GRUPO SSC

Developing the Next Generation of Engineers

GrupoSSC

Ansys

ABOUT US

In Grupo SSCwe have **32 years of experience** in engineering solutions through **Design and Computer Simulation.**

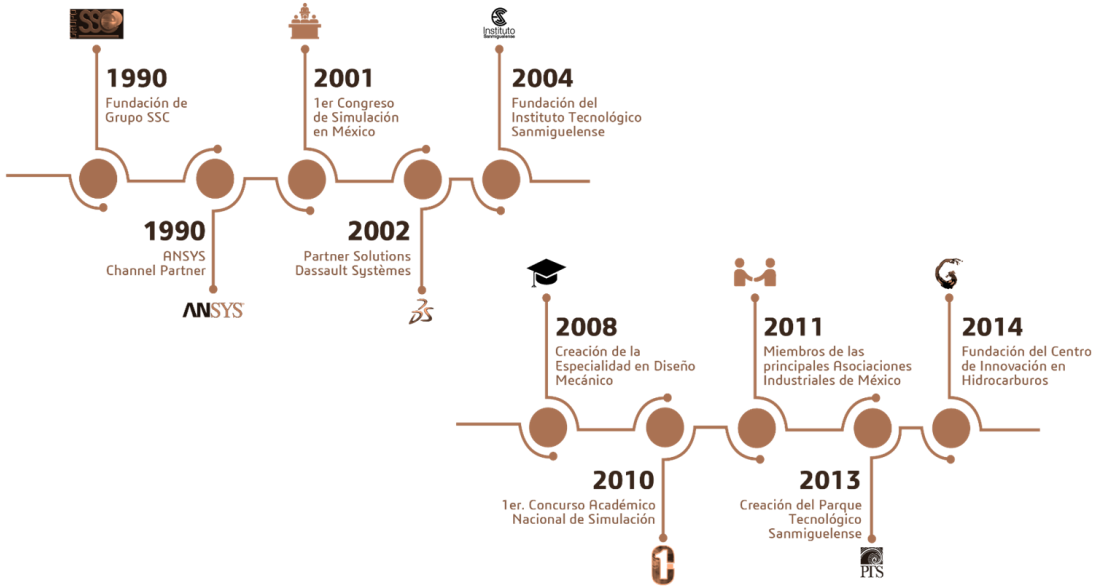
GrupoSSC Ansys

OVERVIEW

GrupoSSC

Commercial Partner of ANSYS Inc in Mexico and Central America.

Grupo SSC is a Mexican company with over 30 years of experience propelling innovation in engineering through simulation and direct promoter of ANSYS usage in more than 300 academic institutions (universities, laboratories and technological and scientific research centers), and over 1,000 leading companies in their sectors, with the objective of improving the experimental education of engineers in all the fields through simulations.



CAPACITY


110
Employees
Sales Partners
Ansys
+300
Academic
Clients
+1000
Commercial
Clients
MESCALEA 5.0
e-learning mode ON
Founded
in 1990

INDUSTRY PRESENCE

- Machinery
- Automotive
- Academic
- Healthcare
- Energy
- Semiconductors
- Aerospace & Defense
- Electronics
- Construction
- Investigation
- Consumer Goods

GrupoSSC Ansys

ANSYS IN NUEVO LEON

SOFTWARE VENDORS

Established since 1990, Mexican leading pioneers of Engineering solutions driven by Simulation and Computer Aided Design.

- SOFTWARE CHANNEL PARTNER
- Certified Training Center
- Technical Support
- Consultancy Services

High Performance Hardware

- Partners with the best Universities in the country

Ambassador and Business Partner for ANSYS Inc. in México and Central America.

OVERVIEW Ansys

ANSYS Inc., world leader in numerical simulation software, and currently the only simulation company that quotes in the NASDAQ and that is included in the Fortune 500 list, which includes the companies with the highest commercial success in the world. Their portfolio of tools includes software for mechanical structural simulation, computational fluid dynamics, electromagnetic simulation and the integration of multiple physics domains.

