



# Milwaukee Section Newsletter

April 2011

[www.milwaukeeesae.com](http://www.milwaukeeesae.com)



## Kenosha, WI - Thursday April 14th, 2011

**TOUR THE SNAP-ON MUSEUM & TECHNICAL PRESENTATIONS ON**

**POWER TOOLS • HAND TOOLS • DIAGNOSTICS • TOOL CONTROL**

### About Snap-on Innovation Works

Snap-on's Innovation Works is a new 15,000 square foot facility located at Snap-on's Kenosha campus and provides a resource for Snap-on's entire global organization. It includes several defined areas each specifically designed to support a vibrant user-centered innovation process. Included is a state-of-the-art service garage, prototyping room, 3D modeling facility, display and application room, customer observation room, innovation library and training room. Importantly, this centerpiece facility supplements the many local innovation resources and infrastructure already in place throughout Snap-on's global footprint.

### About Snap-on Tools

Snap-on Tools is a subsidiary of Snap-on Incorporated, a leading global innovator, manufacturer and marketer of tools, diagnostics and equipment solutions for professional users. Product lines include hand and power tools, tool storage, diagnostics software, information and management systems, shop equipment and other solutions which are used by technicians and professionals at vehicle dealerships and repair centers and in the marine, powersports and aviation industries. Snap-on Tools is one of the largest non-food franchise companies in the world, selling its products through more than 4,500 franchisees worldwide and through company-direct sales and over the Internet. Snap-on Incorporated, which was founded in 1920, is a \$2.9 billion, S&P 500 company located in Kenosha, Wis. with operations throughout the world. For additional information visit [www.snapon.com](http://www.snapon.com).

Printing and distribution of this newsletter is sponsored by **Ken Cook Co.**

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## Speakers

Four different product groups within Snap-on will present a technical presentation on their products. Presentations will include an engineering and product development focus. There will also be an opportunity for hands on use of Snap-on products.

### Hand Tools

Kraig Tabor - Director of Advanced Processes & Product Development – Snap-on Tools

### Diagnostics

Mark Schaefer Dir-Marketing - Snap-on Diagnostics

Craig Govekar - Senior Project Engineer – Snap-on Diagnostics

### Power Tools

John Fuhreck – Director of Engineering – Snap-on Power Tools, Inc.

Eric Fernandes - Director of Marketing - Industrial – Snap-on Power Tools, Inc.

### Level 5 ATC - Tool Control System

John Martell – Product Manager – Snap-on Industrial

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#### --- EVENT AGENDA ---

**Registration and Museum: 5:30 pm**  
**Dinner: 6:45 pm**  
**Presentation/Hands-on: 6:30-8:00 pm**

#### --- DINNER ---

**DINNER PRICES**

<b>SAE Members/Spouses</b>	<b>\$10.00</b>
<b>Retirees</b>	<b>\$10.00</b>
<b>Guests/Non-members</b>	<b>\$15.00</b>
<b>SAE Students</b>	<b>\$5.00</b>

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#### - - - Menu - - -

**Snap-on Café:** Chicken Picatta & Roast Beef

## Directions to Snap-on

**Snap-on: 2801 80<sup>th</sup> Street Kenosha, WI 53143**

### **From North (Fond Du Lac)**

Take US-41 S, continue on US-45 S  
Take I-894 E and exit at 10B onto  
I-94 E / US-41 S  
Take exit 344 for WI-50 (Kenosha)  
Turn left at WI-50 E / 75<sup>th</sup> St  
Turn right at Pershing Blvd  
Turn left at 80<sup>th</sup> St

### **From West (Madison)**

Take US-12 E / US-151 N / US-18 E toward I-90/I-94;  
Turn right at N Main St  
Continue onto US-12 / Co Rd K / Whitewater Ave  
Slight right to stay on US-12 E  
Exit onto WI-120 N / WI-50 E  
Turn right at Pershing Blvd  
Turn left at 80<sup>th</sup> St



## Registration

Only pre-payments made with a **charge card** can be completed online via <http://www.milwaukeeesae.com>. Retirees, students, and members without web access may register by phone on the SAE Registration Coordinator – Jim Ryan (262) 424-4958. **Note the new phone number!** MAX ATTENDANCE for this event is 100. Registration deadline: **Tuesday April 12<sup>th</sup>, 12:00 p.m.**

**Maybe Snap-on will have some door prizes?**

## Clean Snowmobile Challenge Event Summary:

**Houghton , MI** provided extremely cooperative weather from March 7-12<sup>th</sup> for this years Clean Snowmobile Challenge (CSC) event. A record number of 20 teams have entered this year's competition featuring 7 all electric sleds. Traditional internal combustion powered sleds will focus on fuel efficiency.

