

Advanced Laser Applications Conference

(ALAC 2014 Automotive)

Papers and Presentations

Proceedings Volume 25

**Dearborn, Michigan, USA
29 – 30 October 2014**

Editors:

M. Nasim Uddin

Rafiq Uddin

ISBN: 978-1-63439-920-3

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2014) by Global Automotive Management Council (GAMC)
All rights reserved.

Printed by Curran Associates, Inc. (2015)

For permission requests, please contact Global Automotive Management Council (GAMC)
at the address below.

Global Automotive Management Council (GAMC)
5305 Plymouth Road
Ann Arbor, Michigan 48105

Phone: (734) 418-2365
Fax: (734) 418-2356

info@gamcinc.com

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Smart Laser Welding and Monitoring of Sheet Materials	1
<i>J. Boillot, R. Simoneau, J. Fontaine, J. Gaboury, S. Latour</i>	
BlankLight™ Aluminum Laser Welded Blanks	16
<i>S. Fetsko</i>	
Evaluating Laser Blanking for Your Manufacturing Needs	34
<i>J. Finn</i>	
A New Simulation Model to Assess the Crash Ductility of Hot Stamped Laser Welded Blanks	46
<i>S. Gaied, I. Viaux, Q. Yin</i>	
Trends of Laser Applications in Hot Stamping	54
<i>F. Geyer</i>	
Laser Joining of Aluminum Fundamentals and Automotive Applications	60
<i>D. Havrilla</i>	
Joining Solutions for High Volume Production of Al Tailor-Welded Blanks	76
<i>Y. Hovanski, G. Grant, B. Carlson, J. Carsley, S. Hartfield-Wunsch, M. Eisenmenger, T. Luzanski</i>	
Coil-fed Laser Blanking Technology	86
<i>M. Hunger</i>	
Solutions to Laser Weld AlSi Coated Steel by Soutec	90
<i>D. Iacovelli</i>	
Smart Laser Welding and Monitoring	105
<i>J. Noruk</i>	
Author Index	