The most powerful simulation platform. With solutions for any engineering field. ANSYS is used by the most innovative companies in the world.

FOCUSED

Simulation is all we do.
Leading product technologies for multiphysics simulation supported by global development and technical teams.

PROVEN

Members of the prestigious

Nasdaq STANDARD &POOR'S

$25B+ market capitalization

GLOBAL

4,800+ employees globally

75 Offices in

40 Countries

COMMITTED

Overall customer satisfaction Globally is at **96%**

TRUSTED

More than **40,000** customers worldwide

ISO 9001 CERTIFIED

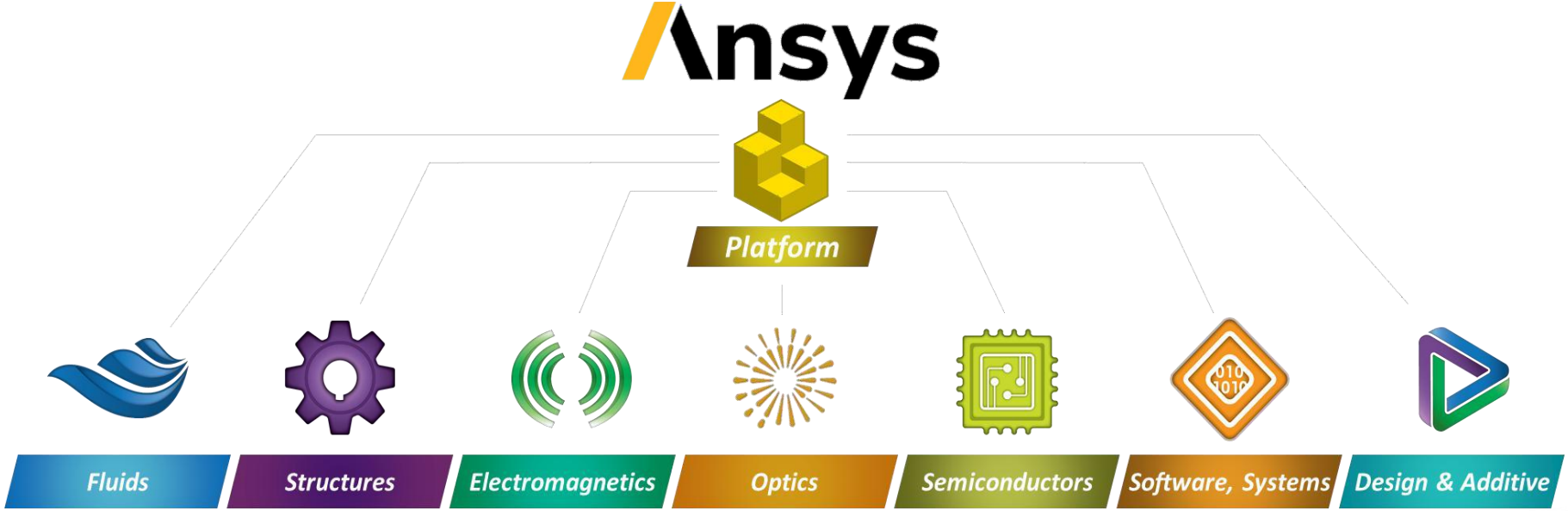
LARGEST

3X

the size of our nearest competitor (revenue)

WHY ANSYS?

ANSYS offers the only true simulation platform with best-of-breed simulation across all major physics