The SAE International Clean Snowmobile Challenge (CSC) is an engineering design competition for college and university student members that challenge engineering students to reengineer an existing snowmobile to reduce emissions and noise. Their modified snowmobiles will compete in a variety of events including: emissions, noise, fuel economy/endurance, acceleration, handling, static display, cold start and design.



UW-Madison's award winning ZE sled

This year's 1<sup>st</sup> place winner overall in the internal combustion (IC) class was Clarkson University (New York). Milwaukee Section's UW-Madison followed close behind for a 2<sup>nd</sup> place overall. UW-Madison's IC sled also won awards for Best Emissions, Lowest In-Service Emissions, and Best Design. Their Zero Emissions(ZE, battery operated) sled won 1<sup>st</sup> place overall in the ZE class. Michigan Tech University won Rookie of the Challenge award for their pioneered ZE sled entry. UW-Madison's ZE entry also won awards for Best Range Event and Drawbar Pull Event. Congratulations to the Milwaukee Section collegiate participants!





Michigan Tech Univ team photo



Students line up for top speed event

Find more info on this year's competition at MTU's CSC website: <http://www.mtukrc.org/snowmobile.htm>  
 Be sure to visit [http://blizzard.mtukrc.org/~csc2011\\_vid/index.htm](http://blizzard.mtukrc.org/~csc2011_vid/index.htm) to review videos of the event action!

## ***HB Performance Systems Introduces Trail Trac 1.0 at 2011 SAE Clean Snowmobile Challenge:***

HB Performance Systems Inc, or 'Hayes', was excited to offer another consecutive year of CSC support in 2011. In addition to technical support and administrative help, Hayes offered students access to new braking technology to potentially expand scope and increase innovation even further during future competitions. Hayes TrailTrac 1.0 is a **controlled braking technology, similar to Anti-Lock Braking (ABS), and applicable to snowmobiles**. About 50 interested students and industry participants were provided the opportunity to ride the Hayes snowmobile equipped with this technology, and compare 'system on' and 'system off' modes. All riders, inexperienced to highly experienced, gave positive feedback that they were impressed with the targeted benefits which were improved braking controllability and confidence. This feedback was no surprise for the Hayes team as this and similar technology for off-road power sports vehicles, such as ATV's and UTV's, has been in development in some cases for more than 5 years. Other opportunities were also offered, such as during the combined CSC-SAE-Milwaukee Chapter meeting, to learn from presentation about new Hayes products and technologies.



Kurt Person, VP Engineering and CTO, demonstrates TrailTrac 1.0 sled and invites others to take demo rides.

In addition to the snowmobile demonstration Hayes allowed a sneak-peak at another vehicle throughout the week, a UTV, which was equipped with similar technology (dubbed TrailTrac 3.0).

Students and industry participants involved with CSC are typically more experienced and focused on 'going' (emissions and noise) versus 'stopping' (braking) by nature of the competition and its history. Perhaps because of the technical similarities and inherently similar engineering challenges, such as adapting complex software control to achieve a desired vehicle behavior, interest in the new controlled braking technology was overwhelming.

Hayes was pleased to once again support the CSC. We thank you SAE, the students and industry representatives, for their review and interest in Hayes and its new technologies!

HAYES is excited about their growth and as a result is actively hiring. Find out about their employment opportunities in the "Job Postings" section of this newsletter.



