

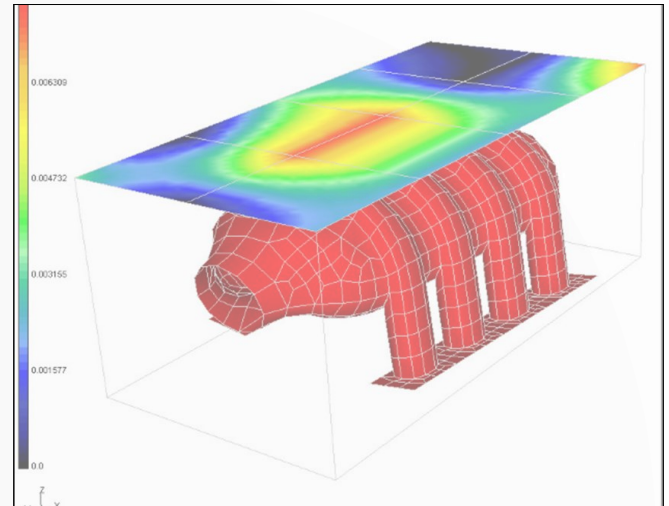
DATS-Modal Analysis

Hammer Impact, Animation & Modal Analysis



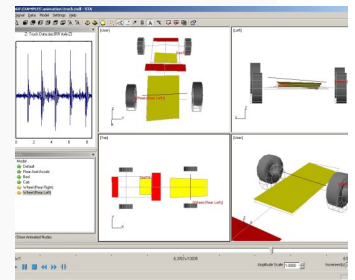
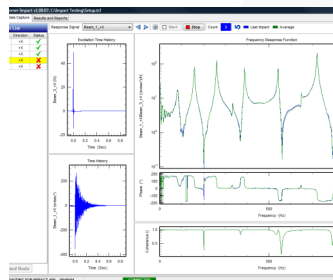
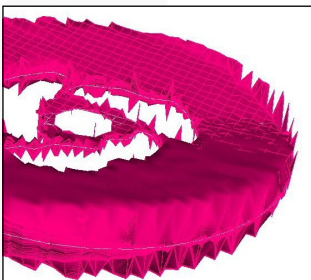
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- **Guided Workflow Measurement**
- **3D Model Editor**
- **Real-time Animation Playback**
- **Forced Response Forecasting**
- **Streamlined User Experience**
- **Extensive File Support**



DATS-Modal Analysis: Achieve Unmatched Accuracy and Efficiency with DATS Software Suite

Unlock the future of structural analysis with our streamlined DATS software suite. From precise measurements in Hammer Impact Analysis to insightful visualizations in Structural Animation, our integrated tools offer unparalleled accuracy and efficiency. Elevate your engineering capabilities and navigate complex challenges effortlessly—experience the next level in smart, reliable analysis today.



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DATS-Modal Analysis

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Hammer Impact, Animation & Modal Analysis

Hammer Impact Analysis Software

Unlock precise structural response measurements essential for tackling noise and vibration challenges. DATS Hammer software streamlines the user experience, offering comprehensive control over every aspect of the testing process.

Modal Analysis Software

Empower your analysis with the DATS Modal Analysis Suite, designed for professionals focused on identifying Modal Frequencies, Damping Factors, and Modal Amplitudes. The software is compatible with a wide range of data types, including frequency response functions, impulse response functions, and response-only data.

Advanced Identification Methods

Leverage cutting-edge identification methods like Half-Power, SDOF, MSDOF, MDOF, and ERA-DC for thorough modal mapping.

Visual and Synthesis Capabilities

Visualize and animate identified mode shapes through our DATS Structural Animation package. Moreover, the synthesis module allows you to regenerate Frequency Response Functions (FRF) based on the identified parameters, offering insights into

the accuracy of your modal model fitting. It even predicts forced responses through convolution of regenerated FRFs with simulated or known force inputs.

Structural Animation Software

Visualize Vibrations: How, When, Where

Explore your structural vibration patterns in an insightful way, using either frequency or time-based data.

Frequency Animation

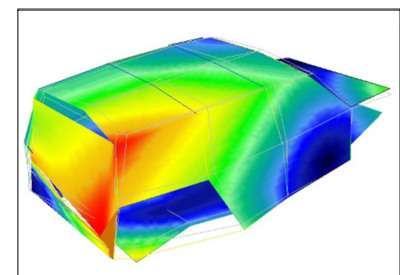
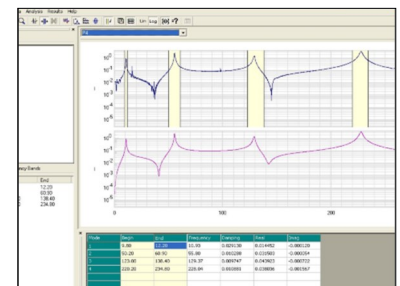
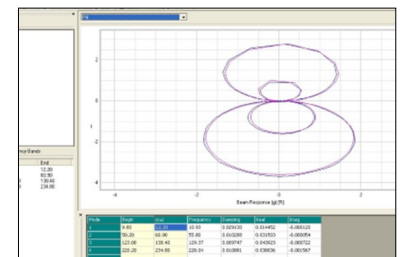
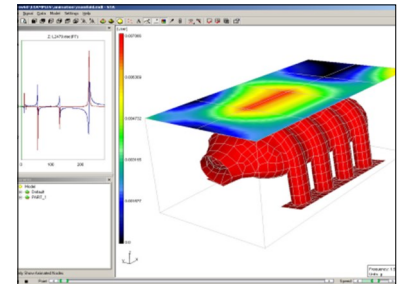
Utilize the power of FFT magnitudes and phases, Frequency Response Functions (FRFs), or cross-spectra at each measurement position to dissect motion at varying frequencies.

Time Animation

Implement time-based data to display the true position at each measurement point over a sequence of time steps.

Seamless 3D Modeling

Craft or modify your 3D models with the fully featured editor integrated into the Structural Animation software. For added flexibility, import existing models from NASTRAN, CSV, or Universal files.



Software Features

- Frequency Response Functions
- Structural Response Measurements
- Impact Quality Signal Checks
- Experimental Modal Analysis (EMA)
- Operational Modal Analysis (OMA)
- Modal Parameter Identification
- Alternative Curve Fitting Algorithms:
 - SDOF
 - MSDOF & MDOF (Frequency Domain)
 - ERA-DC (Time Domain)

- Stability Diagram
- FRF Synthesis from Modal Parameters
- Forced Response Prediction
- Animate v Frequency
- Animate v Time
- Full 3D Views
- Sophisticated Model Editor

Specifications may be subject to change without prior notice.

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