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Automotive

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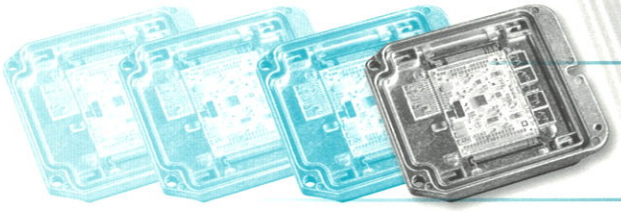

News Circuit

Siemens VDO Automotive Drives The Automotive Industry's Best Engines

Siemens VDO Automotive's Powertrain products are often difficult to see and are sometimes underappreciated for their impact and importance on an engine. However, it was Powertrain's time to shine when five out of the top 10 industry engines named by automotive trade publication *Ward's Auto World* featured Siemens VDO Automotive technology.

Every year, *Ward's Auto World* lists its top 10 engines in the industry and this year Siemens VDO Automotive is in the driver's seat among the leading engine producers in the automotive industry with powertrain products on half of the honored engines . The five "Best Engines" employing company technology include:

- The BMW AG 3-liter DOHC I-6 (330I);
- The BMW AG 3.2-liter DOHC I-6 (M3);
- The Mini Cooper 1.6 liter SOHC I-4 (Pentagon);
- The DaimlerChrysler AG 5.7-liter OHV Hemi Magnum V-8 (Dodge Ram HD); and,
- The Ford Motor Co. 6-liter Power Stroke OHV Turbo-diesel V-8 (F-Series Super Duty).

Ward's Auto World editors scored each engine based on crucial engine characteristics of power, torque, noise vibration and harshness (NVH), technical relevance and basic comparative numbers. The most noteworthy Siemens VDO Automotive engine technologies, based on *Ward's* scoring criteria, are:

For Both BMW I-6 Engines

- Engine Management System (EMS), comprising the engine control unit and corresponding system software provided by the Regensburg, Germany location;
- Variable Valve Timing (VVT) system provided by the Regensburg location; and,
- Various sensors, including crankshaft position, for emissions control provided by the Toulouse, France location.

Mini Cooper 1.6-Liter SOHC I-4

- EMS, comprising the engine control unit and corresponding system software provided by the Regensburg location.

DaimlerChrysler 5.7-Liter Hemi V-8

- Three-piece injection-molded, vibration-welded air fuel module, the industry's most comprehensive integrated air fuel module, to date. The module integrates 26 previously independent components in one deliverable unit. Key components of the module include the integrated Electronic Throttle Control (ETC), fuel injectors and rail, emissions components, air cleaner housing and resonator. The module is provided by the Windsor and Chatham, Ontario, Canada; Santa Catarina, Mexico; and, Newport News, Va. locations.

Ford Power Stroke 6-Liter V-8 Turbodiesel

- Diesel Fuel Injector Driver Module (IDM), an electronic control module dedicated to the precision control of each fuel injection event provided by the Auburn Hills, Mich. and Guadalajara, Mexico locations; and,
- High-pressure fuel injectors supplied by Siemens Diesel Systems Technology (SDST), a joint venture formed by Siemens VDO Automotive and International Truck & Engine Corp. located in Blythewood, S.C.

This is the ninth year *Ward's Auto World* has celebrated its annual 10 Best Engines competition. The competition is the industry's first

