



BTPA Services

Solutions for your acoustic and vibration needs.

BINAURAL TRANSFER PATH ANALYSIS

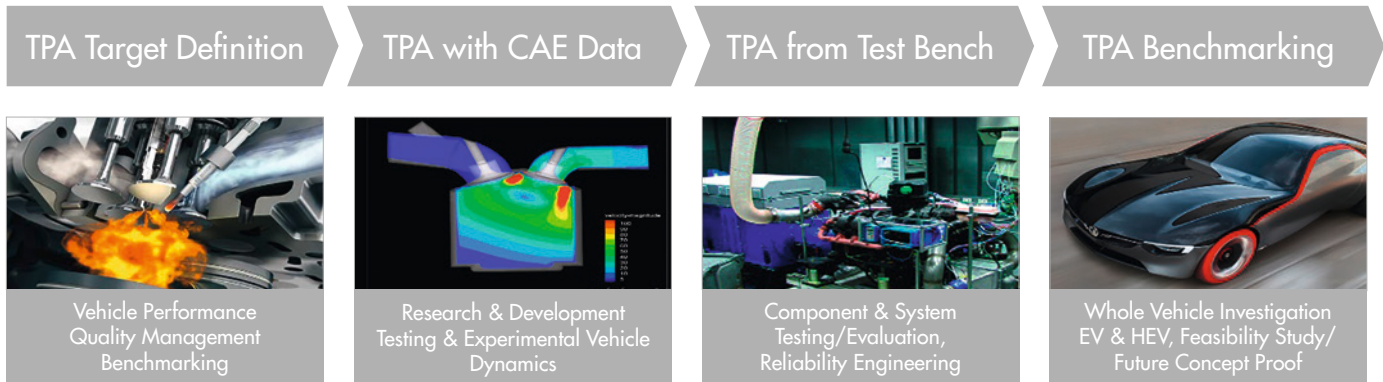
Time Domain Approach | Troubleshooting | Target Definition | Sound Design

- ✓ State of the art technology combined with industry leading expertise – get the most value.
- ✓ Regardless of the sound character – impulsive, transient, tonal, broadband, high or low-frequent, modulated – we'll help you focus on the essential root causes of your noise issue.
- ✓ Take advantage of our continuously growing knowledge base from research, science and industry. Make your processes leaner and focus on immediate improvements for your products.



A word cloud of various noise types, including: Ticking, Wind Noise, Booming, Whine, Door Noise, Chatter Noise, Roar, Rattle, Clunk Noise, Combustion Noise, Whistle, Squeak, Road Noise, and Inverter Noise.

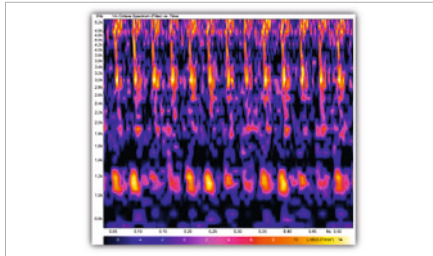
BTPA IN AUTOMOTIVE DEVELOPMENT PROCESS



The HEAD acoustics time-domain binaural TPA process represents a holistic development technology. The high versatility makes it possible to identify the essential parameters of any complex system. These findings can be used to derive problem-specific goals and take effective countermeasures.

BTPA WORKFLOW

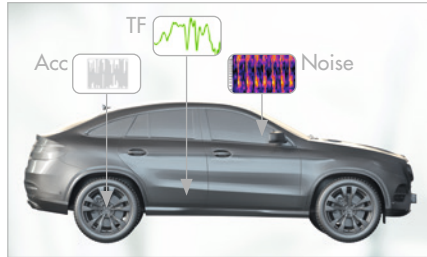
System Description | Root Cause Analysis | Optimization | Auralization



Consideration of your specific demands

Focus on your particular noise issue

State of the art measurement equipment

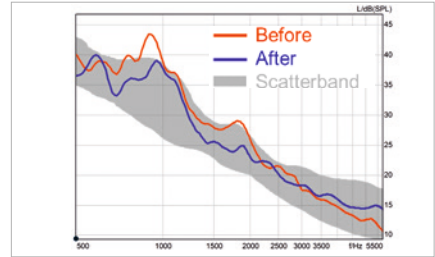


Individual modelling using PROGNO[ISE]

