Type: Keynote - Highlight

## Digital transformation in fine blanking

Monday, 24 March 2025 16:20 (20 minutes)

Fine blanking is a manufacturing process combining forming and blanking operations to produce metal parts from coils with high dimensional accuracy, smooth edges, and minimal post-processing requirements. However, challenges such as unexpected tool wear and fluctuations in material properties can lead to unplanned machine downtimes, increased scrap production, costly finishing treatments, and expensive repairs or replacements of tool components. To address these issues effectively, it is essential to implement tool condition monitoring and non-destructive material testing as part of the digital transformation of the fine blanking process. This presentation will explore various data analysis techniques leading to the empowerment of manufacturers to proactively manage tool wear and material property variations through informed decision-making and adaptive process control, enhancing overall efficiency and product quality.

## **Speaker Country**

Germany

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**Primary author:** Mrs ORTJOHANN, Lucia (RWTH Aachen University, MTI – Manufacturing Technology Institute )

Presenter: Mrs ORTJOHANN, Lucia (RWTH Aachen University, MTI – Manufacturing Technology Institute

Session Classification: Fineblanking

Track Classification: Processing: Refurbishment of tool materials