

Development in (metal) 3D printing for next generation smart products

Johannes H. Schleifenbaum, RWTH Aachen University, Aachen, Germany

Additive Manufacturing, especially 3D metal printing is becoming more and more essential to manufacturing: it allows to create, quickly, fully functioning parts with high mechanical properties, and sometimes geometries that would be impossible to make with traditional manufacturing techniques. Consequently, most of the world's top companies have taken notice and are making ambitious moves to capture their share of its potentially huge value.

GE's fuel nozzle and the acquisition of two of the leading companies that specialize in metal-based AM technology are only one example. BMW, Google and many more are among the investors funding Silicon Valley & MIT startup's efforts to develop new polymer- and metal-based AM systems. Yet, there are still undiscovered secrets of AM in the context of material development, Industries 4.0 and especially design.

This presentation will share insight in the current status of Metal AM and the expected development within the above mentioned domains.