

Tribology in Sheet Metal Forming with Regard to Challenges in Lightweight Construction

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Keywords: production process, sheet metal forming, tribology

Abstract. Today's sheet metal forming is affected by several trends concerning sheet metal material. The sheet metal forming industry is thereby influenced by the reinforced demand of drawn components made of high strength steels, aluminum or magnesium because of economical and ecological reasons. Besides shifted mechanical properties, changing the sheet metal material influences the entire tribological system and therefore raises questions concerning the suitability of the tool material as well as the lubrication.