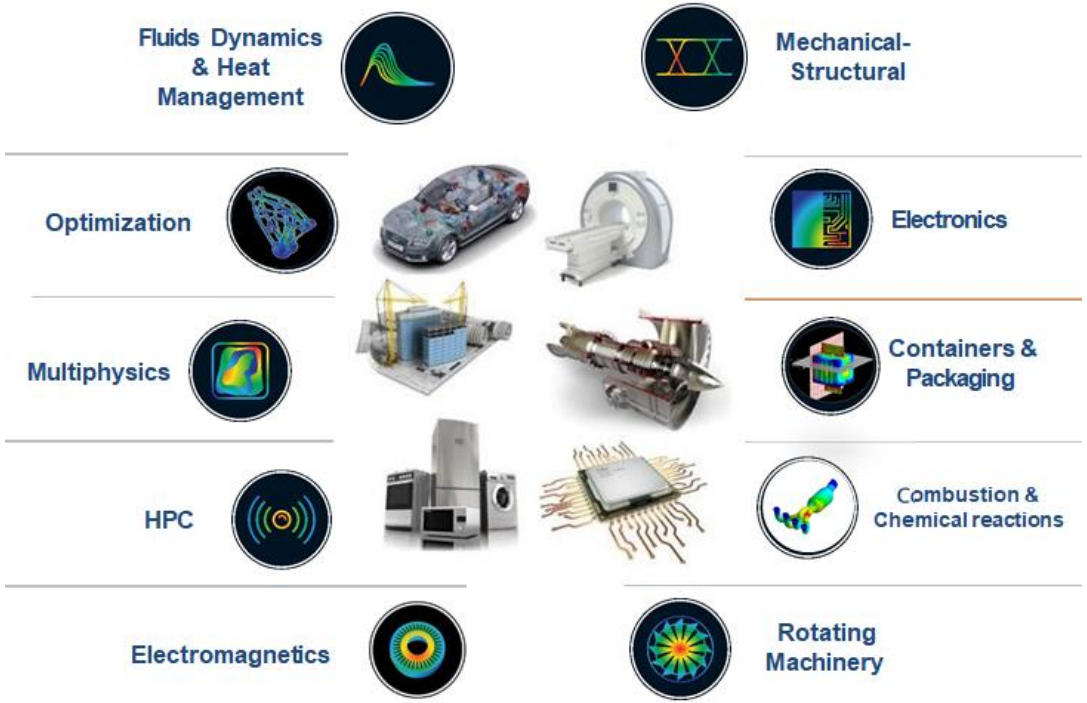
ENGINEERING SIMULATION

Engineering Simulation Services are base dont generation of computational models capable of representing physical applications in parts, products and manufacturing processes.

Through the use of the ANSYS software within a Simulation Driven Process, the computational Models will provide advantages through their predictive nature in the Definition and Validation of Designs at the System level supporting the credibility of decisions.

ENGINEERING SIMULATION - SOLUTIONS

SIMULATION IS THE ANSWER



Fluids Dynamics & Heat Management

Coil Design
Energy consumption
Fluid Dynamics
Air distribution
Laminar, turbulent, transient flow
Compressible and non-Newtonian fluids
Heat transfer
Heat exchangers
Pumps
Air curtains
Air mixers
Water Mixer
Temperature, Pressure, Speed, Humidity
Fluid-Structure interaction
Phase change modeling and multiphase flow,
Determination of flow patterns.
3 phase flows
Interaction between the phases and phenomena associated with transport
Ventilation
Polymer Processing
Combustion and Radiation

Mechanical-Structural

Structural analysis
Thermal analysis
Structural fatigue
Thermal-Structural Fatigue
Reliability análisis
Snap fit
Development of mechanical design
Linear and nonlinear buckling
Composite materials Vibration
Noise
Dynamics
Impact drop test

Fatigue

Stress life (SN) for high-cycle fatigue

Strain life (EN) for low- and high-cycle fatigue

Crack growth

Safety factor (Dang Van) for predicting endurance limit under complex loadings

Weld analysis for spot and seam welds

Enhanced vibration analysis including PSD

Hybrid loading to combine loads (constant, transient, time series)

Dynamics

Multi Body Dynamics

(rigid, flexible, linear, non-linear)

Strength/Fatigue

Vibration (Linear)

NVH (Transient)

Heat Transfer

Design of Experiments

Door Latch

Crash Simulation & Analysis

Crash simulation and analysis
Response of materials to short periods of severe loading
Extreme deformation problems

Failure progresses through a partor through asystem

Models with large amounts of parts or surfaces interacting with eachother

Interactions and load passing between complex behaviors are modeled accurately

Simulate models with large amounts of contacts, joints and other connections undergoing drop, impact and other short timescale events

Optimization

Design of Virtual Experimentsfor validation of several design alternatives.

