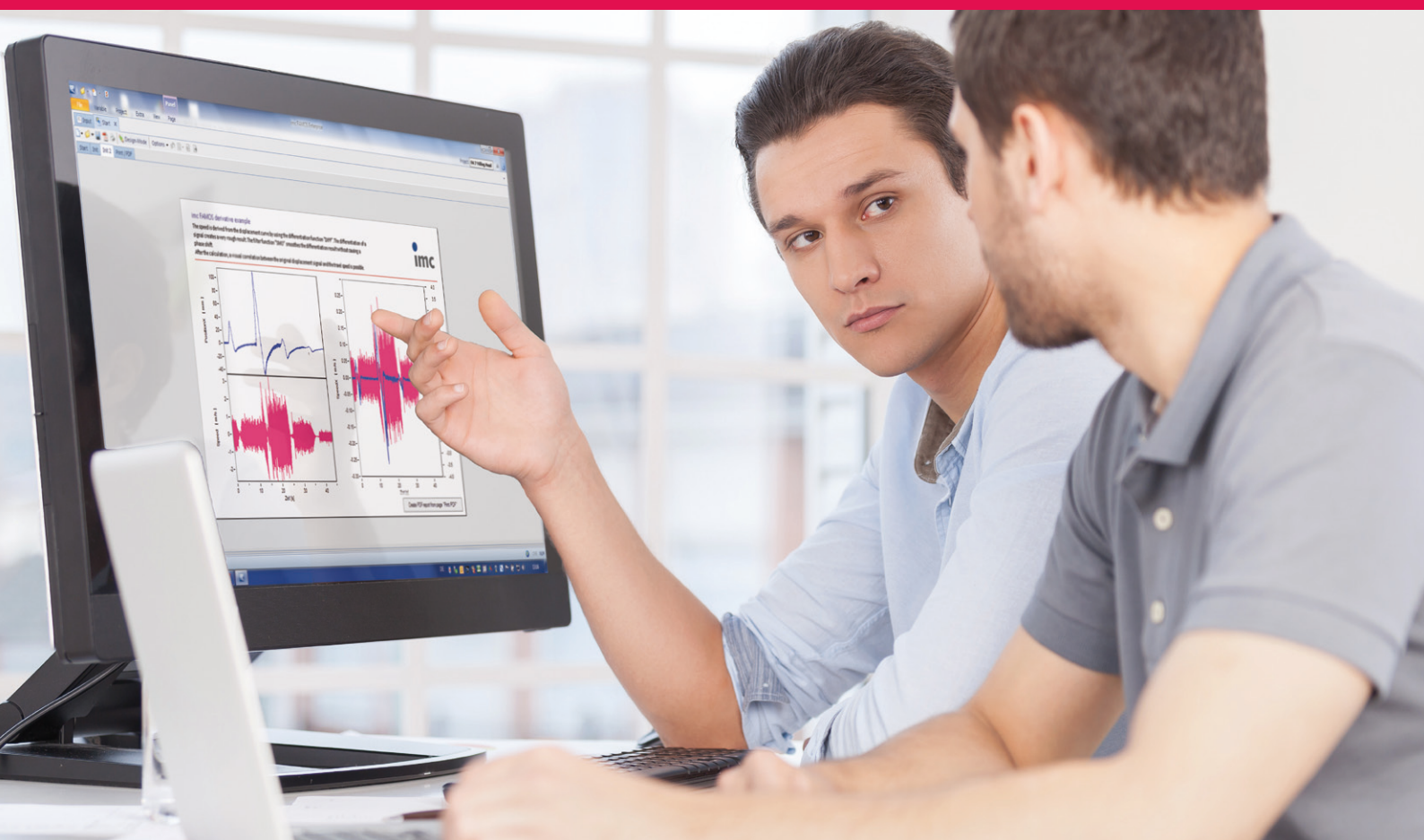


# imc FAMOS

visualization • signal analysis • test reporting



Comprehensive data analysis and documentation



### imc FAMOS at a glance

- Easy management of large data sets
- Simplify comprehensive data visualization
- Accelerate your data analysis
- Create professional test reports
- Automate work flows



