



Purchase Tickets online at:
<http://www.midmichigansae.org>

Mid-Michigan SAE Dinner and Program
Thursday, October 6, 2016
6:00 PM Social Hour, 7:00 Dinner, 8:00 Program
Zehnder's of Frankenmuth
Frankenmuth, Michigan
Students\$20, Retirees/Spouse\$30,
Member/Spouse\$35, non-members, \$40

ACRA Cast Inc, Investment Casting Process, Design & Application

Presented by **Richard Singer**



Award winning cast football face guard

Richard Singer IV, Owner and President of Acra Cast, Inc in Bay City MI will be presenting an overview of the Acra Cast facility/products/processes. He will be giving a detailed presentation about the investment casting process, design and application.

Mr. Singer has 25 years of experience working in the foundry industry. His background includes jobs in production, engineering, sales, purchasing and management in such companies as Cadmet Corporation, Barron Cast and Johnson Controls.

He also has 30 years of experience in the US Army and the Michigan Army National Guard. He reached the rank of Colonel and had top secret clearance. He received 15 decorations and awards during his service to his country.



Reservations required by Noon Tuesday, October 4 , 2016
Contact: Bernard Santavy at SAEMidMichSec@cs.com or (810)-635-7948
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Joint Society event AFS-ASM-SAE

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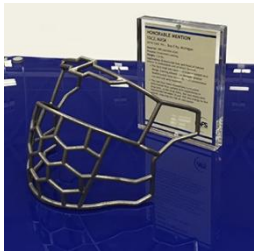
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Please join us for a joint engineering society dinner meeting with presentation hosted by
The American Foundry Society, Saginaw Valley Chapter – AFS
at Zehnder's of Frankenmuth in the Town Hall Room (downstairs).

The meal served: Family Style Chicken (broiled & fried) with Livers Dinner.

Richard Singer IV, Owner and President of Acra Cast, Inc in Bay City MI will be giving an overview of the Acra Cast facility. His presentation will be a detailed presentation about the investment casting process, design, and application.

Do not miss this presentation if in your job you specify, release, or buy investment cast parts or components. Would you believe football helmets utilize investment castings?



HONORABLE MENTION by Modern Casting Design & Purchasing

FACE MASK

Material: 309 Stainless Steel.

Process: Investment Casting.

Weight: 1.2 lb.

Application: Protects the face and head of helmet wearer in professional and amateur football.

- The face mask was converted from a welded wire design. Casting allowed the designer greater flexibility and more creativity than conventional cut wire and welded methods.
- The cast face mask showed less permanent deformation than welded wire equivalents in drop tests. In the drop tests, the cast masks also transmitted between 25 and 35% less energy to the wearer, reducing the risk of concussion.