

The 90-second oil change: Castrol claims a breakthrough

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90-second oil change? It could be a reality in 5 years. Shannon Rae Green reports.



(Photo: Castrol)

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The oil change may be about to endure a change of its own.

A big motor-oil maker plans to announce Thursday that it has achieved a breakthrough in engine-lubrication design that makes it easy to change the oil in a vehicle in as little as 90 seconds,

Castrol, a division of BP, says the modification over current designs also lowers carbon emissions and fosters recycling.

The new system, which Castrol has dubbed Nexcel, must be integrated into vehicle engines at the design stage. That means it won't hit mainstream cars for another five years — about the length of time between major model changes for many automakers.

Castrol said it's in discussions with several major automakers to speed adoption of the Nexcel system, which it brags is significantly faster than the 20 minutes it traditionally takes to get an oil change.

It's "a revolutionary technology that's the most significant change in oil servicing since the introduction of the vehicle," said Steve Goodier, project leader. "The average driver will not notice a direct difference as far as driving it down the road is concerned. Where the driver will see a benefit — and it's quite significant — is time."

A product development team of about 50 people, including technologists in the United Kingdom, U.S. and Germany, created the system.

The company did not reveal many details about the technology, which it said also offers environmental benefits. It lowers carbon emissions when the car is driving and enables improved recycling of oil cells back into refined petroleum.

"It means you do not waste a drop of lubricant during the oil-change process," Goodier said.

The system will make its debut in the Aston Martin Vulcan supercar, which can only be driven on racetracks, not streets.

But Castrol said that decision was made to speed the process of development and testing, allowing other automakers to gauge performance before adopting the system.

A key test is whether the oil delivers smooth handling, braking and accelerating. Castrol said the technology "functioned smoothly" in a test in which a vehicle went from 62 miles per hour to a full stop in 1.6 seconds. The system has also been tested with everything from cheap minicars to racecars.

What's unclear is how the technology could affect oil-change service locations, which generally charge anywhere from \$20 to \$55 for a standard oil change, according to consumer information website [CostHelper.com](#).

Nexcel would make it substantially easier for consumers to change their own oil, Goodier said. He said it's too early to discuss pricing for automakers that may integrate the system into their cars or consumers who experience the simplified oil-change process.

Goodier said he "can't imagine" it would substantially disrupt the oil-change service business model.

But fewer hours spent on oil changes in the shop could mean fewer jobs for technicians if service locations don't adapt.

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