# imc FAMOS ensures fast results

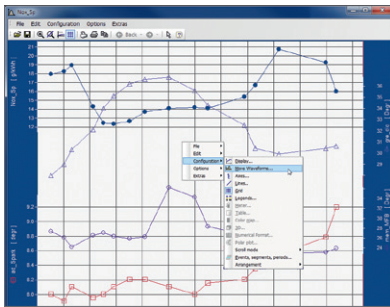
## Comprehensive data processing and signal analysis framework

You have data. You need answers. Fast. Regardless of where your data originates - test stand, bench top, or mobile measurements - imc FAMOS provides you with the versatile software tools necessary to visualize and analyze your data, automating routine and complex tasks - from data import to test report.

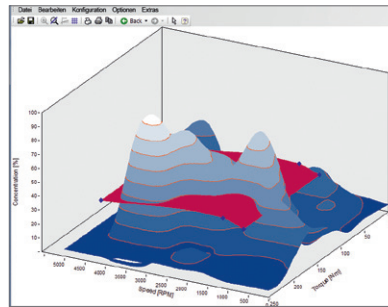
imc FAMOS is designed for your day to day analysis needs: it is the ideal tool for engineers constrained by the limited functionality of vendor supplied "viewer" software, seeking independence from outside programmers, or overwhelmed with data analysis and reporting in a spreadsheet or programming intensive environment.

The extensive capabilities and workflow oriented framework of imc FAMOS boosts your productivity by integrating:

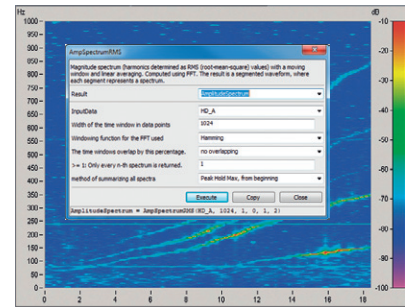
- Data source and file format management
- Multi-faceted visualization
- Comprehensive data analysis with function assistant
- Report creation
- Quick processing of large data sets: 64 bit technology
- Automated macro-supported work flow
- Project oriented work approach
- Synchronize measurement data with maps or videos



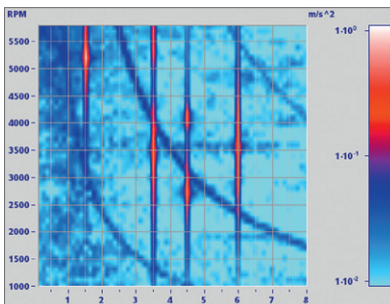
Time based and x-y data: zoom, scroll, markers, overlays, line styles



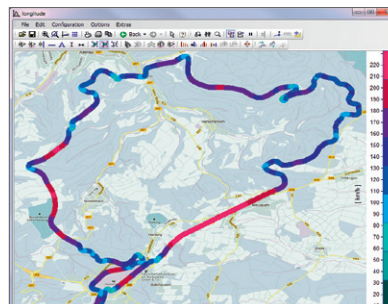
2D and 3D histograms, and surface maps from independent x, y, and z channels



Function assistant to guide users through the function parameters and options



Advanced algorithms: spectral analysis, fatigue classification, order tracking,...



GPS data x-y map overlay, with both line color and scrolling, linked to related time-based data



Synchronized playback of multiple videos, linked to time-based data channel displays



“Worldwide, imc FAMOS has helped people to understand their test data, extract useful information, and document test results in manufacturing industries from automotive development to wind power.”

