Objective:

Implement noise prevention for individual components or vehicles in accordance with OEM guidelines (e.g., BMW PR311, PR309 etc.), as part of product development.

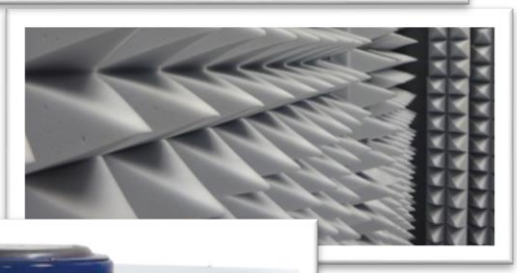
Implementation:

- Determine actual excitation profile by using mobile measurements, for example on cobbled roads
  - Müller BBM PAK/Siemens LMS
  - Structure-borne sound sensor technology
  - Subjective inventory

- Subjective or metrological analysis of new part, for example in accordance with PR311
  - Excitation by previously determined vibration profile
  - Low-noise shaker <27dB(A)
  - Hemi-anechoic space certified in accordance with ISO 26101 10.6 x 6.6 x 4 m (LxWxH) 50Hz lower cut-off frequency

- Component ageing, for example in accordance with PR309
  - Vibration testing in all 3 spatial directions (X/Y/Z)40 kN force vector900 x 900 mm clamping surface
  - With climatic overlay
    Chamber volume: 1700 litres
    Temperature range: -70 °C to 180 °C
    Humidity range: 10 % - 95 %
  - Climate change test, for example in accordance with PR303

- Subjective or metrological analysis of aged component, for example in accordance with PR311



Result:

- Summary of all detected noise sources
- Details and evaluation of noise in accordance with OEM specifications
- Analysis of noise sources
- Fast, immediate solutions
- Elaboration of long-term corrective measures
- Solution implementation support

Acoustic Testing

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