

EnginSoft is a premier consulting firm in the field of Simulation Based Engineering Science (SBES) with a global presence. It was founded in 1984, but its founder and initial employees had been working in SBES since the mid '70s. Throughout its long history it has been at the forefront of technological innovation and remains a catalyst for change in the way SBES and CAE technologies in general are applied to solve even the most complex industrial problems with a high degree of reliability.

Today, EnginSoft is comprised of groups of highly qualified engineers, with expertise in a variety of engineering simulation technologies including FEM Analysis and CFD, working in synergic companies across the globe. We are present in Italy, France, Germany, the UK, Turkey and the U.S.A. and have a close partnership with synergic companies located in Greece, Spain, Israel, Portugal, Brazil, Japan and the U.S.A.

EnginSoft works across a broad range of industries that include the automotive, aerospace, defense, energy, civil engineering, consumer goods and biomechanics industries to help them get the most out of existing engineering simulation technologies.



ITALY

info@enginsoft.com

FRANCE

info.fr@enginsoft.com

GERMANY

info.de@enginsoft.com

UNITED KINGDOM

info.uk@enginsoft.com

TURKEY

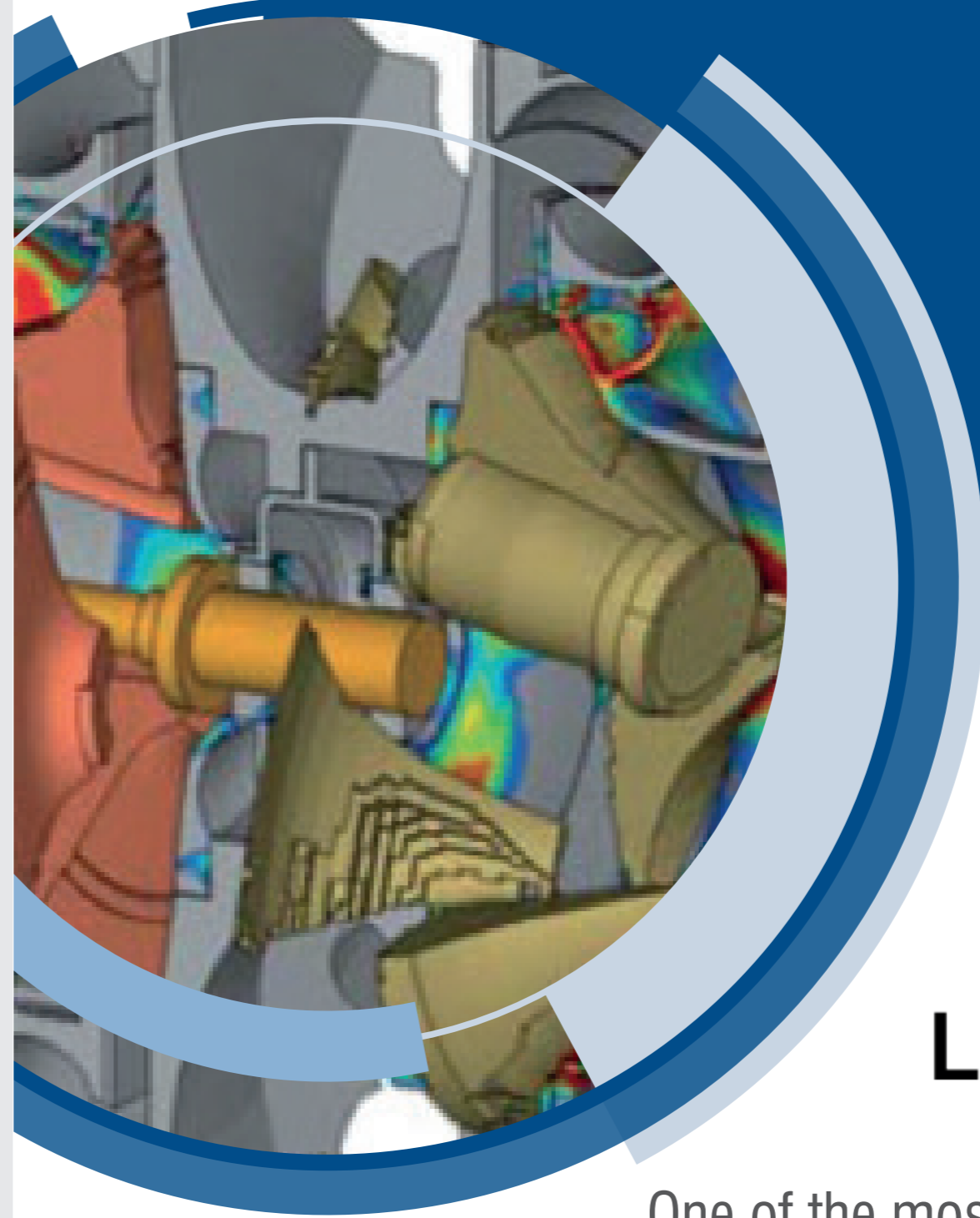
info.tr@enginsoft.com

USA

info@enginsoftusa.com



www.enginsoft.com | info@enginsoft.com



DATA SHEET

LS-DYNA

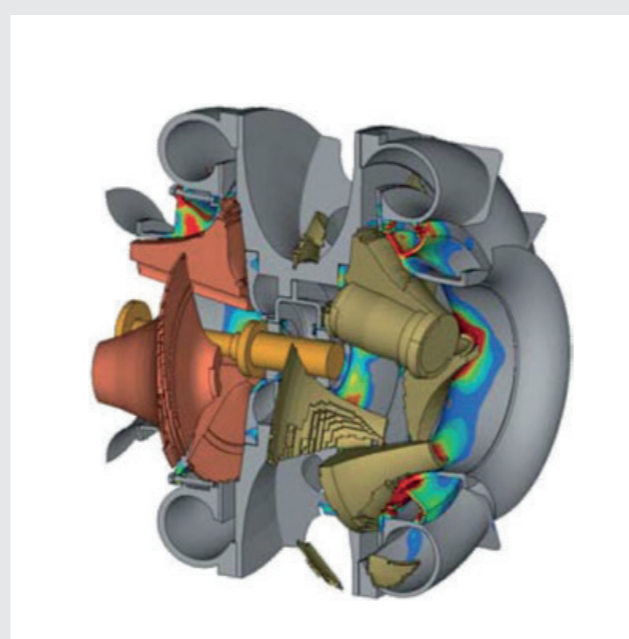
for Automotive Crash