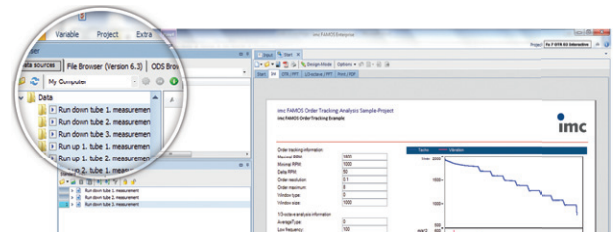
Stefan Hippe, Product Manager of imc FAMOS

## Complete data analysis workflow

### Data administration

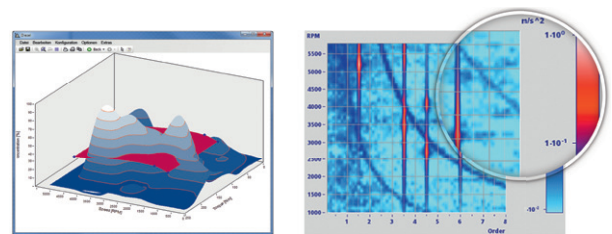
File Assistant easily scripts the interpretation and format interpretation conversion of data files; no more tedious data importing!

Data source administration ensures that the correct formats and options are applied, based on data file locations.



### Display data

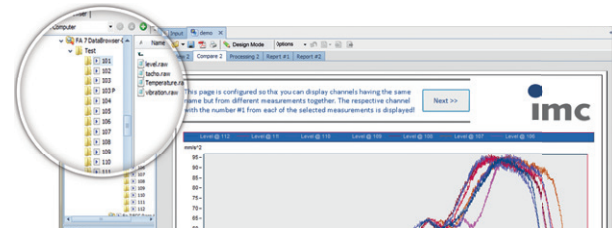
Seeing is believing: The intuitive Curve Window visualizes measurement data in imc FAMOS; there are many display types for your data, such as color maps, 3D and 2D histograms or waterfall charts - to name a few. Dialog driven configuration and toolbars for most common functions enhance your productivity.



### Viewing & comparing data

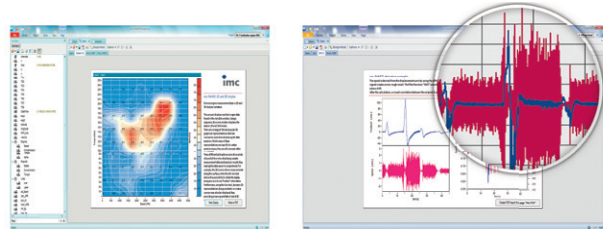
Can you imagine combining a test run oriented file browser, file importing, visualization curve windows, overlaying test data with reference curves, using sequences, and a report generator, all into one easy to use tool?

The solution is called imc FAMOS Data Browser.



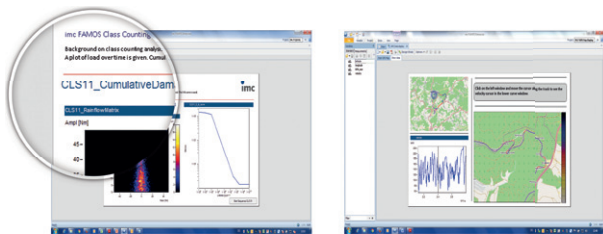
### Presentation with Panels

The Panel is not only used for multi-page display of data, it combines visualization, automated analysis and the creation of test reports. Typical displays are, for example, curve windows, tables or text boxes. You can also utilize active input elements such as functional buttons and text entry fields.



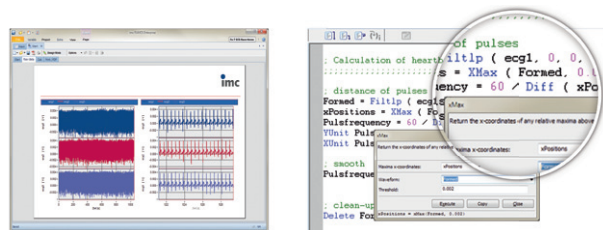
### Data analysis

Forget tedious programming or column-based spreadsheets - using the imc FAMOS formula assistant you can directly apply analysis functions on signals or even entire groups of signals. Everything in a single step - with impressive speed - even when it comes to large amounts of data.