Topology Optimization

Cost-Optimization driven by

material

RotatingMachinery

Turbochargers

Torque converters

Pumps

Inducers

Fans

Blowers

Propellers

Gas, steam, wind & hydraulic turbines

Expanders

Liquid rockets

Industrial compressors

Electromagnetics

Magnetic transient with rigidmotion

AC electromagnetic

Magnetostatic

Electrostatic

DC conduction

Electric transient

Expert design interfaces for electric machines and Transformers

Simplorer (circuit and system simulation)

Multiphysics

Fluid-Structure Iteraction

Thermal Stress and Force induced Motion

Electric Motor Applications

Electromagnetic Cooling and Thermal Stress

Aero-Thermal Optimization

GrupoSSC e-learning

MESCALEA

TRAINING

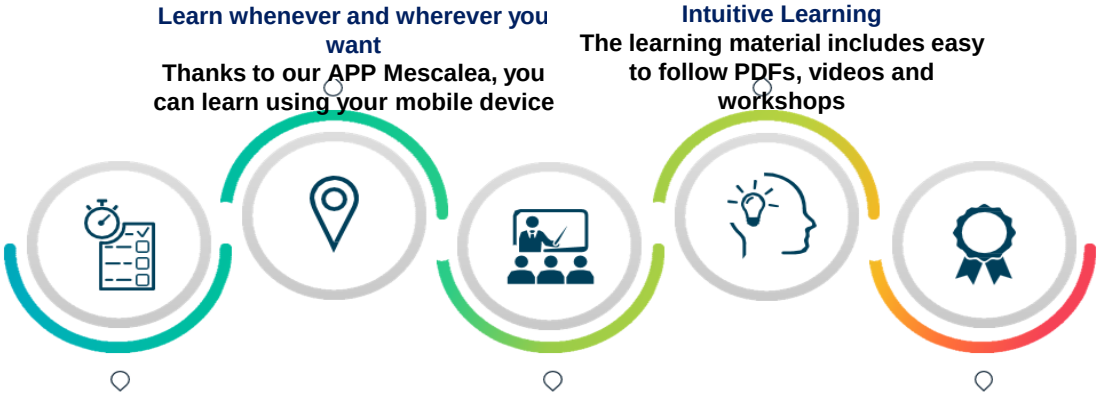
GrupoSSC Ansys

MESCALEA

The new tool that will change the way design and simulation information is shared among the engineering community, researchers, professors and students.

¿Why train with us?

- Introductory to advanced courses.
- Quizzes to evaluate your courses or certifications for progress and achievements.
- Attention by our experts.
- Online community where you will be able to ask the experts and share your own knowledge.
- Learn wherever you want with the Mescalea App and Web Platform.



Learn whenever and wherever you want
Thanks to our APP Mescalea, you can learn using your mobile device

Intuitive Learning
The learning material includes easy to follow PDFs, videos and workshops

Move at your own pace
Modular Online Courses and Certifications available 24/7

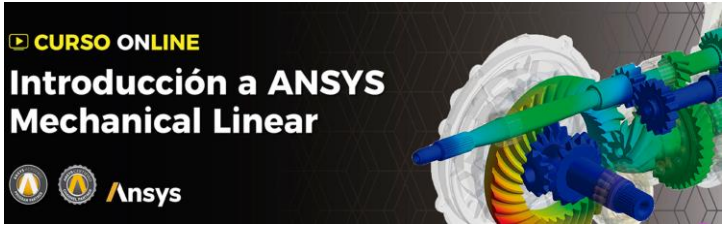
Study with the experts
We have expert personnel certified in Design and Simulation by ANSYS Inc, and Dassault Systemes

Certificate
Courses and certifications validated by: Grupo SSC Instituto Sanmiguelense Universidad de Guanajuato

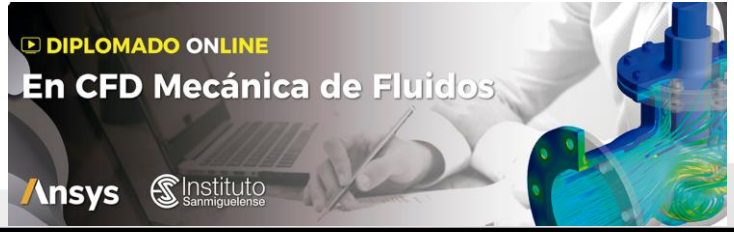
GrupoSSC Ansys

GRUPO SSC E-LEARNING

Go to our page and learn about all our training offer we have for you.



