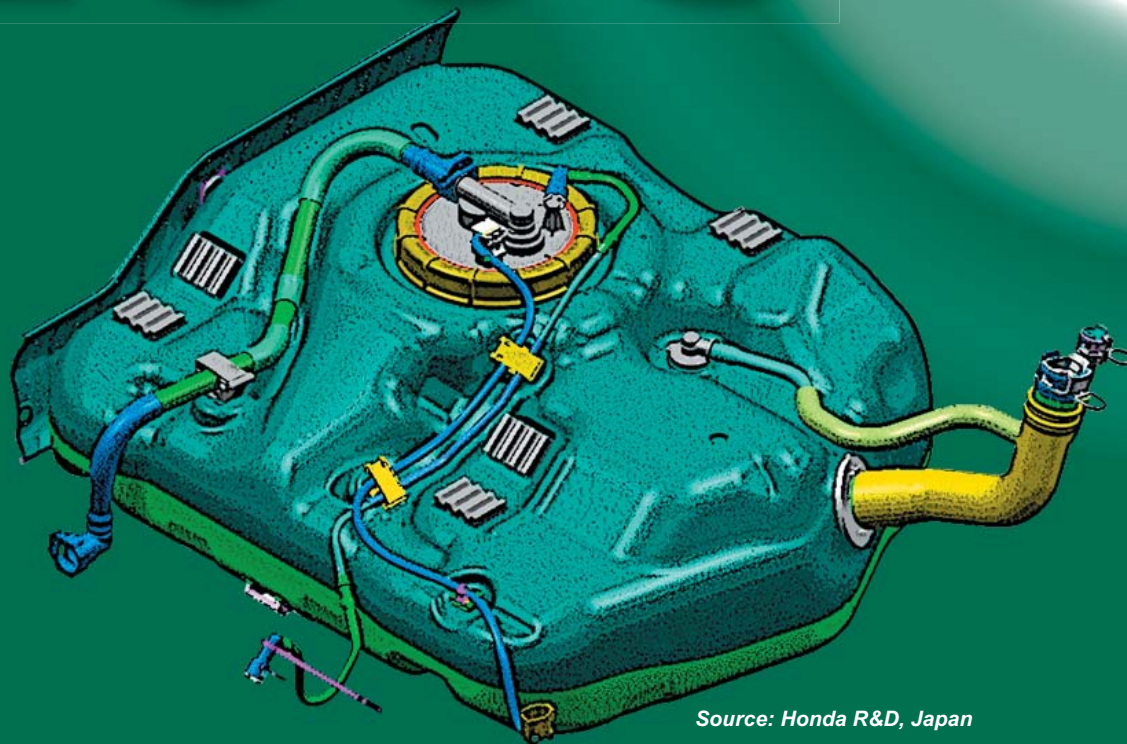


Automotive Fuel Systems

The
ITB
Group, Ltd.



Source: Honda R&D, Japan

March 3, 2006

Ford Motor Company Conference & Event Center
Dearborn, Michigan U.S.A.

Final Program

Sponsors:



Automotive Fuel Systems 2006

AGENDA

Please note that conference proceedings are not available

- 7:00 –
8:15 a.m. **Registration and Continental Breakfast**
- 8:15 a.m. **Opening Remarks**
Dr. Joel Kopinsky, Principal, The ITB Group (U.S.A.)

SESSION 1: FUEL TANK SYSTEMS

- 8:30 a.m. **A Tier One Approach of Fuel Pumps by Benchmarking and Validation**
Inergy Automotive Systems (Belgium)
Fuel pumps are an integral part of fuel tank systems. As such, fuel tank suppliers need to increasingly account for fuel pump performance as part of the overall fuel tank system design. A benchmarking approach is being deployed based on testing and validation devices.
- 9:00 a.m. **The New Steel Tank - Innovative and Functional**
Strategic Alliance for Steel Fuel Tanks (SASFT) (U.S.A.)
The design capabilities of steel fuel tanks have changed dramatically in recent years in response to demanding requirements of automotive fuel system engineers. The improved manufacturability of steels allow excellent design flexibility for producing today's complex shaped tanks. New durable steel systems are now available to meet 15 year life requirements when exposed to different fuel compositions.
- 9:20 a.m. **An Innovative Plastic Fuel Tank Solution using Nanotechnology: HYPERIER®**
LG Chem Technology Center (Korea)
LG Chem Engineering Plastics Division (Korea)
An innovative plastic fuel tank solution has been developed that meets CARB's LEV II regulations. The technology has been developed combining both nanomaterials and processing technologies.