## **June Sprints at Road America**

**Elkhart Lake, WI** Save the date for the June Sprints races at Road America – June 16, 17, 18, 19<sup>th</sup>.

Through SAE Milwaukee's cooperation with Elkhart Lake's Road America, your section will again have tickets for this event at very favorable rates; \$5 for SAE members, \$10 for non-members. Tickets are good for any one day. Get a group together and plan

now for this fun weekend. Enjoy June Sprints and save \$\$\$ as a feature of your SAE Milwaukee membership. Look for more information soon or contact board member Doug Kautzer at [kautzer.douglas@basco.com](mailto:kautzer.douglas@basco.com).



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## **Company Representative – Milwaukee Section's Ambassadors to their Company**

Company representatives help in several ways:

- Promote the benefits of SAE to their colleagues and management
- Circulate the Newsletter/monthly event notices within their company
- Encourage regular section meeting attendance
- Are a conduit to the SAE Milwaukee section board for continuous improvement

Company reps wear their SAE logo'd apparel frequently to promote SAE at their company and become identifiable for colleagues to ask questions.

We thank our section's Company Representatives for their Work throughout the year:

*Doug Kautzer – Briggs & Stratton*

*Ken Traub – Bosch Rexroth*

*Dan Nehmer – BRP US Inc.*

*Cara Kazda – Cummins, Inc.*

*Kevin Konkle – Dresser Waukesha/GE*

*Bernard Krauska – DRS Technologies*

*Kurt Person – HB Performance Systems*

*Mike Freisleben – Husco International*

*Roger Shirk – John Deere Horicon*

*Works*

*Bob Bonneau – Kohler Company - Engines*

*Vigitt Jayasheela – Kohler Company – Power Systems*

*Bob Satori – Manitowoc Company*

*Pete Chisholm – Mercury Marine/Brunswick*

*Jim Ryan – Bucyrus International/Caterpillar*

*Ray Ryan – Oshkosh Corporation*

*Josh Rayeske – Strattec Security Corporation*

*Drew Boyer – Modine Manufacturing*

For more information about SAE Milwaukee Section's Company Representation program, please contact either Tony Grant/Hamlin Inc [tony.grant@earthlink.net](mailto:tony.grant@earthlink.net) or Wayne Richter at [richterway@sbcglobal.net](mailto:richterway@sbcglobal.net).

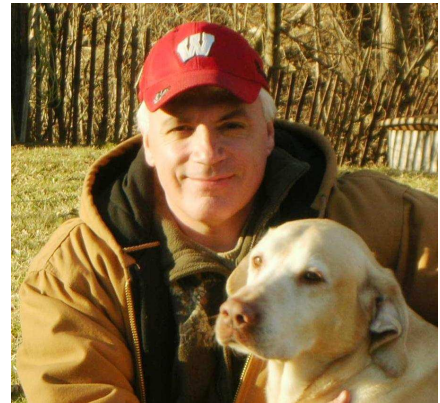


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## ***SAE Testimonials:***

*“The dinner meetings have been a rewarding way to experience the diversity of the many technologies located right here in WI. I also volunteer a few hours a week on the SAE Board which has allowed me to work side-by-side with some very fun students and business professionals. I find it very refreshing to be networking with many like-minded individuals on a non-profit basis as we set our goals and meet our objectives.”*

- Tony Grant, SAE Company Rep Chair, North American Business Development Manager, Hamlin Electronics, Lake Mills, WI.



*“Being involved with the Society of Automotive Engineers has broadened my prospective of industry in Wisconsin. After talking with other members, I can get the inside scoop to new products, ideas and the direction of companies in the area. I feel extremely confident, that I will be able to find a job after graduation, having met so many engineers from around the area.”*

- Mitch Crawford, Mechanical Engineering Student, University of Wisconsin-Milwaukee

*“It was 16 years ago, while recruiting for H-D, when a hiring manager asked for candidates that were active in SAE. So I joined too, and thought - this will be for business, and offered to be the Membership Chair. Soon, I grew a more of a servant's heart, with a higher regard for the authentic relationships and serving SAE (not it serving me). Then the real growth, and genuine rewards followed!”*

*Dale Wiza, Professional Engineering Placements, Inc./  
Career Development Chair, & a Past-Past-Past-Chair*