Learn from wherever you want with our MESCALEA app.



https://www.gruposSC.com/elearning

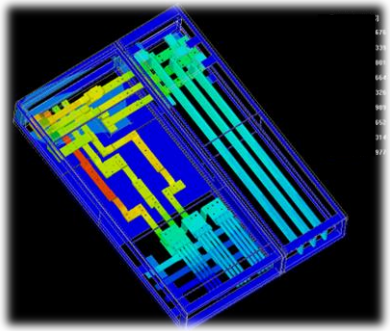
GrupoSSC Ansys

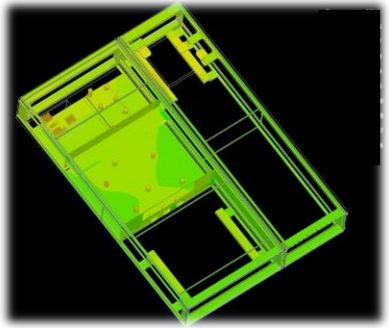
CASE OF SUCCESS

Schneider Electric™

Simulation for the thermal benchmark

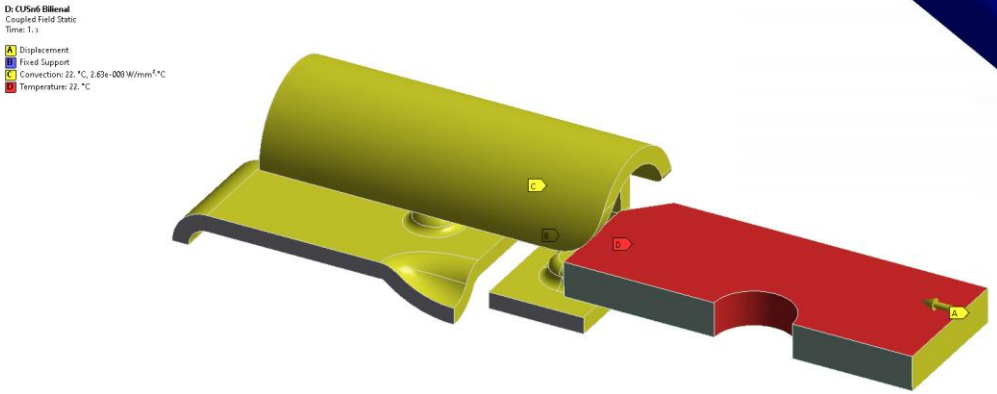
Evaluate the thermal management of the Switchboard operation. ANSYS Icepak and ANSYS Maxwell solutions were used.

