

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

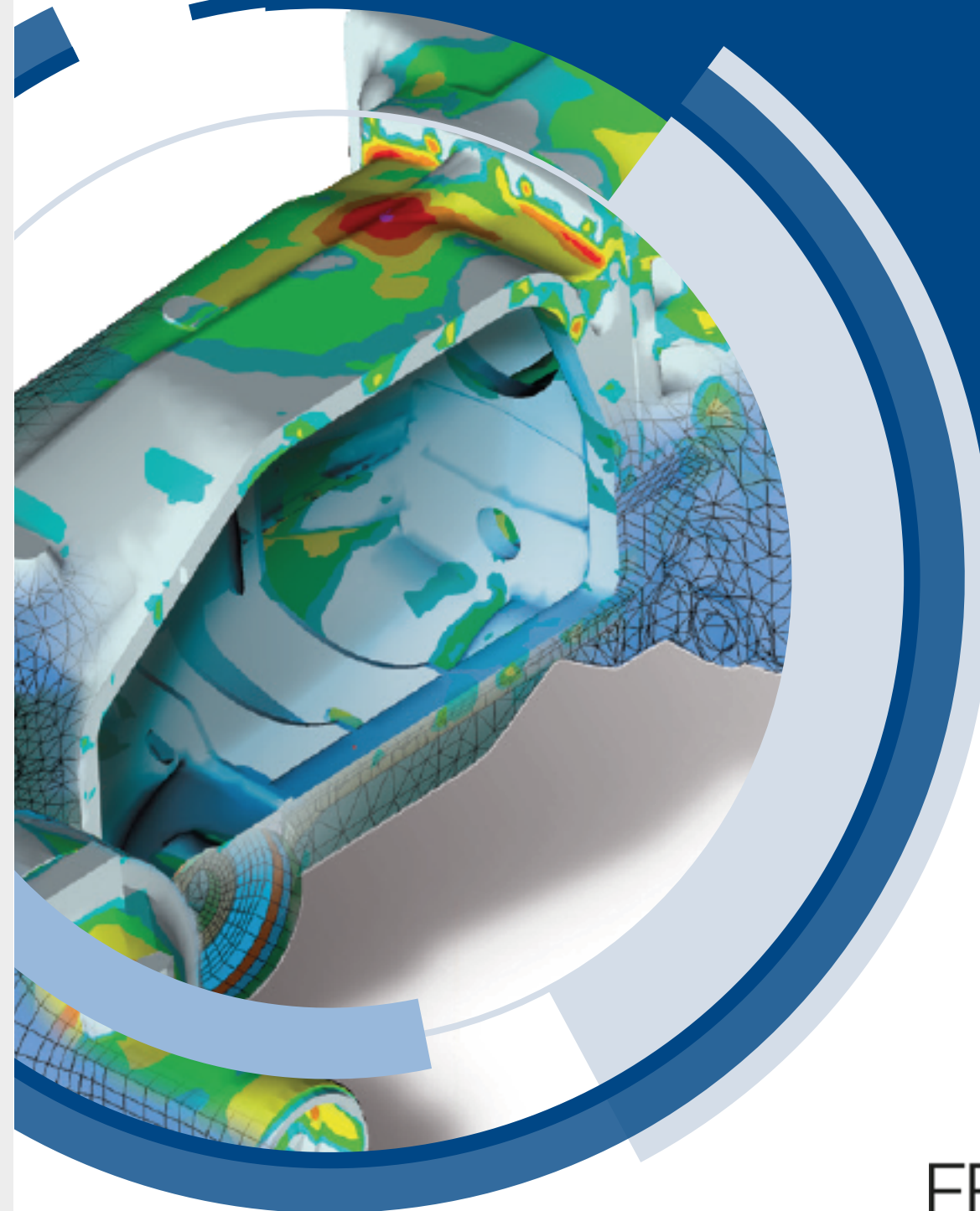
info@enginsoftusa.com



www.enginsoft.com | info@enginsoft.com

 **ENGINSOFT**

DATA SHEET



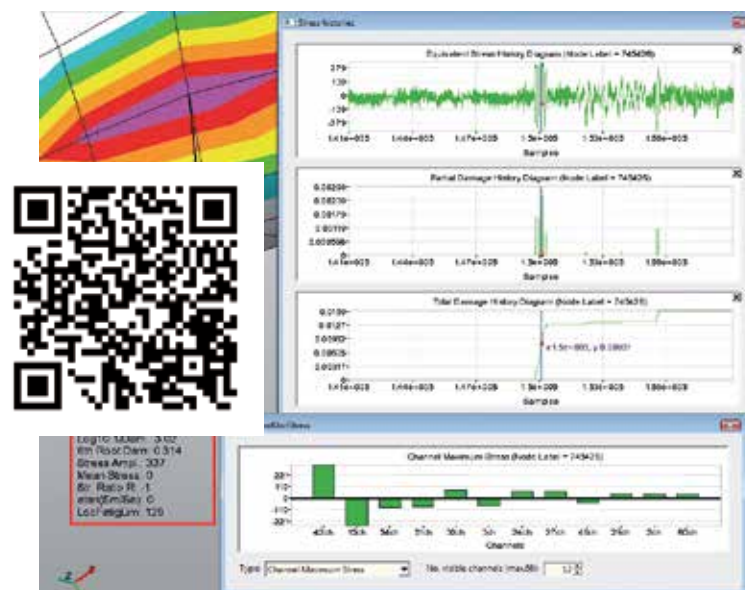
FEMFAT Software
3D Postprocessor

FEMFAT visualizer is a fast 3D postprocessor for displaying the structure of