



Software Solution
Operational Modal Analysis



Software Solution - Operational Modal Analysis

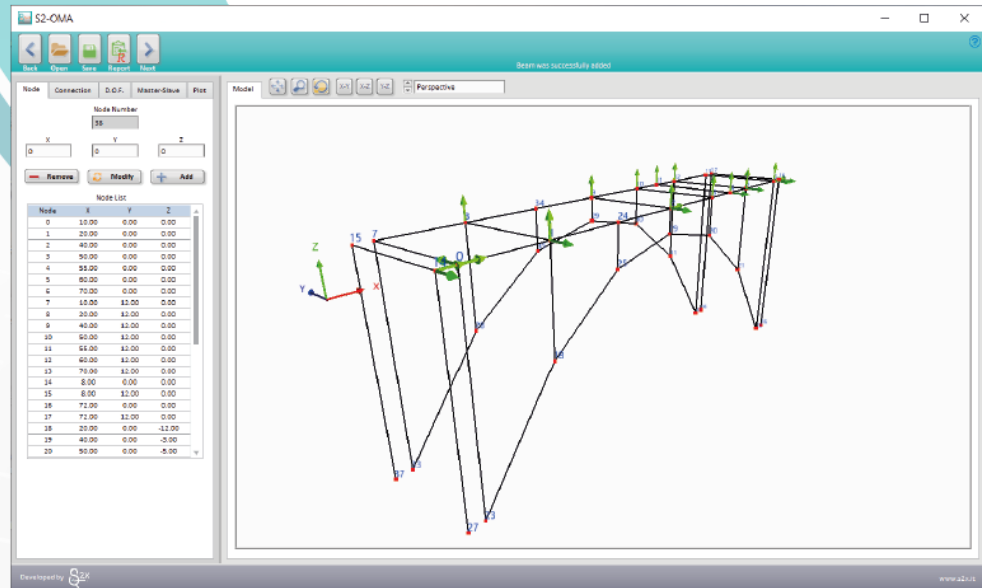
S2 - OMA has been developed for Operational Modal Analysis in the time as well as frequency domain.

User-friendly interface

An intuitive interface guides the user through the entire analysis process from input of data and geometry to test report.

Data formats

The most common file format (*.tdms, *.lvm, *.csv, *.txt) are supported to upload measurement data.



Operational Modal Analysis

State of the art procedures for Operational Modal Analysis in time as well as frequency domain are available for data processing.

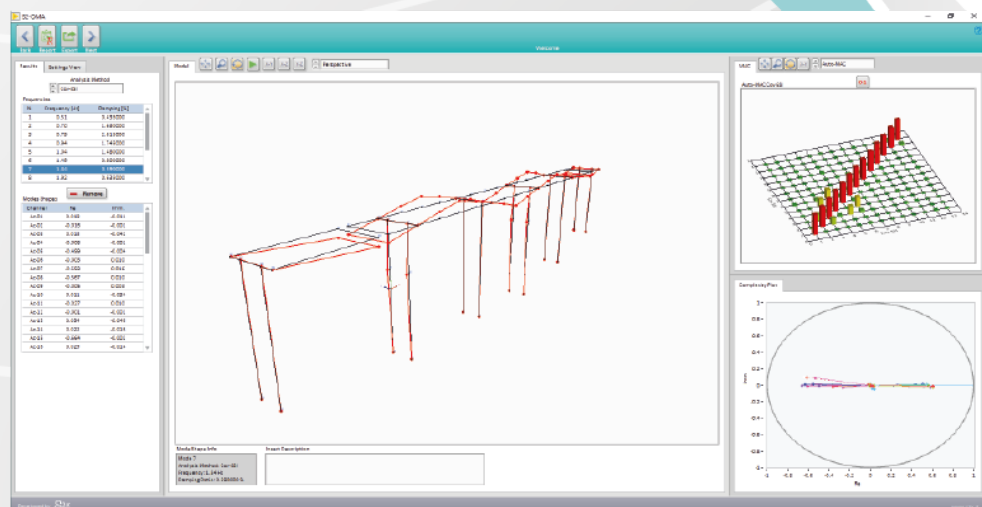
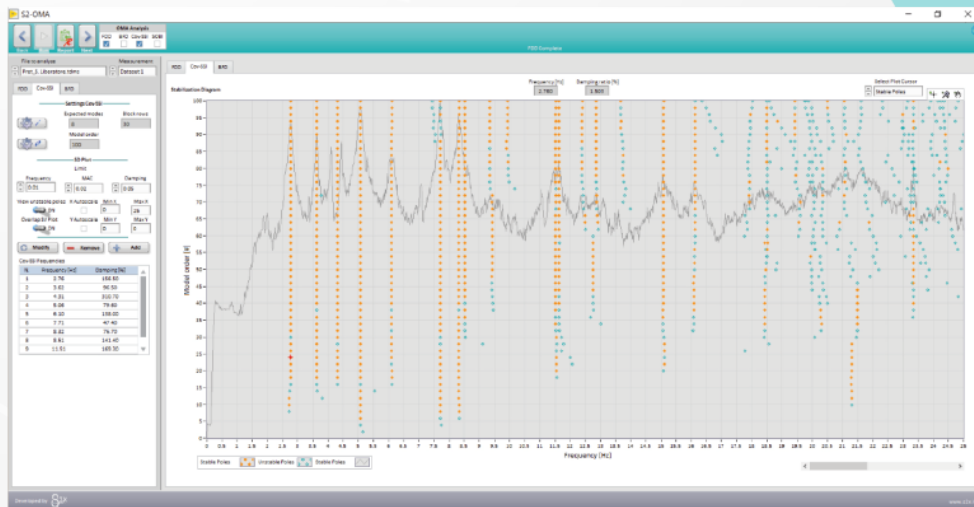
Visualization and validation tools

Animated mode shapes, MAC, AutoMAC, CrossMAC and Complexity Plot are available for visualization, validation and correlation of tests results.

Automatic report generation

The software can automatically generate a test report in editable format.

The report content is fully customizable by the user.



FEATURES	BASE	INTERMEDIATE	ADVANCED
File upload			
Data import from different file formats (.tdms, .txt, .csv, .lvm)	✓	✓	✓
Geometry			
3D model drawing	✓	✓	✓
3D model import	✓	✓	✓
Data treatment			
Plot time series	✓	✓	✓
Data statistics	✓	✓	✓
Decimation	✓	✓	✓
Data filtering	✓	✓	✓
Data Analysis			
Natural frequency estimation	✓	✓	✓
Damping ratio estimation	-	✓	✓
Mode shape estimation	✓	✓	✓
Non-parametric analysis in frequency domain	✓	✓	✓
Power Spectral Density Matrix	-	✓	✓
Coherence functions	-	✓	✓
Non-parametric analysis in time domain	-	✓	✓
Parametric analysis in time domain	-	-	✓
Support of multi-layout tests	-	-	✓
Validation			
Animated mode shapes	✓	✓	✓
User-selectable views of mode shape	✓	✓	✓
Complexity Plots	✓	✓	✓
AutoMAC	✓	✓	✓
CrossMAC	-	✓	✓
MAC with numerical mode shapes (FEM)	-	-	✓
Report			
Results exported in text format (.txt)	✓	✓	✓
Customize report with images and texts	-	-	✓
Report in editable (.docx) format	-	-	✓



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