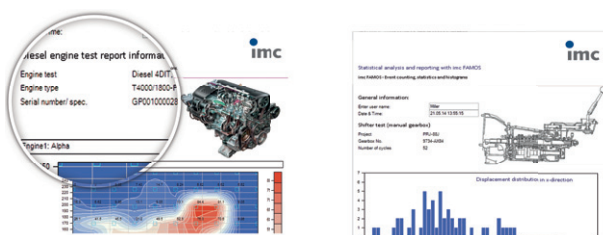
### Automatization & GUI

Increase your efficiency and automate routine tasks. While interactive analysis is great for getting a feel for your data, complex and repetitive tasks benefit from the straight forward sequences of imc FAMOS macro commands and intuitive operation of the dialog editor.



### Test reports & documentation

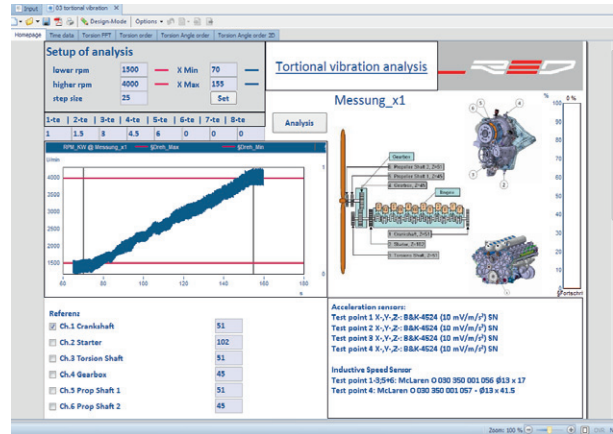
Cutting & pasting plots and tables can work for one-time test reports, but repetitive analysis benefits from the time savings of report templates and automatic updates, export and printing.



# In Practice

## Optimization of diesel engines

To optimize V12 diesel engines for the aviation industry, it is possible to reduce torsional vibrations to a minimum. Test engineers are able to acquire the periodic spiking, or high points, of the RPM from the gearbox, shafts and starter motor, and then, transmit this data to the signal analysis software imc FAMOS. From here, the time and angular ranges are calculated from the angular velocity and then examined as order lines. This allows an optimization of the firing order for reduction of torsional vibrations.



## Keeping things under control - vibration analysis

In order to safeguard the health of machinery users, hand-held power tools must comply with the EN ISO 5349-1/2 Standard. To ensure this, the project team performs tri-axial vibration measurements. Acceleration sensors are mounted near the hand, thus allowing the oscillations in all three orthogonal directions to be measured simultaneously. With the help of a weighting filter for hand-arm vibration, the frequency-weighted rms value is determined from the three channels, which are compared with the ISO 5349 information about risk of harm. The weighting filter is defined by imc FAMOS sequences.



## Current analysis of lightning strikes

A lightning strike has unbelievable potential. The Austrian Association for electrical engineering and the Austrian Power Grid AG investigate just how strong these forces are. Using a measurement device placed on the transmission tower on the summit of the Geisberg in Salzburg, the engineers receive around 60 strikes per year. For each measurement, up to around 1 GB of data must quickly and effectively be evaluated. For years, researchers have relied on the imc FAMOS signal analysis software, as it makes large datasets easy to handle. Via specially developed analysis sequences, each dataset can be progressively filtered, calculated, and analyzed step by step and provide subsequent visualizations of the results.






# imc FAMOS: Editions & Options


Four editions to fit your needs and budget

	Free Reader	Standard	Professional	Enterprise
Data Import	●	●	●	●
Curve Window	●	●	●	●
Report Generator	●	●	●	●
Data Browser	①	●	●	●
Data Analysis		●	●	●
Macro Editor		●	●	●
Dialog Editor		②	●	●
Data Export		●	●	●
Project / Pack & Go	①	②	●	●
Spectrum Analysis			●	●
Video	①		●	●
Class Counting				●
Order Tracking				●
ASAM ODS				●

● : Included; ① : imc FAMOS Reader edition includes only viewing functionality ② : Standard can open dialogs and projects, but cannot create or alter them. Note: Pack & Go projects create self-contained visualization and analysis environments for deployment to imc FAMOS Runtime, or higher users only.




**Free Reader**  
 "I need to open data files from multiple sources, visually review test data, create simple test reports."