FEM models, FEA stresses and for viewing fatigue results.

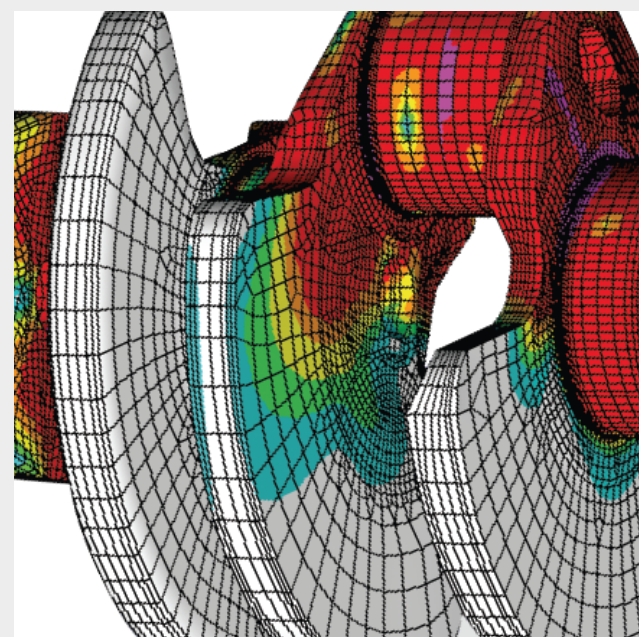
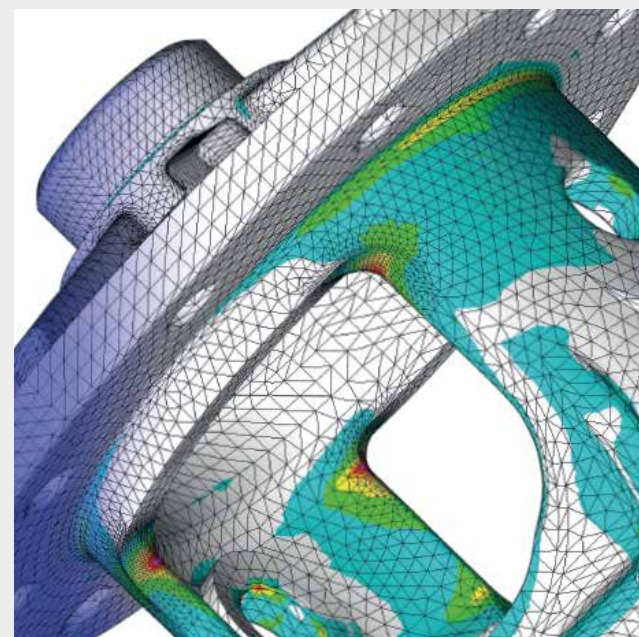
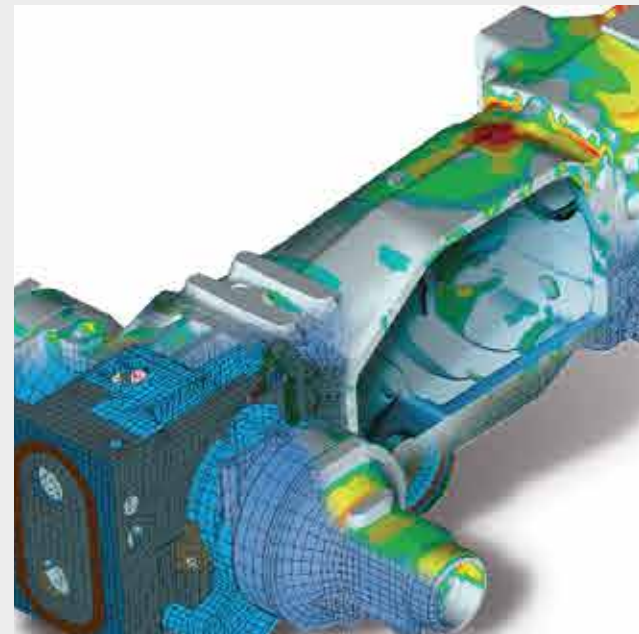
It is also a valuable preprocessor for the FEMFAT weld assessment to facilitate near-automatic weld definitions. This enables a quick and easy weld seam definition.