One of the most flexible finite element analysis software packages

LS-DYNA is a general-purpose finite element program capable of simulating complex real world problems. It is used by the automobile, aerospace, construction, military, manufacturing, and bioengineering industries. LS-DYNA is optimized for shared and distributed memory Unix, Linux, and Windows based, platforms, and it is fully QA'd by LSTC. The code's origins lie in highly nonlinear, transient dynamic finite element analysis using explicit time integration.

"Nonlinear" means at least one (and sometimes all) of the following complications: Changing boundary conditions (such as contact between parts that changes over time); Large deformations (for example the crumpling of sheet metal parts); Nonlinear materials that do not exhibit ideally elastic behavior (for example thermoplastic polymers).

"Transient dynamic" means analyzing high speed, short duration events where inertial forces are important. Typical uses include: Automotive crash (deformation of chassis, airbag inflation, seatbelt tensioning); Explosions (underwater Naval mine, shaped charges); Manufacturing (sheet metal stamping).



One of the most flexible finite element analysis software packages

Main Benefits

Any of LS-DYNA's many features can be combined to model a wide range of physical events

- ✓ Full 2D & 3D capabilities
- ✓ Nonlinear dynamics
- ✓ Rigid body dynamics
- ✓ Crack propagation
- ✓ Real-time acoustics
- ✓ Implicit springback
- ✓ Multi-physics and Structural-thermal coupling

