

# DATS-NVH

## NVH / Refinement Measurement & Analysis



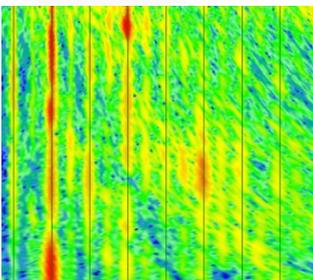
CMTG.COM

- Comprehensive NVH Testing Solution
- Advanced Tools for Rotating Machinery
- User-Friendly Experience
- Rugged and Mobile Hardware



## Discover DATS-NVH, the comprehensive tool for Noise, Vibration & Harshness (NVH) analysis

It's not just about reducing noise; it's about creating the right noise for automobiles, aircraft, and even household appliances. The DATS-NVH package paired with Prosig data capture hardware offers a complete toolkit for analyzing the sources of vibration and noise from motors, engines, gearboxes etc., with real-time displays. With DATS-NVH, you're crafting an enhanced auditory experience for your vehicle or product.



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## NVH/Refinement Measurement Analysis

### Introducing DATS-NVH: The Cutting-Edge Solution for NVH Testing

NVH Testing (Noise, Vibration & Harshness) is central to building successful products in today's competitive market. The DATS NVH Analysis Software takes NVH testing to a new level, providing the tools necessary not only to reduce noise but to create the right noise for various products, from automobiles and aircraft to white goods and other household appliances.

### NVH Testing for Rotating Machinery

The DATS-Rotating Machinery option presents a comprehensive set of tools for NVH testing, analyzing the sources of vibration and noise caused by cyclic forces in engines, gearboxes, and wheel excitation. The Prosig acquisition software comes with real-time displays for enhanced NVH testing of Rotating Machinery.

### Time Sampled Analysis & Waterfall Visualization for NVH Testing

Our Time Sampled analysis enables users to conduct classical Waterfall analysis, a vital part of NVH testing, to produce frequency spectra related to rotation speed. It includes tacho conditioning software and offers visualization for waterfalls and orders, along with band-pass filtering and envelope analysis for bearing analysis.

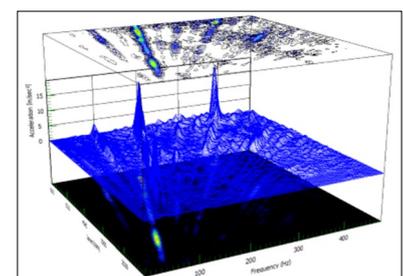
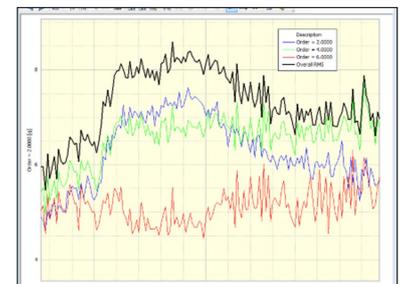
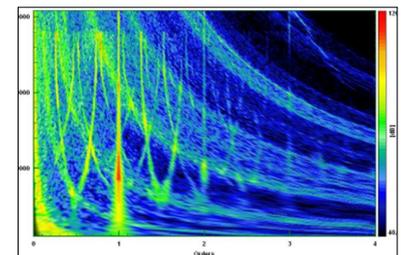
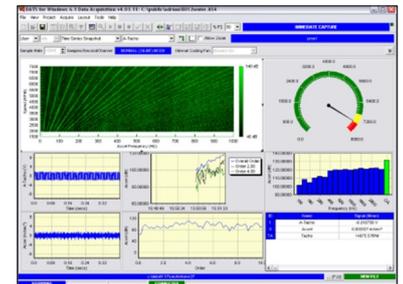
### Synchronous Analyses for Advanced NVH Testing

DATS-NVH offers various synchronous analyses for NVH testing, allowing data to be viewed in the order domain. Utilize a discrete Fourier transform (DFT) for order extraction, and resample data using the tacho as the synchronous marker for consistent cycle sampling.

### Why Choose DATS-NVH for Your NVH Testing Needs?

- **Fully Integrated Solution:** Streamline your NVH testing process with a solution that contains everything an engineer needs.
- **User-friendly Experience:** Simple to set up and use, focusing on the data, not the technology.
- **Rugged, Mobile Hardware:** Reliable and adaptable hardware ready for demanding conditions.

With DATS-NVH, NVH testing is not just about finding problems; it's about refining solutions. Experience precision, efficiency, and simplicity in one powerful NVH testing package, and take the driver's seat in the future of product refinement. Contact us today to learn more about how DATS-NVH can transform your NVH testing process.



#### Waterfall Analysis

Speed signal from tacho  
Waterfall from tacho signal with phase  
Waterfall from speed signal

#### Order Extraction

Frequency to order spectrum conversion  
Order cuts from waterfall

#### Averaging, Weighting & Octaves

A, B, C, D spectral & time domain weighting  
Spectrum averaging

Spectrum average & RMS in user-defined bandwidth  
Waterfall averaging  
1/nth octave band analysis

#### Sound Quality Metrics

AI Versus Time  
Loudness  
Zwicker Diffuse (ISO532B)  
Zwicker Free (ISO532B)  
Zwicker Diffuse (Vehicle Biased)  
Zwicker Free (Vehicle Biased)Stevens (ISO532A)

Loudness Versus Time  
Speech Articulation Index  
ANSI S3.5 1969  
Vehicle Biased  
Composite Rating Performance Value  
High Frequency Factor  
Preferred Speech Interference Level  
Spectral Balance

#### Misc

Nth Octave from Time  
Difference dB Signals

Specifications may be subject to change without prior notice.

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