The weld seam line can be specified with only a few mouse clicks on the FEM geometry. The joint type (T-joint, lap joint, etc.) is automatically recognized, details can be modified and added – with visual support.

The detailed weld geometry is displayed within the FEM model (see bottom figure), allowing rapid and unambiguous checking.



FEMFAT Visualizer is a product



3D Postprocessor

Method

Animation of stresses: VISUALIZER can display the ChannelMAX or TransMAX or SPECTRAL FEA stress results as static images or as an animation by selecting a specific time interval. If the result is from ChannelMAX, the channels can be selected for superimposing too.

Node group definition: VISUALIZER provides an option for creating a new node group by dragging a frame or by selecting individual nodes. This new group can be saved and imported in the FEMFAT group menu.

3D Screenshots: For enhanced presentation of your results it is possible to export a 3D screenshot of your part. With a plug-in it is possible to export the 3D screenshots and put it into your presentation.

ChannelMAX load factors: From the equivalent stress or the damage history diagrams, the load factors for all channels can be visualized as a bar chart. The results (channel load factors, unit stress data, maximum stress data) are sorted according to absolute value. So it is easy to find out the most relevant loading directions.

Additional information for hot spots at a glance: All analyzed results (in analogy to the report file) can be selected for output simultaneously for one or more nodes. This applies to the base material, WELD and SPOT nodes.

Stress and damage history: After selecting a FEM-node from the DETAILED RESULTS group, the stress history and the partial and total damage history can be displayed in a diagram (see left figure). Exact diagram points are displayed with the aid of markers and the time range of interest can be enlarged with the help of a zoom function.

Your Benefits

- ✓ Can be directly launched from FEMFAT
- ✓ Fast FE-solver independent postprocessing
- ✓ Handles shell, solid, linear and parabolic FEM elements
- ✓ Unlimited number of displays for one user
- ✓ High graphic performance in all display modes for wire frame, hidden-line, flat-shaded, smooth-shaded, result display
- ✓ Semi-automatic recognition of weld lines and joint types
- ✓ Visualization of the detailed weld geometry
- ✓ Checks and warnings to avoid modeling errors
- ✓ xMCF interface for CAD based weld definition
- ✓ Detailed weld display can be defined in the weld database, standards like Eurocode and British Standard are available