

Application of Flash Processing to Plain Carbon Steel Sheet

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ABSTRACT

SFP Works LLC developed a novel process (aka. Flash Processing) for rapid heat treatment to produce high strength, high formability, low cost steels for automotive applications. Initial funding through the SBIR program has shown very promising results including several stamped parts and key collaborations with OEMs. The flash processing technology is still unrefined and not optimized. Here, an important step is to determine if commercial off the shelf low carbon steel can exhibit the same behavior as a more heavily alloyed steel. Effectively three alloy types were flash processed and characterized: AISI 101X, AISI 102X, AISI 1030. This project aims to address key questions about the uniformity of the product at a manufacturing scale, and de-risks the technology for private investment. The progress to date is discussed.