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Circuitry Inside

Ready, Se

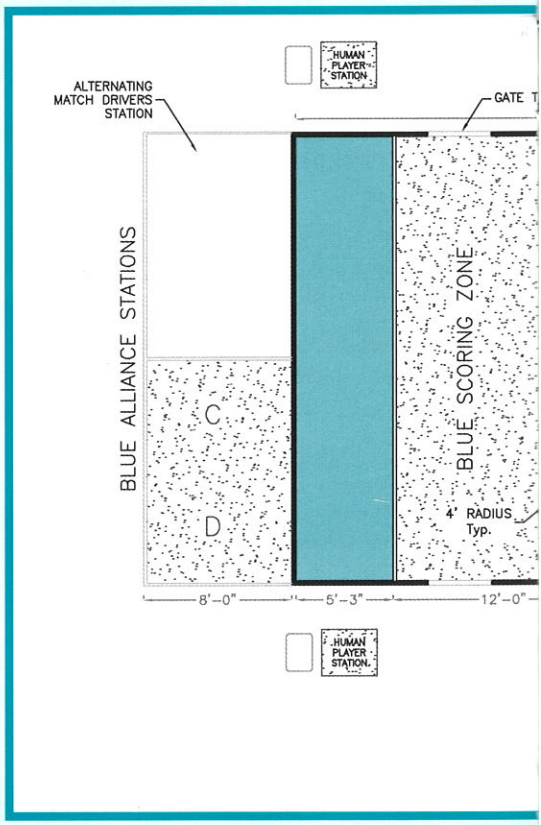
During kickoff events held across the country on Jan. 4, 2003, high school teams received three boxes of components from FIRST to get them started on building a robot to compete in the Stack Attack challenge.

January marks the beginning of the 2003 FIRST Robotic Competition season and Siemens VDO Automotive, its employee volunteers and the high school teams it is sponsoring, have dived head first into task. As a part of Siemens Corporation's Caring Hands Initiative, employees at Siemens VDO Automotive locations in Auburn Hills and Troy, Mich., Newport News, Va. and Ontario, Canada have provided fiscal support, experienced mentors and access to their facilities to aid local high school students in their engineering efforts.

The FIRST Robotics Competition is a program that teams professionals and students together to solve engineering design problems in an intense and competitive way. The 2003 competition will include 20,000 students on over 800 teams from every state, as well as Canada, Brazil and the United Kingdom.

"Being involved in the community through education-based programs like FIRST enables our organization to support the development of the next generation of people advancing innovative technology," said John Sanderson, President and CEO, Siemens VDO Automotive. "As employees of Siemens VDO Automotive, we have a commitment to being good corporate citizens and the FIRST Robotics Competition is an effective, satisfying way for us to contribute to the community. Additionally, it is an excellent opportunity to engage in an expansion of our own personal and professional development."

Detroit Area Campus employees celebrate their fifth year as the sponsor of the Rochester Adams High School FIRST Robotics Competition Team. In addition to donating $20,000, the Auburn Hills location is also providing access to machining and fabrication facilities, as well as employee volunteers who will serve as mentors to the aspiring young engineers. For their past efforts, Siemens VDO Automotive and Rochester Adams High School were recognized for their successful partnership with the 2002 Siemens Corporation's Caring Hands Foundation Community Excellence Chairman's Award. The award provided a $5,000 donation to the Rochester Schools Foundation used to support its FIRST Robotics teams.

