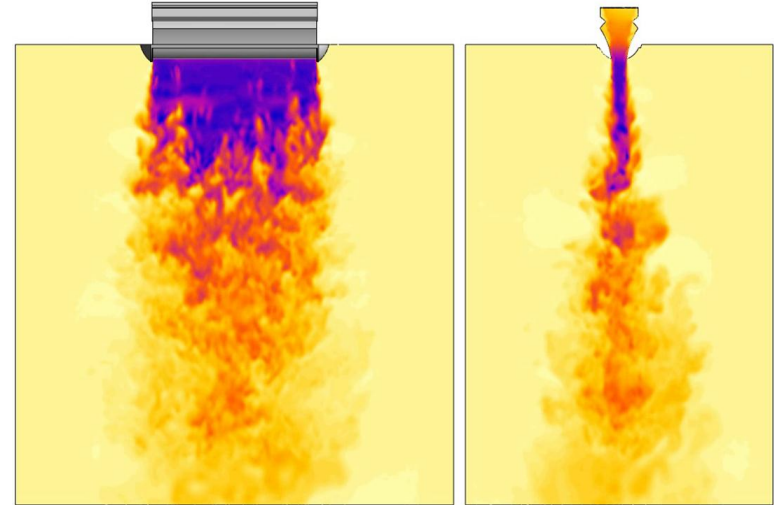
Services – structure & fees



CFD/ FEA consultancy services

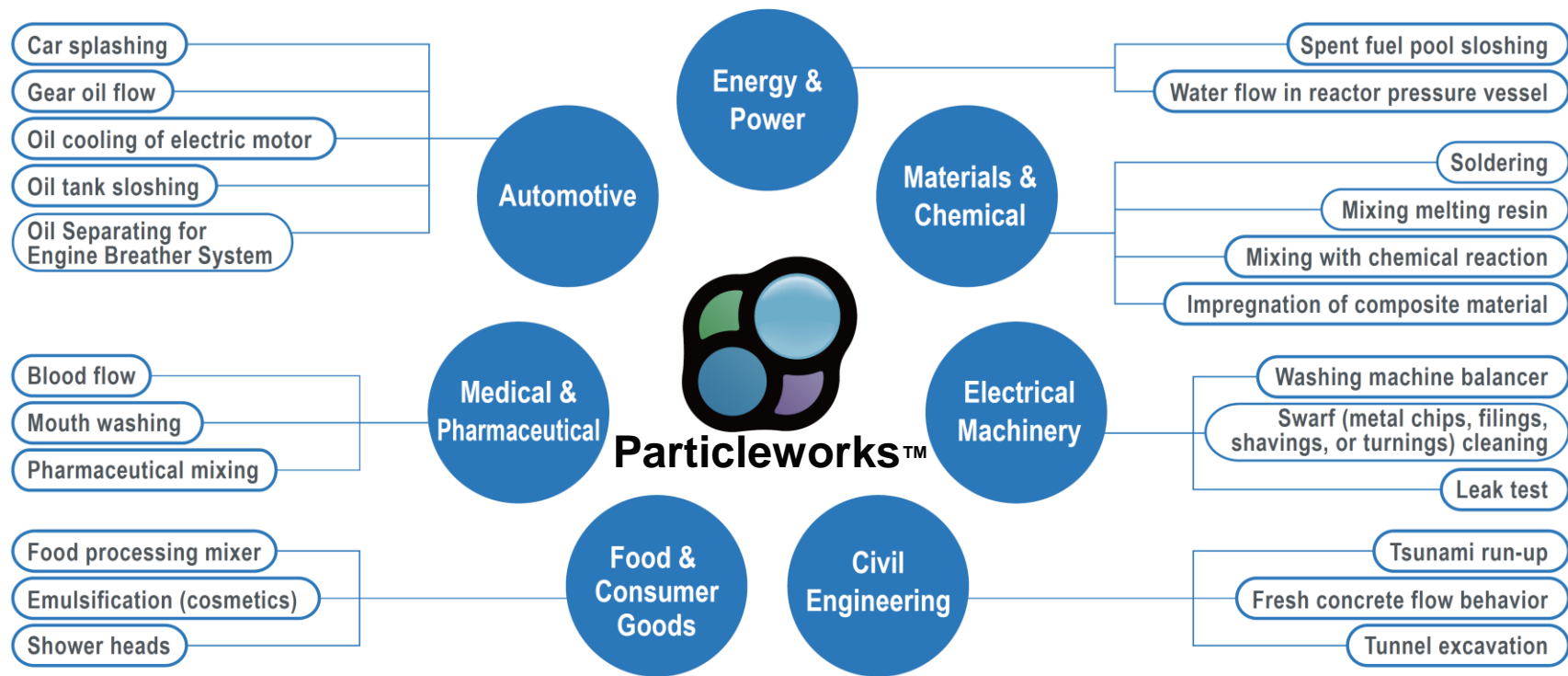
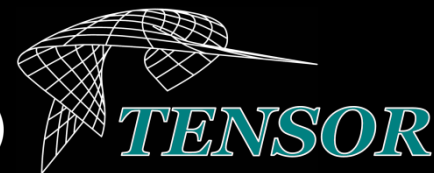
Software used:

