

Now standardized: HEAD acoustics develops new psychoacoustic analysis Tonicity (Hearing Model)

The NVH Research department of HEAD acoustics has developed a new algorithm: the psychoacoustic analysis Tonicity (Hearing Model). The new analysis, based on an improved hearing model by Prof. Dr. Roland Sottok is now part of the standard ECMA-74 15th edition (June 2018). Within the context of the standardization, the algorithm has been tested and evaluated by an international committee of experts.

From howling caused by an electric vehicle to a whistling sound of IT equipment, almost every acoustic engineer has to deal with disturbing tonal noise issues. If a product or a machine causes tonal noise components, it will have a negative impact on its perceived overall quality. The analysis Tonicity (Hearing Model) determines whether or not a sound contains prominent tonalities. If tonalities are present, the analysis will even determine their strengths. The outcome shows a better correlation to the by humans perceived tonality than other existing approaches.

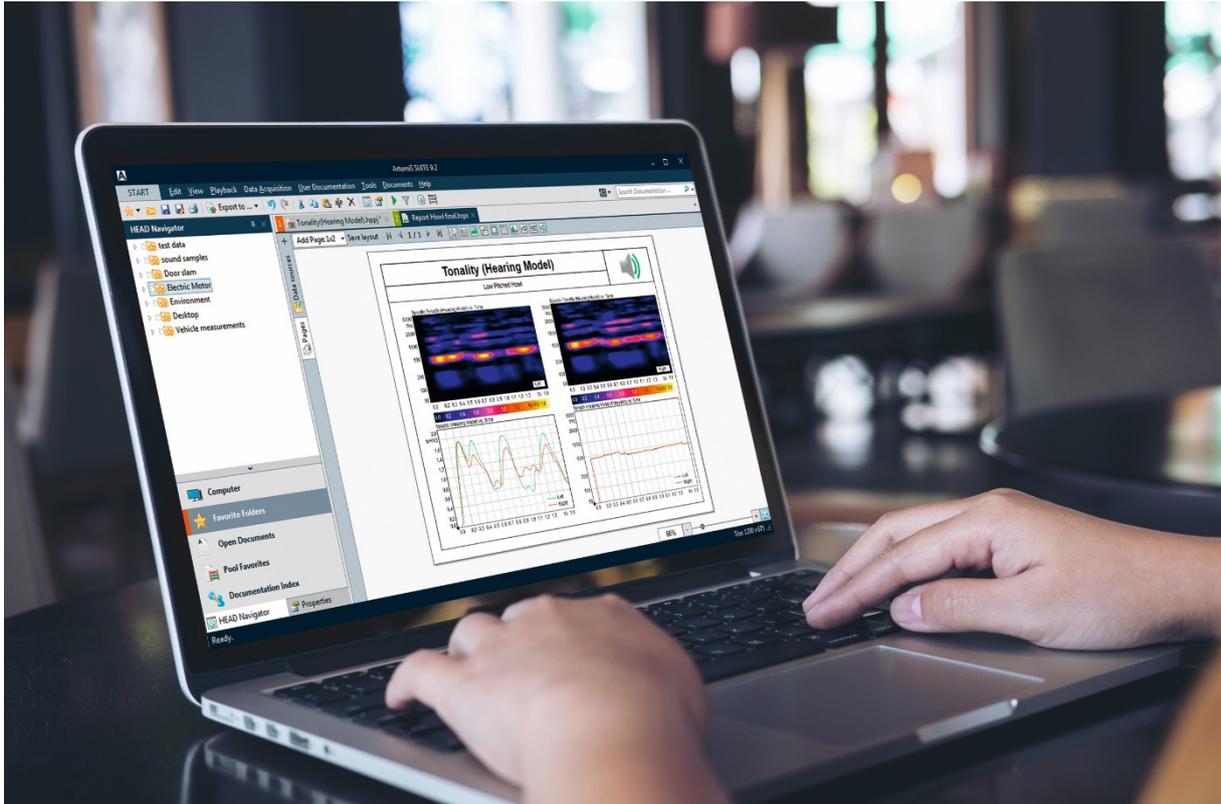
About HEAD acoustics

For decades, HEAD acoustics has been one of the world's leading suppliers of products and services in the fields of binaural recording and playback technology, sound and vibration analysis and communication measurement technology.

The company is internationally recognized for its expertise and leadership in the development of hardware and software for measurement and analysis to optimize noise, speech and audio quality.

Always at the cutting edge, we passionately develop high-tech solutions for data acquisition and analysis. For various acoustic requirements in vehicles, HEAD acoustics offers holistic solutions that take into account the aspects of human perception of sound and vibration events. The product portfolio includes integrated hard and software solutions as well as customer-specific solutions and services.

The medium-sized enterprise from Herzogenrath nearby Aachen has seven subsidiaries all over the world, located in France, Italy, Great Britain, China, Japan, South Korea and the USA.



ArtemiS SUITE: Psychoacoustic Analysis Tonality (Hearing Model)