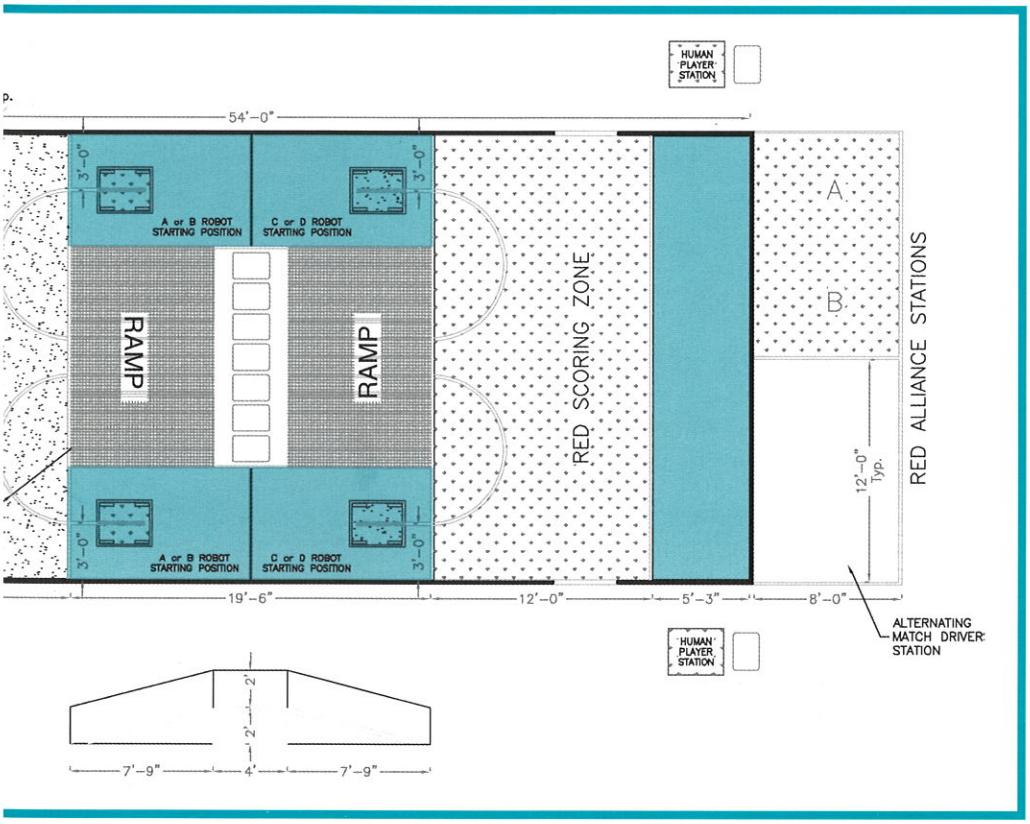


In addition, the President's Award provided an additional $2,500 donation to the foundation.

The company's Newport News location recently donated $1,000 to help students at the New Horizons Governor's School's FIRST Robotics Competition Team build a robot and attend competitions. Recently, New Horizons along with a local student from Denbigh High School presented the Newport News facility with a commemorative plaque as a special "thank you" for Siemens VDO Automotive's support during the 2002 competition.

Siemens VDO Automotive's local plants in Ontario, Canada have also donated their time and effort to Windsor, Ontario, Canada- based Kingsville High School FIRST Robotics Team. In addition to financing the team's entry fee, Paul Howlett and

t... Build!



This year's FIRST Robotics Competition challenge, Stack Attack, has high school student teams trying to score points by maneuvering boxes with their robots within a 54' X 24' arena. Teams must navigate a large ramp obstacle, as well as around the opposition's robots, to place and stack boxes within their designated colored zones. The alliance of two high school teams with the most boxes, multiplied by their tallest stack of boxes, inside their scoring zone will win the match.

Jeff Powell of the Windsor facility and volunteers from the Tilbury and Chatham plants will guide Kingsville students throughout their engineering process. Employees will offer strategic insights and accompany students and their robots from inception to completion.

The FIRST Robotics Competition formally kicked off on Jan. 4 at the Novi Expo Center in Novi, Mich. Teams have a total of eight weeks to construct a robot that will compete in 24 preliminary competitions held across the United States.

The theme for the 2003 FIRST Robotics Competition is Stack Attack. Two teams will compete to stack containers as high as possible while leaving remaining containers in their designated scoring area. During this time, opponents can knock down or steal each other's containers. At the start of the challenge, robots will be required to operate autonomously for 15 seconds using a variety of sensing strategies to detect field features, containers and other robots. Following this short segment, human players will then take control of the robots for the remainder of the match and teams will attempt to score points by having as many containers in their scoring zone as possible. The number of scoring containers is then multiplied by a team's tallest stack to determine a final score. Students will build basic robots to push boxes into illegal scoring positions, as well as build more complex robots that are able to steal opponent's containers.

Additional information about the FIRST Robotics Competition and this year's Stack Attack challenge can be found on the Internet at www.usfirst.org.

Interested in getting involved with a Siemens VDO Automotive-sponsored FIRST Robotics Competition team in your area? Contact:

Location & Team	Contact
Southeast Michigan Rochester Adams High School	**Paul Slaby** Siemens VDO Automotive (248) 209-5759
Windsor, Ontario, Canada Kingsville High School	**Paul Howlett** Siemens VDO Automotive (519) 974-5400 ext. 5607
Newport News/Tidewater Area, Va. New Horizons Governor's School	**Richard Purman** New Horizons Governor's School (757) 766-1100 ext. 366