

News Release

FOR IMMEDIATE RELEASE

CONTACT: JENNIFER GREENFELDER

Cell: 586.823.7145 / Office: 248.945.4767

jgreenfelder@steel.org

AUTO/STEEL PARTNERSHIP ANNOUNCES HEMMING OF THIN GAUGE ADVANCED HIGH-STRENGTH STEEL CAN ACHIEVE MORE THAN 30 PERCENT WEIGHT SAVINGS

Project enables AHSS technologies at higher-than-expected-results

LIVONIA, Mich., May 11, 2016 – In an effort to assist automakers in meeting stringent fuel economy requirements, the Auto/Steel Partnership (A/SP) announced today the Hemming of Thin Gauge Advanced High-Strength Steel (AHSS) project achieved a 30 percent weight savings using thinner gage AHSS for automotive closure panels.

"The Hemming team achieved positive results with significant weight savings and great formability, resulting in a quality hemmed panel," said Terry Cullum, director, A/SP. "The goal of each A/SP project enables the use of AHSS in automotive applications, and this team demonstrated AHSS sheet can be successfully modeled and manufactured into hemmed assemblies for automotive closures."

The project demonstrated thin gauge AHSS can be successfully hemmed into automotive closure assemblies; computer-aided engineering tools can be developed accurately, predicting results of hemming operations involving thin gauge AHSS; and post-hemming baking operations do not adversely affect hemmed thin gauge AHSS assemblies.

"This study allowed the project team to look beyond the boundaries of conventional steel and hem AHSS at a more than 30 percent thinner gauge," said Giovanni Costa, project lead for the A/SP Hemming of Thin Gauge AHSS team and corporate hemming specialist at FCA US LLC. "We took hemming to new limits and proved it with results. Thinner gage AHSS, real-world closure shapes, extremely tight breakline radii, and weight reduction in outer closures make this a winning project."

PAGE TWO / A/SP ANNOUNCES HEMMING OF THIN GAUGE AHSS CAN ACHIEVE MORE THAN 30 PERCENT WEIGHT SAVINGS

AutoForm Engineering USA, a software solutions company for the die-making and sheet metal forming industries and a vendor for the team, presented its results from the project at the Steel Market Development Institute's Great Designs in Steel (GDIS) seminar today. The team also showcased the test samples in the Steel Showcase exhibit at the event.

For the Hemming of Thin Gauge AHSS final report, video and images, please click here.

Formed in 1987, the Auto/Steel Partnership is a consortium of North American automotive companies and the Steel Market Development Institute's Automotive Applications Council. The Partnership leverages the resources of the automotive and sheet-steel industries to pursue research, validation and education that have helped automakers enhance vehicle safety and fuel economy and improve design and manufacturing.

Through the Auto/Steel Partnership, automakers and steel companies have worked to drive improvements through projects focused on new steels, manufacturing processes and design challenges, including mass reduction with steel. Auto/Steel Partnership members include <u>AK Steel Corporation</u>, <u>ArcelorMittal</u>, <u>FCA US LLC</u>, <u>Ford Motor Co.</u>, <u>General Motors Co.</u> and <u>Nucor Corporation</u>. For more information, visit <u>www.a-sp.org</u>.