***Share your success story with our membership.  
Send submission to Ken Traub ( [ken.traub@boschrexroth-us.com](mailto:ken.traub@boschrexroth-us.com) )***

## Milwaukee Section 2010-2011 Governing Board

### CHAIRMAN:

James Ryan  
Bucyrus International  
email: [Jim.Ryan@Bucyrus.com](mailto:Jim.Ryan@Bucyrus.com)

### VICE CHAIRMAN:

*OPEN POSITION*

### SECRETARY:

Doug Kautzer  
Briggs & Stratton Corp.  
E-Mail: [Kautzer.Douglas@basco.com](mailto:Kautzer.Douglas@basco.com)

### TREASURER:

Bernard Krauska  
DRS Technologies  
email: [Krauska@execpc.com](mailto:Krauska@execpc.com)

### PAST CHAIRMAN:

Joe Sagat  
Modine Manufacturing Company  
email: [j.g.saga@na.modine.com](mailto:j.g.saga@na.modine.com)

### HISTORIAN:

Wayne Richter  
Business Development  
email: [richterway@sbcglobal.com](mailto:richterway@sbcglobal.com)

### AWIM / EDUCATION:

*OPEN POSITION*

### WEBMASTER:

Cara Kazda  
Cummins Filtration  
email: [cara.r.kazda@cummins.com](mailto:cara.r.kazda@cummins.com)

### MEMBERSHIP/ COMPANY REP:

Tony Grant  
Hamlin  
email: [tony.grant@hamlin.com](mailto:tony.grant@hamlin.com)

### COLLEGIATE RELATIONS:

Mike Krauski  
UW-Milwaukee  
email: [krauski@uwm.edu](mailto:krauski@uwm.edu)

### STUDENT ACTIVITIES:

Randy Hoffman  
ACS  
email: [rhoffman@acscm.com](mailto:rhoffman@acscm.com)

### CAREER DEVELOPMENT:

Dale Wiza  
Professional Engineering Placements, Inc.  
email: [dale@engineeringplacements.com](mailto:dale@engineeringplacements.com)  
Work: 414-807-9663

### SENIOR ADVISORS:

Amy Adams  
Kohler – Engine Division

Kurt Person  
HB Performance Systems

### NEWSLETTER EDITOR:

Ken Traub  
Bosch  
email: [ken.traub@boschrexroth-us.com](mailto:ken.traub@boschrexroth-us.com)

### STUDENT REPRESENTATIVE:

Marquette University: *OPEN POSITION*  
UW-Milwaukee: Mitch Crawford  
MSOE: Alex Zelhofer, Sven Krause

Dear Members and Section Friends,

As the warm Spring weather approaches I encourage you to get outdoors and join us at the April Snap-on meeting along the southern boarder of our section. Don't miss this opportunity to learn about the Wisconsin based company and possibly win a free door prize!

On behalf of the section we are thankful to the Rockford-Beloit Section for inviting us to their March meeting at Fairbanks Morse. Their tour of large scale engine manufacturing, assembly, and testing was fascinating. We are happy to reciprocate with them by inviting their section to join us at the Snap-on April Section meeting. This will be a great opportunity for networking outside our Section membership.

Michigan Tech University (MTU) hosted another fantastic Clean Snowmobile Challenge event. I proudly attended the event along with many other Milwaukee Section members. This year's snow conditions were much improved and everyone had an opportunity to enjoy the scenic trails through Copper Harbor. I am pleased to report that the Milwaukee Section continued to provide its \$1000 sponsorship towards the event. For those who have not participated, please consider joining us next year for an action packed weekend!

The Family Night event will occur in May. Bring your friends and family to join us on the Go-Kart track. This will be a causal "open house" event that everyone can enjoy. Look for event details in the April newsletter.

The Milwaukee Section will be offering discounted tickets to the June Sprints races at Road America. Tickets will go on sale soon. Purchase them online via the registration page.

Next years program lineup is in the works. If your company would like to host an event or if you'd like to participate as a program chair please contact a board member.