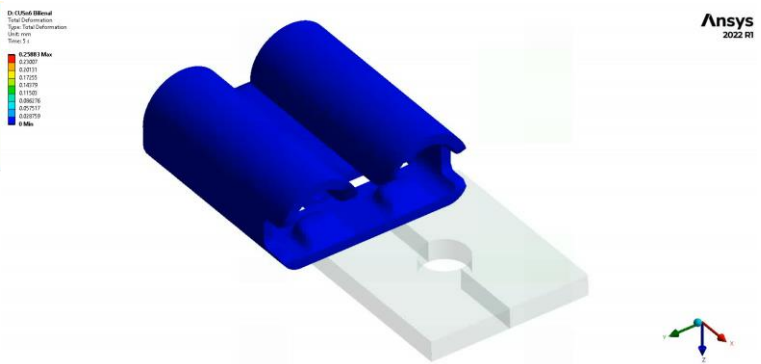


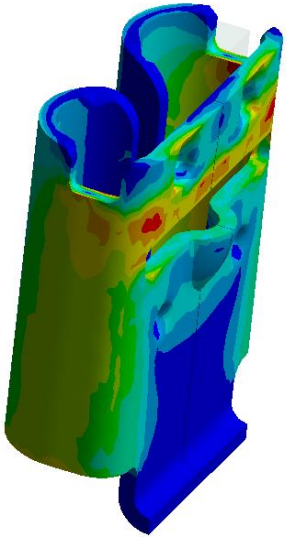


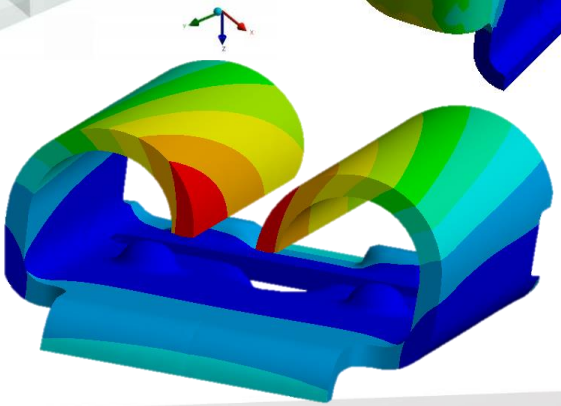
GrupoSSC Ansys

CASE OF SUCCESS









Thermal-structural simulation of an electrical connection

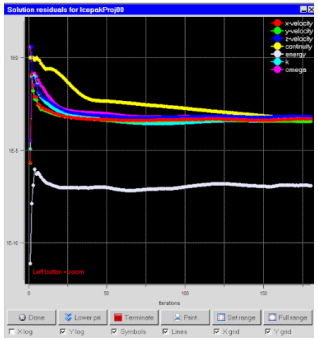
Development of the mechanical analysis of the insertion of a component in an electrical terminal to know the retention force, and the effect that temperature has on the system

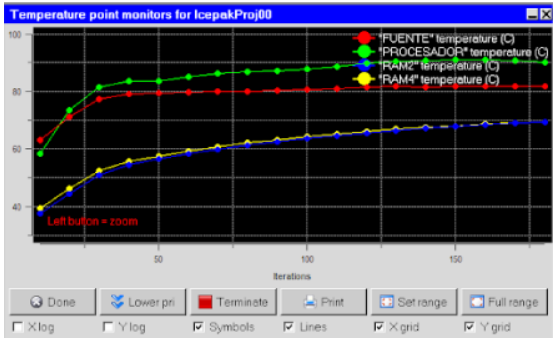
CASE OF SUCCESS

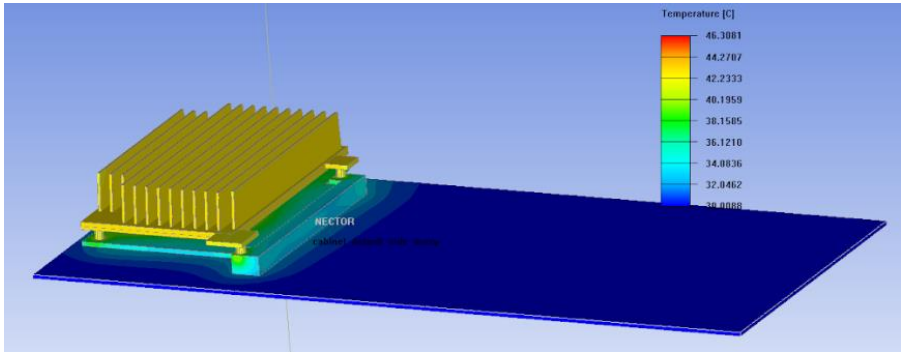
YAZAKI

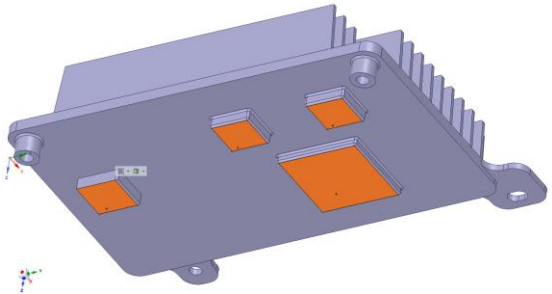
Development of a CFD model to analyze the thermal behavior of an automotive cluster

