

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, Sweden, Turkey and the U.S.A. and have a close partnership with synergetic companies located in Greece, Spain, Israel, Portugal, Brazil, Japan and the U.S.A.

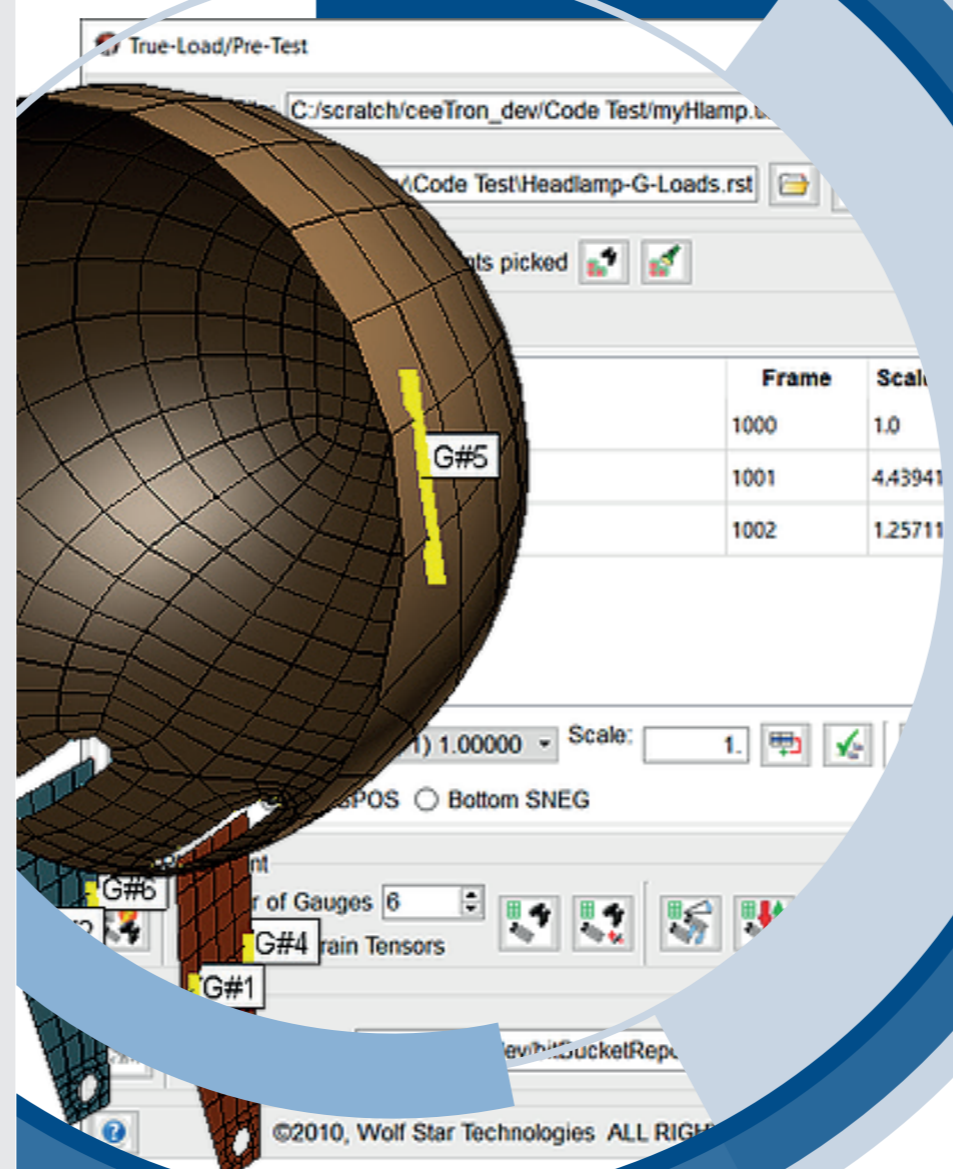
EnginSoft works across a broad range of industries that include the automotive, aerospace, defense, energy, civil engineering, consumer goods and biomechanics industries to help them get the most out of existing engineering simulation technologies.



- ITALY**  
+39 0461 9153 91
- FRANCE**  
+33 1 41 2299 30
- GERMANY**  
+49 2234 60386 10
- UNITED KINGDOM**  
+44 2476 9971 60
- NORDIC EUROPE**  
+46 46 286 89 00
- TURKEY**  
+90 216 504 11 53
- USA**  
+1 469 912 0504



[www.enginsoft.com](http://www.enginsoft.com) | [info@enginsoft.com](mailto:info@enginsoft.com)