Preprocessing	<ul style="list-style-type: none">▪ ANSYS Workbench (WB)▪ ANSYS Meshing (under WB)▪ FLUENT Meshing▪ ANSYS SpaceClaim Direct Modeler (SCDM)
CFD simulations	<ul style="list-style-type: none">▪ ANSYS CFD (Fluent)
Postprocessing	<ul style="list-style-type: none">▪ ANSYS CFD-Post
FEA simulations	<ul style="list-style-type: none">▪ ANSYS Mechanical



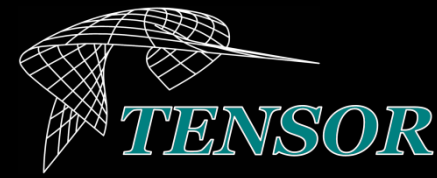
CAE Software – PARTICLEWORKS

PROMETECH software representative in Romania (Particleworks & Granuleworks)



CAE Software

FRENETIC (magnetic design for power electronics)



Frenetic platform connects the most accurate designs based on **Artificial Intelligence** (IEEE referenced) with manufacturers in a 100% Online Platform.

2. SampleStage

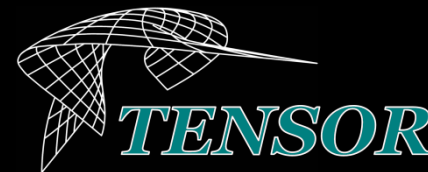
The SampleStage interface shows a top navigation bar with folders: All folders (93 Designs), Kostal (0 Designs), Tesla (0 Designs), Microsoft (0 Designs), and Flyback (0 Designs). Below this are three main panels: Projects (Total: 93 projects), Samples (Total: 6 samples), and Measurements (Total: 5 measurements). Each panel has a search bar and a table of entries. The Projects table lists 'Halliburton 8kHz copy' and 'Frenetic_20210916121449'. The Samples table lists 'Sample for: Halliburton 8kHz copy' and 'Sample for: Frenetic_2021'. The Measurements table lists 'Test 198 - 2021-08-27_02_'. A 'Reference Designs' section is also visible on the right.

3. Manufacturing

1. Design Stage

The Design Stage interface shows a top navigation bar with tabs: Waveform, List of Designs, Core, Winding, and Overview. The Waveform tab is active, displaying a circuit diagram and a waveform plot. The circuit diagram shows a transformer with primary and secondary windings, and a diode. The waveform plot shows Voltage [V] and Current [A] over Time [ms]. The Overview tab shows a table of results, including Vrms, Irms, Vpk, Ipk, Mpk, Td, and Tdss. The bottom of the interface has a status bar with temperature (T= 73 °C), power (P= 1.23 W), and buttons for SAVE, SUGGEST DESIGN, and RUN.

Contact details



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