

Future Mobility: Vibration Control Technology as Basis for In-Car-Infotainment

Comment for free editorial use by Dr. Jörg Böcking, CTO at Vibracoustic



At the beginning of September, the technology industry traditionally meets at the International Consumer Electronics Fair (IFA) in Berlin, the leading global trade fair for consumer electronics and home appliances. Thanks to trends such as connected cars, in-car infotainment, integration of mobile devices and apps, artificial intelligence and autonomous driving, more and more suppliers from the automotive industry attend the trade fair, presenting innovations and discussing visions for current and future mobility concepts.

Consumer-driven topics are also exciting for suppliers as technologies such as vibration control technology prepare the ground for the successful implementation of current and future mobility trends:

Take the example of in-car entertainment. More and more vehicles are equipped with entertainment systems for the passengers in the back seat. But the quality of the film or gaming experience does not only depend on the content but also on the vibrations of the vehicle. Movements are transferred to the front seat and thus also to the devices themselves, since these are usually integrated in the seat. The results are visual vibrations and a bad entertainment experience. This can lead to discomfort or even motion sickness among the passengers in the rear seat. This challenge will become even more important if autonomous driving becomes mass suitable. Specific, modular seat damper design concepts with rubber elements provide a remedy. These are inserted directly into the frame of the seat damper and thus replace the clamps to which it is normally attached. Vibrations, especially when the seat is not occupied, are thus reduced to an acceptable level.

Another example is the trend of artificial intelligence, and above all of language assistants, which now also find their way into vehicles and simplify and improve the driving experience. Using voice commands, users can read and write messages, operate the navigation system, answer or make calls, call up their favorite song and play it at the desired volume – all this might be part of everyday life in the future. But it is crucial that the integrated microphones understand the user – for this, vibration technology is necessary. It isolates and dampens disturbing noises and vibrations caused by the drive train or road unevenness. Engine mounts, for example, isolate the vibrations that occur when starting the vehicle and prevent boom noises and load change shocks while driving. Unwanted vibrations and oscillations of the drive do not even reach the driver and the microphones.

Comfort in the vehicle will become increasingly important for the mobility of the future and we are curious to see what the IFA will bring with it.

Vibracoustic is the leading supplier of anti-vibration solutions for the global automotive and commercial vehicle industries. The company generated sales of approximately 2.1 billion Euros in 2017. Vibracoustic has around 10,000 employees at 43 locations in 19 countries, who develop and produce powertrain and chassis components for automotive vibration control. For more information, see www.vibracoustic.com

Press contact:

Nicole Stück
Senior Manager Corporate Communications
Tel.: +49 6151 3964 212
Mobil: +49 174 1641 449
E-Mail: nicole.stueck@vibracoustic.com