**MN Chapter ASM** will host its monthly meeting jointly with ASME on Wednesday, November 13th at the Green Mill Best Western in Plymouth, Minnesota. Our guest presenter, David W. Hoel, AFW, will discuss Rotary Friction Welding technology.

**About the Meeting**...American Friction Welding (AFW) specializes in joining dissimilar metals, creating near-net shapes, and full strength penetration weld bonding. The process produces bonds of equal or greater strength than parent material. At the same time, it is an efficient means to save material and machine time.

The largest full-service friction welding shop in North America, AFW is an ISO 9001:2008 Certified subcontract fabricator. AFW combines friction welding services with CNC capabilities for finished-to-print production. With a wide range of friction welding equipment, the company accommodates industries with differing application and volume needs. Work at AFW ranges from prototypes to limited lot size production orders to large production runs. Several Original Equipment Manufacturers (OEM)s are served with fully automated cells running thousands of parts per month.

This presentation will provide an overview of Friction Welding technology and use case studies of popular project types to illustrate areas of feasibility for using this process in your work. Topics will include:

- The Friction Welding Process
- When and Why to Choose Friction Welding
- Welding Dissimilar Materials (bi-metal components)

Guidance on what does and does not work will be discussed along with unexpected properties generated by friction welding. Photos, video, and sample parts will be shared. Come prepared for a Question and Answer session to follow the presentation.
HOW TO REGISTER:
Register online at http://mnasm.org. This month’s registration deadline is Friday, Nov 8th at 4:00pm.

MEETING COST:
- $30 Non-members
- $25 Members & Sustaining Companies
- $5 Full Time Students

SCHEDULE:
5:00-6:15 Social (Cash Bar) in Bar
6:15-7:00 Dinner
7:00-8:00 Presentation

PLEASE NOTE:
A registration deadline is necessary for group banquet reservations. Because of our catering agreement, if you have made your reservation by the deadline and are unable to attend, we must invoice you for your dinner because we are charged for it. If you make your reservation after the deadline, ASM will contact the caterer and try to accommodate your added reservation but a dinner is not guaranteed. However, you are always welcome to attend the presentation at 7:00 p.m.

PAYMENT:
Credit card payment online at http://mnasm.org. Payment is due at check-in. Make checks payable to “MN Chapter ASM.”

LOCATION:
The Green Mill is located northwest of the Twin Cities at the southeast intersection of Highway 55 and 494 in an industrial park area, south on Xenium and west on 26th Ave. N.

Green Mill Restaurant
2705 Annapolis Lane N
Plymouth, MN 55441
(763) 553-9000
2013-2014 MN Chapter Program Schedule

<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>Topic</th>
<th>Speaker</th>
<th>Meeting Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday September 18th</td>
<td>TOUR of Pace Industries</td>
<td>Pace Staff</td>
<td>Pace Industries St. Paul, MN</td>
</tr>
<tr>
<td>Wednesday October 16th</td>
<td>Student - Industry Networking Event</td>
<td>Professor Mykoyan University of Minnesota</td>
<td>U of M Minneapolis, MN</td>
</tr>
<tr>
<td>Wednesday November 13th</td>
<td>“Rotary Friction Welding” (Joint ASME)</td>
<td>David Hoel American Friction Welding</td>
<td>Green Mill Plymouth, MN</td>
</tr>
<tr>
<td>Wednesday December 4th</td>
<td>Transportation Materials Holiday Party</td>
<td>Kevin Western MNDOT</td>
<td>Green Mill Plymouth, MN</td>
</tr>
<tr>
<td>Wednesday January 15th</td>
<td>“Patent Law Changes”</td>
<td>Rakhi Nikhanj Pauly Devries Smith &amp; Deffner</td>
<td>Green Mill Plymouth, MN</td>
</tr>
<tr>
<td>Thursday March 27</td>
<td>Annual MinnTS (Technical Symposium)</td>
<td>TBD</td>
<td>Medtronic Headquarters Fridley, MN</td>
</tr>
<tr>
<td>Wednesday April 16th</td>
<td>Past Chair Night / Scholarships / Awards</td>
<td>ASM Trustee</td>
<td>Green Mill Plymouth, MN</td>
</tr>
<tr>
<td>Tuesday May 13th</td>
<td>“Austempering Process” (Joint AFS)</td>
<td>Dr. Kathy Hayrynen AP Westshore</td>
<td>Green Mill Shoreview MN</td>
</tr>
</tbody>
</table>

About the Presenter...Our guest presenter, David W. Hoel...
- has spent his career in technical business-to-business (B2B) sales.
- believes that “good selling is built on solving problems” and offers a clear communication channel between client technical teams and their counterparts at AFW.
- His team building approach has been key to developing solutions throughout a variety of manufacturing industries.

In his work at American Friction Welding, it became apparent to him that providing education about friction welding to customers is a vital element of support. Although AFW does not offer an engineering design service, the company does advise engineers and designers to help them understand friction welding, so that they can integrate it into their manufacturing or production processes.