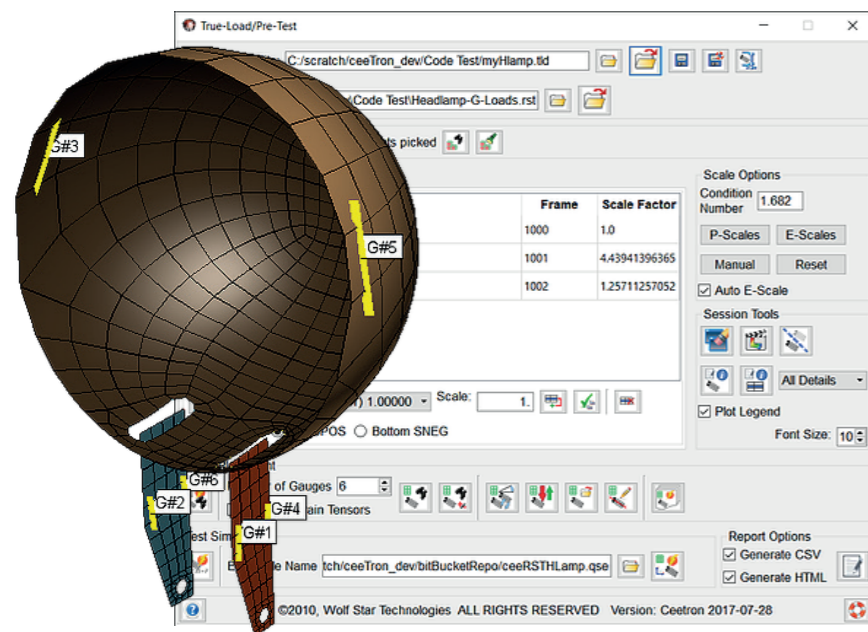
DATA SHEET



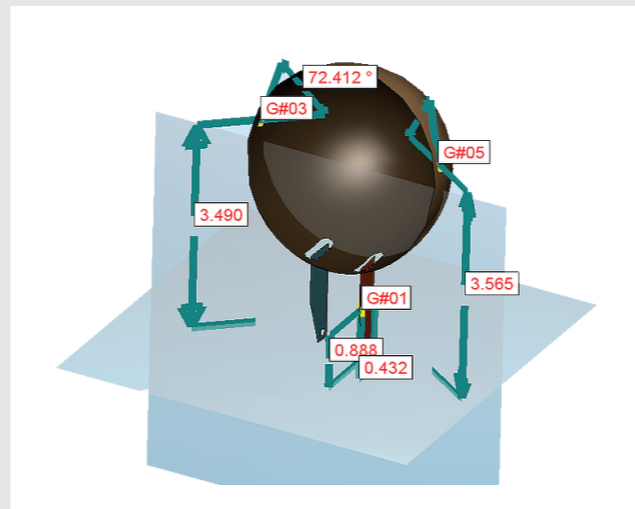
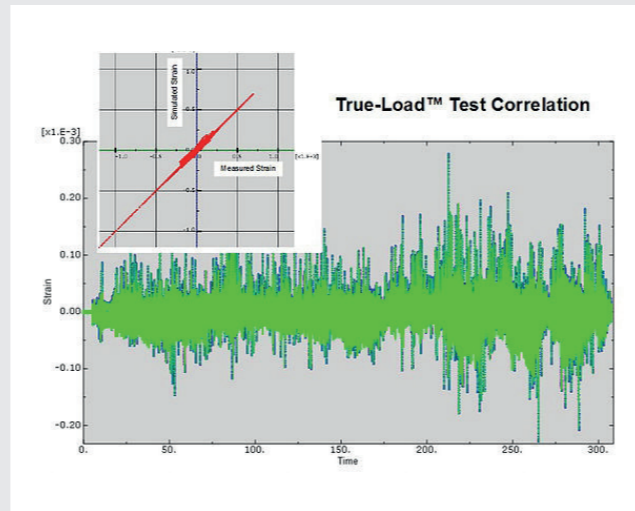
Strain Gauges:  
No Problem!

True-Load is a first to market to solution that leverages FEA models to place strain gauges on unmodified physical parts and then back calculate loading.

True-Load directly interfaces to FEA fatigue software to make FEA based fatigue with correlated loading events a natural part of the design cycle.



True-Load is a product



## Create multi-channel load cells leveraging your parts and FEA models.

- ✓ Determine optimal strain gauge placement from FEA model
- ✓ Calculate Load Proportionality Matrices
- ✓ Use Measured Strains to back calculate Operating loads
- ✓ Create Quasi-Static Events to be used with True-QSE

One of the most challenging tasks for an analyst is to develop load cases for their FEA model that match measured strain values. Typically, it will take weeks to develop the right load cases that match just one or two strain gauges at a single point in time.

True-Load makes that situation a thing of the past. True-Load will determine optimal gauge placement based on the FEA model. Once strains are collected at these optimal gauge locations, the strain data is read into True-Load to calculate load time histories that will typically match the measured strain to within 2% at every point in time. When combined with True-QSE, interrogating any point in the model for strain, stress or displacement is easy and interactive. Typically, it takes a few minutes to determine the strain gauge placement and a few minutes to back calculate the loading profiles.