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GENERAL MOTORS

TDO 4.0 - New Die Tryout Concept

Motivation

The try-out of sheet metal forming dies is the bottleneck of die manufacturing. Even today, it follows a trial-and-error strategy in which small changes are manually made into die's surfaces until flawless panels are obtained. Its complexity and lack of digitalized data impair the development of automated solutions for try-out. In process monitoring represents a key step to enable automated tryout systems

Objective

Development of online monitoring tools to diminish manual interventions during the try-out stage of sheet metal forming dies.

Approach

In-process monitoring of try-out key variables by means of die embedded sensors allows the development of smart die adjustment solutions

