

Robert Bosch LLC

A Century of Innovation – Bosch Motorsport Stays in the Technology Pole Position



BOSCH

Invented for life

The Bosch Motorsport heritage spans more than a century, beginning with its first partnership with Mercedes-Benz in 1903.

In the world of endurance sports car racing, the 24 Hours of Le Mans carries the most tradition, with its first running in 1906. Today, Le Mans still controls the title as one of the most strenuous tests of automotive technology in the world and Bosch continues to hold the innovation pole position with Clean Diesel Power.

In 2006, the Audi R10 TDI became the first diesel powered race car to win the more than century old contest with a little Bosch clean diesel technology help. The mold-breaking model repeated that feat in 2007. At the same time, the R10 dominated the LMP1 class in the American Le Mans Series (ALMS) for two straight years. For 2008, Bosch is again supporting Audi's ALMS efforts, leading up to the Detroit Sports Car Challenge on Belle Isle, August 30, 2008.

The 5.5L V-12 diesel engine propelling the R10 is equipped with a Bosch common rail fuel injection system and diesel particulate filters. Several checkered flags later, Bosch's collaboration with Audi has delivered a decisive demonstration of diesel's Good Clean Fun.

From its debut in endurance racing, the 30 percent fuel economy advantage of diesel has enabled the R10s to run longer between pit stops - giving the team a significant advantage by spending more time on the track instead of in the pits.

The clean diesel Audi R10 also is one of the quietest race cars on the track. Diesels have a much lower maximum engine speed than gasoline racing engines, but the 50 percent torque advantage allows them to match and exceed their counterparts. While gasoline engines roar and growl, diesels whisper their way to victory.

„Seeing diesel technology in a race may address some misperceptions people may still have from experiences from 30 years ago,“ explains Dr. Johannes-Joerg Rueger, Bosch vice president of Diesel Systems Engineering. „Diesel today is Good, Clean, Fun and has nothing to do with the technology introduced to North America 30 years ago. It's a whole different animal.“

Bosch Motorsport is about more than just promoting products. The challenge of competing in some of the toughest environments in the world at the highest speeds provides accelerated stress testing of all the systems on the car.

Lessons learned in the heat of competition are relayed back to production programs. The engineers and technicians who support the development of race cars like the Audi R10 TDI benefit from the intense experience of solving problems at the track when they return to regular production development.

The American Le Mans Series is particularly appealing to Bosch as Dr. Rueger explains: „In the American Le Mans Series, there is great variety and that is what attracts us as a sponsor. It appeals to different people for different reasons.“

The ALMS features cars running in four different classes with races varying in length from 100 minutes to 12 hours. With locations ranging from city street courses to natural terrain road courses - the cars, drivers and technology all face a range of challenges through the course of the season. The fans also experience some of the most exciting racing on the planet.

As motorsports embarks on its second century, Bosch will be on hand to provide Good Clean Fun for all!