Advanced matrix inversion techniques

Identification of key factors

Validation and refinement based on our vast experience

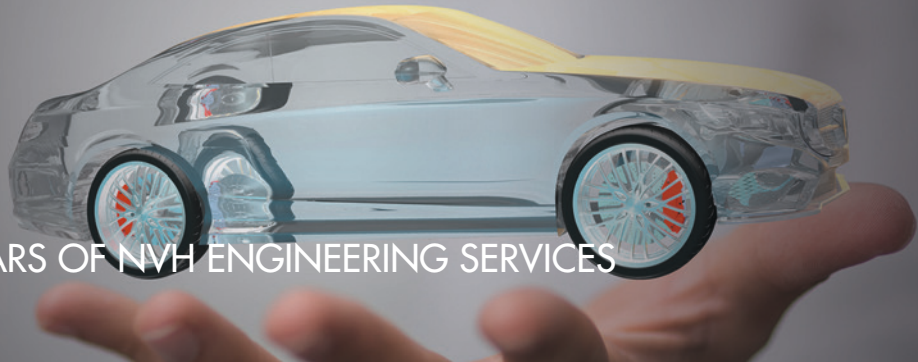


Uncover sound quality issues

Auralization at each step of the process

Derivation of optimization potential

High quality documentation and know-how transfer



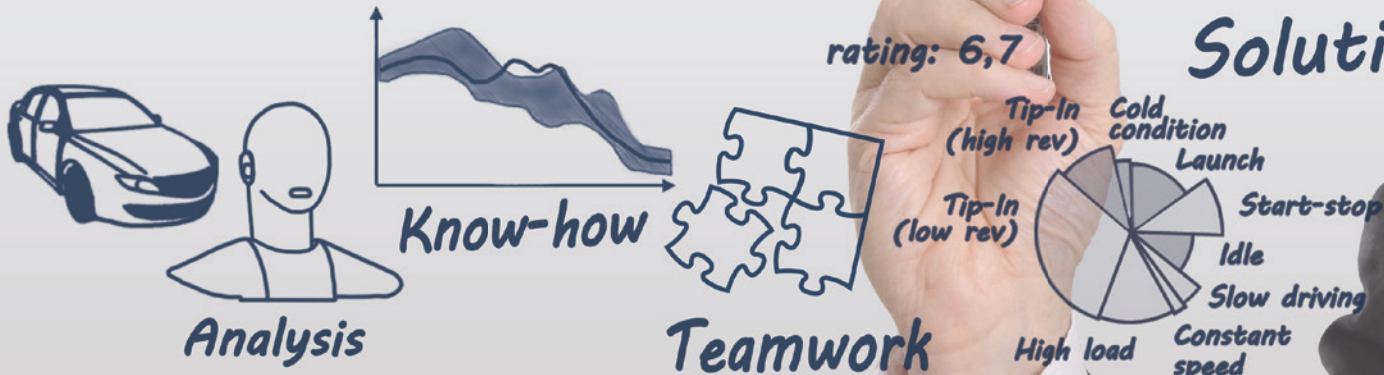
MORE THAN 30 YEARS OF NVH ENGINEERING SERVICES

For over 30 years, HEAD acoustics has been a leading company in the area of head-related recording and playback systems and aurally-accurate analysis of sound events. HEAD acoustics has always been a pioneer in developing innovative technologies, such as head-related stereophony, hearing-related analyses, interactive sound simulation systems and transfer path analysis.

Our experienced team of acoustic engineers, technicians and mechanics will accompany you in the entire optimization process of your product, from problem identification to problem solution.

Success

Solution



HEADacoustics

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The expertise of our specialists will support you throughout the entire development process. You will benefit from our long-term experience in the fields of acoustic measurement methodology and psychoacoustic analysis, and the acquisition of jury test data.