Simulation of a passive ventilation system for a board considering heat sources both from the logic circuit as well as components such as an LCD screen









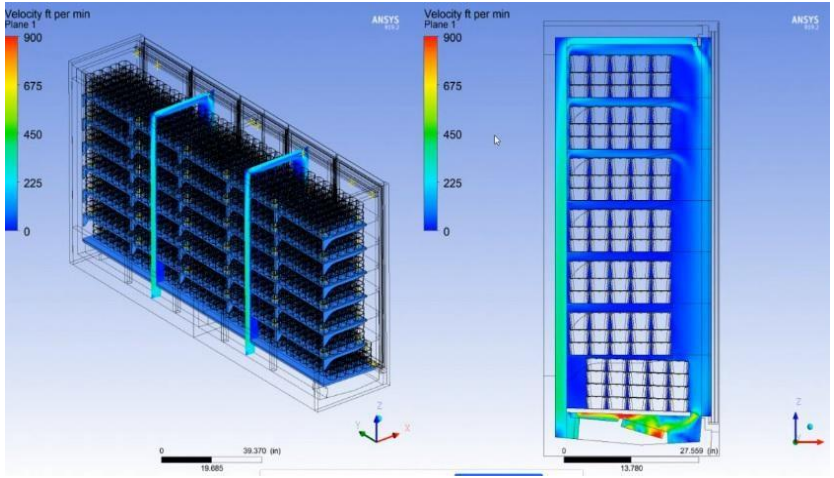
GrupoSSC Ansys

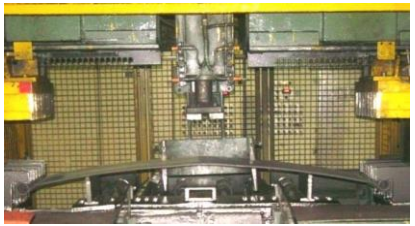
CASE OF SUCCESS

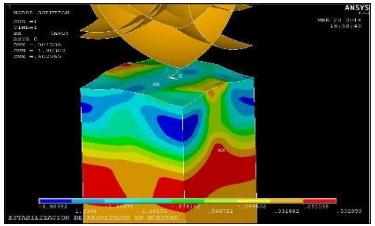
KYSOR WARREN
eptarefrigeration

Rassini

Development of an application for the prediction of camber loss due to the blasting process in parabolicsprings.





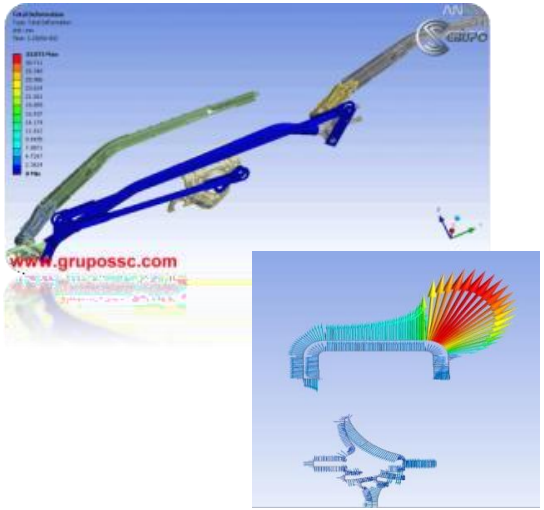


GrupoSSC Ansys

CASE OF SUCCESS

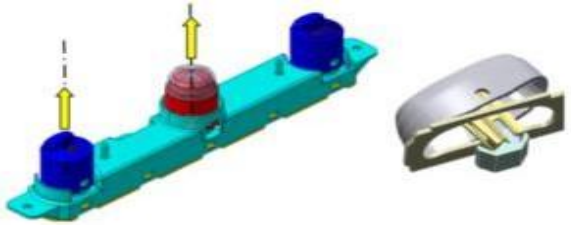
Valeo

Design of the mechanisms in the wiper system.