**Professional**  
 "Visualization and analysis is necessary, but I also deploy stand alone analysis with GUIs for non-experts to use."



**Standard**  
 "Visualization is cool, but I also need analysis and manipulation, data export and scripting."



**Enterprise**  
 "Analysis tools for a range of physical testing, across an entire company, from power users to novices."

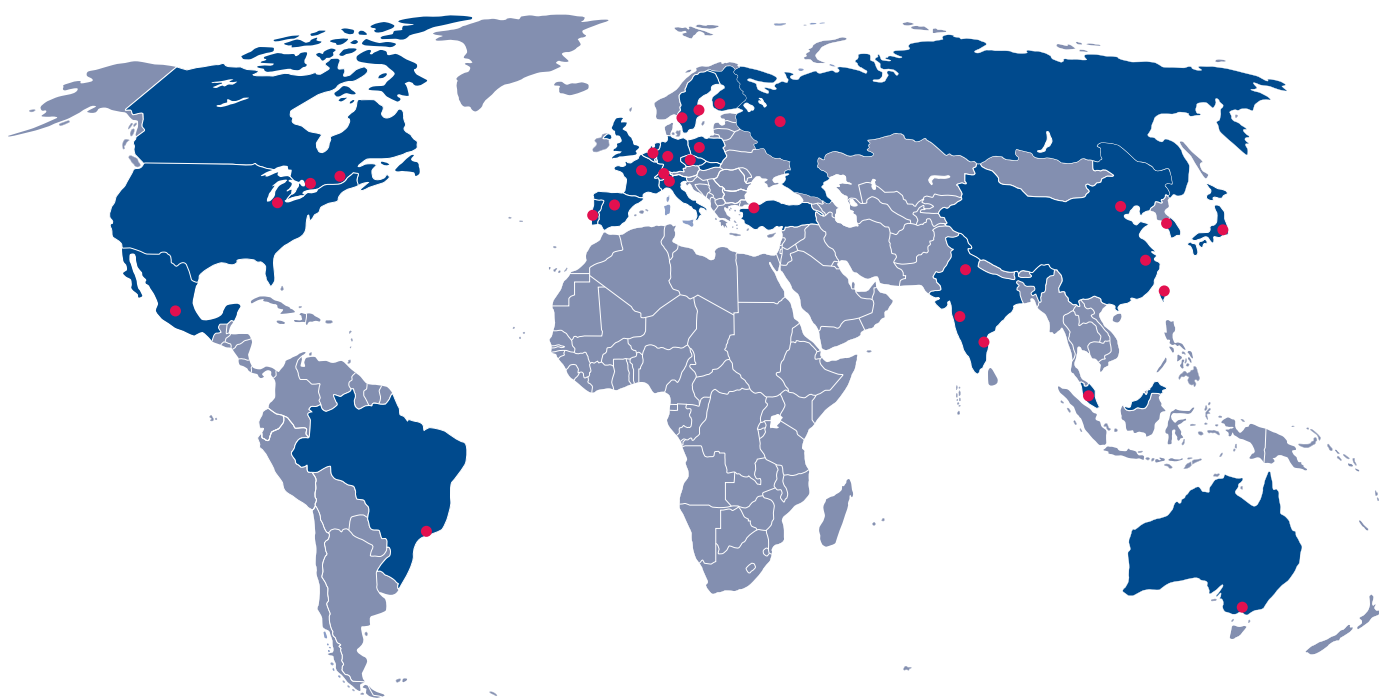
imc FAMOS licensing for your entire group*	
Single User	License is assigned to each user's PC
Dongle	Hardware key for easy license sharing
Network	Concurrent licenses for unlimited PCs sharing a pool of licenses via network
*quantity discounts available	

## Free demo: try it yourself

Experience the full power of imc FAMOS for yourself: 30-day free full Enterprise version available at [www.imcfamos.com](http://www.imcfamos.com)

## Benefit from our international partner network

[www.imc-berlin.com/our-partners](http://www.imc-berlin.com/our-partners)



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