Technical Societies Council Joint Meeting
Wednesday – March 18, 2015

Speaker: Ron Brown, Technology Leader
Buffalo Manufacturing Works

“The Collaborative Human-Robot Team, The New Work Force”
Competitive pressures drive industry to continuously innovate and develop new products and processes. Today, more than ever before, companies are integrating robots to help meet these challenges. Robot manufactures are relentlessly developing new robotic capabilities to meet the demand for innovation.

“The Collaborative Human-Robot” is one of the new class of robots that is just now coming out of the laboratory onto the factory floor. Until now robots required costly safety guarding to protect humans. The collaborative robot has no safety guarding but rather new technology to make it safe for humans to be in the same proximity as the robot. This allows humans to work alongside the robot as a team. In this team the robot would be assigned tasks that are tiresome or repetitive while the human would concentrate on tasks that require dexterity or ingenuity.

We will explore some of these new safety technologies and some of the current and potential applications of the Collaborative Human-Robot Team.

Location: Salvatore’s Italian gardens
6461 Transit Road, Depew, NY
Time: Social Hour Starts at 5:30 (Cash Bar)
   Dinner 6:30 p.m.
   Presentation will follow dinner
Dinner Choices: Chicken Parmigiana /Penene ala Roma/Poached Salmon/Prime Rib
Cost: Members/Guests $30.00
         Students $10.00
Reservations: Stan Biernat, sbiernat@moog.com, 716-805-2285
   Please make reservations (with dinner choice)
   by Monday – March 16, 2015
Ron Brown
Technology Leader, Flexible Automation & Controls

INDUSTRY FOCUS
Throughout his 39-year career in systems engineering, product engineering, and research and development, Ron Brown has played a significant role in a variety of successful industry initiatives. As EWI’s Technology Leader of Flexible Automation and Controls, he focuses on delivering effective and innovative solutions for his clients’ manufacturing automation challenges. His deep understanding of automation technologies is based upon his involvement and leadership in the engineering and integration of assembly and manufacturing automated systems for American automobile and consumer product manufactures.

TECHNICAL EXPERTISE AND PROJECT EXPERIENCE
Ron has extensive experience leading cross-functional teams with comprehensive responsibility for product concept, planning, cost, manufacturing, testing/validation, commercialization, and launch. Prior to his role as Technology Leader he served as EWI’s Business Development Manager for Automotive and Advanced Energy. Before joining EWI, he owned a consulting firm that specialized in engineering and product design for weld monitor products. Ron gained broad managerial experience earlier in his career through positions as VP of Engineering and General Manager for a manufacturer of weld process-monitoring systems, and as VP of Engineering, Research and Development for an automated systems original equipment manufacturer serving Fortune 500 companies.

EDUCATION
A.S.M.E. Mechanical Engineering, Keene State College
B.S. I. E. Industrial Education, Keene State College

PATENTS
U.S. Patent 6,359,249, “No-Wat Welding System”

CONTACT
Ron Brown is based in Buffalo at EWI New York. You can reach him at rbrown@ewi.org.
Chapter Update

At our February meeting Director Stan Biernat presented a gift to Tim Gelnett in recognition of his 3 years service as ASM-Buffalo Chairman. "Thanks Tim for your Service and Leadership!!"

The February meeting was well attended and featured speakers Nick Moroz and Pedro Guillen from Detroit Material. They spoke on the properties and applications of Bainitic Steels, a project they have been working on for several years. With Bainitic Steels the material chemistry and manufacturing process creates steel with higher strength allowing for smaller part design, and an average 40% lower material cost.

These materials provide cost and performance advantages over current higher alloyed materials. The EPA has introduced initiatives to reduce emissions by reducing the vehicles weigh. This makes the semi trucking industry an ideal market to introduce these products. As the weight of the vehicle increases, so does the fuel consumption. Most truck components are currently made of heavier materials. Every 10% drop in truck weight reduces fuel use by between 5 and 10 percent. Choosing lighter-weight tractor and trailer components can reduce a trucks weight by thousands of pounds. Reducing 3,000 pounds from a heavy truck could save 240 gallons of fuel each year. As a result, this would eliminate 2 metric tons of greenhouse gas emissions annually/truck. Bainitic Steels offer an opportunity to achieve vehicle weight reductions with lower cost materials.

The presentation was very interesting and it was great to hear of the new advancements for the low alloy steel casting industry.

On Wednesday March 18th, we will hold a joint meeting with TSC (Technical Societies Counsel). The Speaker will be Ron Brown from the Buffalo Manufacturing Works. The presentation will be titled “The Collaborative Human-Robot Team, The New Integrated Work Force”. Buffalo Manufacturing Works, previously known as the Buffalo Niagara Institute for Advanced Manufacturing Competitiveness, began as part of New York State Governor Andrew M. Cuomo’s Buffalo Billion Investment Development Plan. The groundbreaking Buffalo Billion initiative provided Buffalo Manufacturing Works with an investment of $45 million toward facility, equipment and staff. Ron Brown is the Technology Leader of Flexible Manufacturing and focuses on delivering effective and innovative solutions for his clients’ manufacturing automation challenges. For more information, please visit: BuffaloManufacturingWorks.com. This will be a informative and well attended event.

If you are unable to attend, please post the newsletter and encourage your colleagues to attend. Non-members are always welcome to attend.

Tom Herdlein - Chairman

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**Buffalo Chapter Officers and Directors**

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Niagara Specialty Metals

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Robert Shabala, President bob@nsm-ny.com
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2014 – 2015 PROGRAM

Below are the upcoming meetings tentatively planned for the upcoming program year.

September 16, 2014:
Plant Tour: ATI Specialty Metals

October 2014: TBA

November 2014:
Vendor’s Night- Talk: Refractory Metals – Britt Konczyk from HC Starck

December 2014: TBA

January 2015: TBA

February 2015: Detroit Materials

March 2015: TSC Joint Meeting – Buffalo Manufacturing Works

April 2015: Student Night

May 2015: Golf Outing

If you have an idea for a meeting or event please contact a Buffalo Chapter Officer or Director. All ideas are welcome!!!