KOSTAL

Structural strength in buttons and switch.



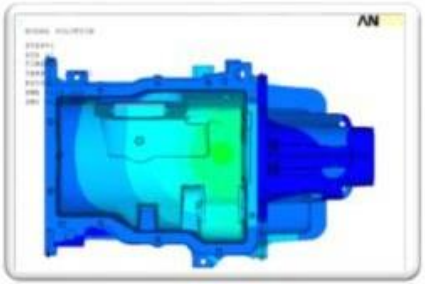
GKN Driveline

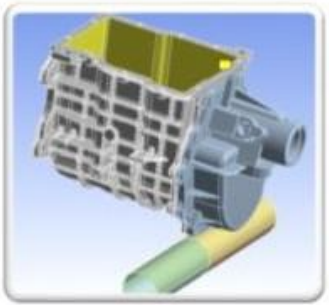
Design and validation of constant speed arrows and semi-axles in the powertrain.

CASE OF SUCCESS

TREMEC TRANSMISSIONS

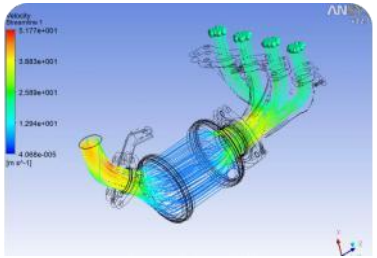
Structural analysis in a transmission system

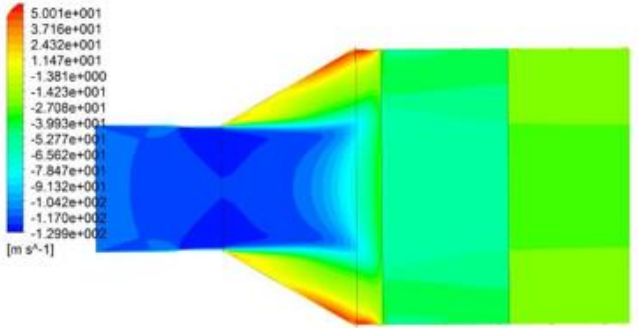




KATCON

New design validation inexhaust system.





GrupoSSC Ansys

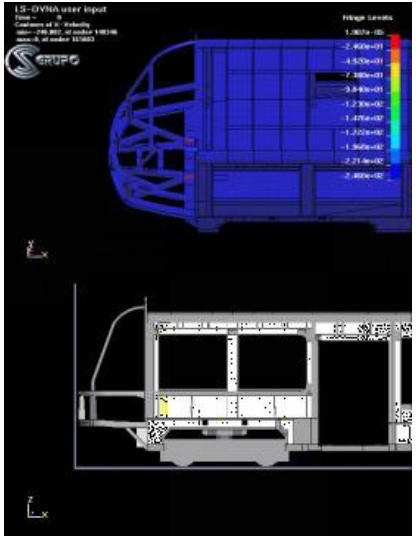
CASE OF SUCCESS

VŪHL

Evaluation of the structural integrity of the Rollbar of the VUHL-05

BOMBARDIER

Development and evaluation of the light rail structural design for the City of Minneapolis, Minnesota under strict safety standards to satisfy the productrequirements.



GrupoSSC Ansys

OFFICES

1 San Miguel de Allende,Gto. México BAJÍO (HEADQUARTER)

2 México City CENTRAL ZONE OFFICE

3 Monterrey, NL. México NORTH ZONE OFFICE

GrupoSSC Ansys

CONTACT INFORMATION

Edgar E. García León
Account Manager Zona Norte
edgar.garcia@gruposSC.com
M: (81) 2515 6914

Eudoxio Ramos Gómez
Business Development Manager
eudoxio.ramos@gruposSC.com
M: (81) 1411 6230

GrupoSSC MESCALEA Ansys