

Additive Manufacturing for Advanced Automotive Measurement Systems - Opportunities & Challenges

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AVL List GmbH (AVL) is the world's largest independent company for development, simulation and testing in the automotive industry, and in other sectors. As a global technology leader, AVL provides concepts, solutions and methodologies in the fields of e-mobility, ADAS and autonomous driving, vehicle integration, digitalization, virtualization, Big Data, and much more.

Since the foundation of the AVL Additive Manufacturing (AM) Initiative in 2017 several activities have been conducted successfully to integrate AM as a strategic technology. In this contribution an overview of AVL's AM achievements in the area of automotive instrumentation and test systems will be presented. After a general introduction, several metal-based AM-enabled use cases with advanced measurement/testing components in various fields (e.g. fuel cell and emission testing) will be discussed. Aside from novel AM-enabled research concepts, innovative (pre-)development components and the implementation of the in-house production of serial AM parts will be described. This will showcase the opportunities and challenges associated with AM to fully exploit its potential for automotive high-precision measurement and test solutions.

Speaker Country

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