- 9:40 a.m. **Universal Testing Approach for a Fuel Tank System Using a Six-Degree-of-Freedom Motion Simulation**
Simtec Simulation Technology (Germany)
Robert Bosch Corporation (U.S.A.)
Providing a robust solution for state-of-the-art automotive fuel systems is becoming more difficult due to the inherent system complexity. Additionally, vehicles with a common fuel delivery module and fuel tank require specific load testing at the vehicle system level. A six-degree-of-freedom motion simulation offers the possibility to test the behavior of the system in the development laboratory instead of repeating costly proving ground tests.

- 10:00 a.m. **Mid-Morning Break**

- 10:30 a.m. **KEYNOTE ADDRESS**
Global Warming
NASA Institute for Space Studies (U.S.A.)

SESSION 2: FUEL LINES AND VAPOR MANAGEMENT

- 11:00 a.m. **Ultra Low Emission LEV II and PZEV Canister Solutions**
Delphi Technical Center
Kraków (Poland)
Extensive R&D efforts to optimize canister designs for LEV II and PZEV applications have been performed. This has included simulation, design concepts and test activities. Designs have been validated and implemented into serial production and address emerging needs such as hybrid vehicles.

Exhibitors:

AGC Chemicals Americas
Alfmeier
Arkema
Bekaert Fibre Technologies
Chevron Phillips
Cooper Standard Automotive

11:30 a.m. Extruded PPA Tubing and Spin Weld Quick Connects – A Complete High Performance Fuel/Vapor Tube System Solution
Cooper Standard Automotive (U.S.A.)
Traditional polymeric fuel tubing has temperature ratings of continuous exposure up to 90°C with intermittent peaks of 125°C. A new fuel/vapor tube system solution has been developed that uses glass filled PPA quick connects spin-welded to extruded PPA tubing. Such a system is rated for 130°C continuous and 150°C peak temperatures.

12:00 p.m. Carbon Canister Requirements and the Ultimate Solution for LEV II and PZEV Applications
Mast Automotive (U.K.)
It is becoming increasingly more difficult for the canister supplier to find an affordable solution to satisfy both powertrain and emission legislation needs. Following the development of Mast's purge heater technology, a new super efficient integrated carbon canister will be introduced that provides the ultimate solution in terms of canister performance for LEV II and PZEV applications.

12:30 p.m. Lunch

SESSION 3: FUEL SYSTEM MATERIALS

1:30 p.m. Innovation in Fuel Systems: From the Tank to the Engine Compartment
Arkema (U.S.A.)
From the tank to the engine, innovative technical solutions have been developed that fulfill the technical and economical constraints of the modern fuel system environment. Differing regional approaches will be introduced through recent key developments covering today's challenges in conductivity, high temperature requirements and cost reduction.

2:00 p.m. Fluoropolymers and Fluoroelastomers: Recent Advances for Applications Requiring Ultra-low Fuel Permeation
Daikin Industries (Japan, U.S.A.)
Recent advances in fluoropolymer and fluoroelastomer technologies will be introduced. These include a reactive fluoropolymer and a fluoroelastomer with significantly lower fuel permeation. These materials have been designed to meet the challenges of the future including PZEV and bio-diesel compatibility.

2:30 p.m. New Direction for Fuel Sender Unit Cover
Chevron Phillips Chemical Company (U.S.A.)
With the renewed interest in producing vehicles with better fuel economy, alternative fuels are being processed in vehicles and fuel sender units are now required to handle gasoline, gasoline plus ethanol, diesel, biodiesel and ethanol. Components of the fuel sender module need to be stable to both fuel mixtures inside the tank and harsh chemicals on the outside of the tank. A family of polymer compounds will be presented that are designed to be stable for different fuels at elevated temperatures.

3:00 p.m. Afternoon Break/Dessert

3:30 p.m. Electrostatic Discharge – Specification Update
Ford Motor Company (U.S.A.)

SESSION 4: DIESEL SYSTEMS

4:00 p.m. Storage and Supply Systems for Liquid Urea Solution (AdBlue)
Kautex Textron (Germany)
Large diesel powered passenger cars and trucks struggle with NOx emission reduction requirements for tailpipe emissions. One possible solution to reduce NOx is the use of SCR catalysts in combination with the injection of liquid urea in the exhaust line. A plastic storage system has been developed for the AdBlue liquid that is similar to traditional gasoline or diesel fuel tank systems.

4:30 p.m. Diesel Fuel Filter Modules for Passenger Cars and Trucks
Mahle (U.S.A.)
An overview of diesel fuel filter modules used for passenger cars and trucks will be provided. Important modular components for diesel systems will be described including heaters, valves, sensors and filter media.

5:00 p.m. Cocktail Reception

EMS-GRIVORY
Eval Company of America
Fraenkische USA
GTR TEC
Helvoet Rubber & Plastic Technologies
Hyperion Catalysis

Inergy Automotive Systems
Innovene
MOCON
Norma Products
RayConnect
RTP Company

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