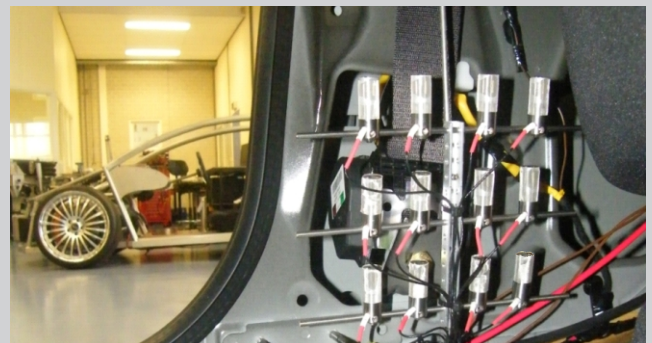


Seatbelt rolling mechanism transient noise mapping

Measurements of noise in real working and transient conditions becomes applicable when using a Microflown particle velocity sensor. Any sound field is described by two complementary acoustic properties, the scalar value 'sound pressure' and the vector value 'particle velocity'. In the near field, acoustic particle velocity is the dominant acoustic property. The near field effect states that there is a lot of particle velocity when sound is radiating from the surface and low sound pressure. With background noise and reflections coming in on the surface it is the opposite effect, the sound pressure of it is very high and the particle velocity is very low. Only the sound field from the component is measured using a single PU probe or an array of PU probes. The Microflown is the only sensor capable of really measuring the particle velocity directly. The probe can measure at full bandwidth with high dynamic range and high spatial resolution.



Application features

- ✓ Frequency range 20Hz - 20kHz;
- ✓ Measured acoustic particle velocity data ;
- ✓ No need for anechoic room or anechoic conditions;
- ✓ Visualization of transients;
- ✓ Sound field mapping of components in real working condition;
- ✓ Direct visualization of particle velocity, sound pressure and sound intensity.