Best regards,

Jim Ryan  
Chairman – Milwaukee Section

## Job Postings

**Company:** HB Performance Systems

**Job Title:** Project Engineer 2

**General Summary:** Develops new product concepts and improves existing product concepts. Synthesizes new product designs and evolves design details toward the requisite functionality. Analyses product designs for conformance to functional performance specifications and safety or governmental requirements. Uses Advanced Product Quality Planning (APQP) methods to evaluate and improve the efficacy of new or revised product designs. Employs test procedures to validate the functionality and lifecycle performance of product designs. Manages/directs project timelines, budgets, interdisciplinary tasks, supplier deliverables, etc. to satisfy project goals and deliverables. Drives the ultimate maturity of product designs to be ready for production via analysis, testing, and documentation of APQP processes.

**Essential Duties and Responsibilities:**

- Develop, apply and adapt HAYES products to various vehicle applications with a particular emphasis on the product performance (loads, displacements, velocities, accelerations, stresses, strains, etc.)
- Analyze and assess functional behaviors of competing products so as to develop overall best-in-class product designs.
- Establish and document goals and deliverables for product development projects.
- Employ engineering methods and principles to synthesize the various elements of design functionality into a competitive design.

See the Hayes website at [www.hbpsi.com](http://www.hbpsi.com) for more information on all open positions

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**Company:** ACS

**Job Title:** Sr. Mechanical Engineer – Machine Design

*ACS seeks an experienced Mechanical Engineer who is highly knowledgeable and experienced in mechanical design and meets the Basic Requirements as listed below:*

*Master's degree in Mechanical Engineering.*

*Minimum 10 years of relevant machine design work experience, preferably involving dynamometers, diesel engines or other specialized testing machines, on-site trouble shooting and commissioning.*

*Analytical engineering skills and practical experience in 3 of the following areas: Mechanical Vibrations and Dynamics, FEA, Machine Design, Statics, Hydraulics.*

*Experience in Fluid Dynamics, Heat Transfer, and Pneumatics systems is beneficial.*

*Requires travel to customer facilities for meetings, installations, and commissioning.*

*More about our company and other positions, on our Career Page: <http://www.acscm.com/>*

*ACS serves Fortune 100 and 500 clients, and is a growing and financially sound company based in Madison, WI. ACS provides integrated design, construction and operations solutions for our client's complex facilities, systems and equipment. We take projects from conception to completion with our unique Integrated Project Delivery methods. Our core markets are engine and vehicle testing, science and technology, and consumer and commercial products.*

EOE/AA. Send resume and cover letter to: [HR@acscm.com](mailto:HR@acscm.com)

*HR Manager, ACS, 3330 University Avenue, Suite 200, Madison, WI*



**Company:** Diesel / Thermal Markets, SE Wisconsin / NE Illinois

**Job Title:** Director of Engineering

We are searching for a Director of Engineering to lead: creation of strategies, requirements and development for a new diesel emission segment. Providing administrative, technical and project leadership to critical system, process and product development initiatives.

Support the business development needs market and technology research, technical literature, representation at events, training materials and off-site support of sales engineers and customers.

**Attributes:**

- Advanced engineering degree or equivalent experience
- Proficiency in Microsoft Office, Microsoft Project or other PM tool.
- Experience leading multiple engineering disciplines: software, mechanical and electrical design, manufacturing, reliability & maintainability, test, quality, systems, logistics and project.
- Current knowledge of the diesel emission and thermal sciences markets including: technology research, industry standards, regulatory influences, existing IP and competitive products.
- Working knowledge of best industry practices, includes: TQM, PBM, QFD, Lean, Earned Value, ISO, DFT/DFM, DOE, CAD/CAE, FEA, CFD, FMECA, FTA, FRACAS, etc.
- Ability to competently lead and demonstrate the highest of: integrity, values, and behaviors

**Please send your resume to: Dale Wiza**

**Professional Engineering Placements, Inc. / SAE Career Development Chair**

[dale@engineeringplacements.com](mailto:dale@engineeringplacements.com), or call 414-807-9663.

***Please learn about additional opportunities at [www.milwaukeesae.com](http://www.milwaukeesae.com);  
and assistance from Dale Wiza, our SAE Career Development Chair.***

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**Meeting Sponsorship**

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