

Lexus concept vehicles star in Spielberg's 'Minority Report'



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July 24, 2002 - Steven Spielberg cast the luxury auto brand Lexus as the car of the future in his latest summer blockbuster film, "Minority Report". Based on a short story by science fiction writer Philip K. Dick, the film is an action-thriller set in Washington, D.C. in 2054, where police utilize psychic technology to arrest murderers before they commit their crime. Tom Cruise plays the head of this precrime unit, himself accused of the future murder of a man he hasn't met.

When it came time to conceptualize automotive travel for the futuristic setting, Spielberg didn't have to look any further than his own driveway for inspiration. "I've been driving a Lexus SUV," said Spielberg. "I thought Lexus might be interested in going into a speculative future to see what the transportation systems and cars would look like on our highways in fifty years. The result of that exploration is something that elevates and transforms driving into an environmental experience."

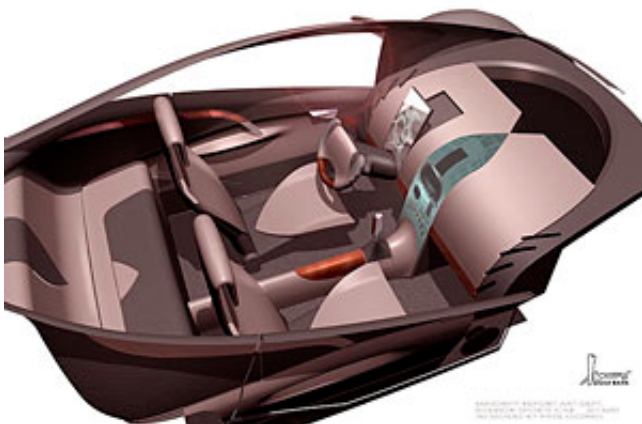
Two featured Lexus vehicles were developed for the film – a radical red sports car and a private pod that rides on a vast urban magnetic levitation (Mag-Lev) system.

The sports car was designed for scenes calling for Cruise's character to drive outside the city limits and was tailor-built to fit the star. The futuristic high-performance two-seat coupe flexes a muscular design with cab-forward seating, low, enclosed wheelbase for sportiness, aggressive lines, and proportions so unexpected that, at first glance, it's not entirely evident which end is the front and which is the rear.

The second vehicle - a private 'pod' - rides on the film's urban Mag-Lev system and features a full-glass roof and doors that open from the center to allow the occupant to step out. The Mag-Lev system itself operates on electrical/magnetic energy, with buildings and horizontal surfaces covered with 'roadways' made of magnetic discs that support and propel various vehicles. The vehicles feature video interaction via holographic projections and a DNA recognition entry and ignition system.

In this accident-free, computer-controlled system, pods move at speeds of 80 to 100 miles per hour. In the future city's transportation layout, private pods, taxis and multi-passenger cars all negotiate the Mag-Lev system - making seamless transitions between vertical and horizontal surfaces.

Conceptual artist Harald Belker designed the custom Lexus vehicles. He previously created the sleek, ominous Batmobile for "Batman & Robin" (1997), the Lincoln Continental for "Inspector Gadget" (1999) and the space shuttle in "Armageddon" (1998). Spielberg, Belker, Caltly (Toyota/Lexus design studio) and a team of futurists met early in the development process to speculate on what the future of



automotive travel might hold, with Lexus ultimately providing styling, luxury and performance cues for the vehicles' designs.

Belker collaborated with 'Minority Report' production designer Alex McDowell to devise the intricacies of the Mag-Lev system. "A lot of designers draw up 'picture vehicles' without thinking how the cars work," McDowell says. "Harald designs from a real-world stance. He combines his knowledge of mechanics to produce functional, aesthetic models."

Says Belker: "The real problem was figuring out how to get a vehicle from a flat surface to go vertical, along buildings. We didn't want flying vehicles, like 'Blade Runner.' It had to make sense, with form following function."

McDowell says that they labored to avoid any comparisons with Ridley Scott's groundbreaking sci-fi film, also based on a Dick story. "When you're doing an urban-based future film, it's hard to avoid 'Blade Runner' because it's always going to be a classic," he says. "But 'Minority Report' goes in a different direction. It imagines more of a utopian future in a green, non-post-apocalyptic world."

"A lot of thought went into the Mag-Lev vehicle, and we were designing the whole system parallel with it. The goal was to design an individual mass-transportation system, using a custom capsule that would transport you anywhere within the system" explains Belker.

"The interior was minimalist. Everything is voice activated and displayed on video screens or holographic. After that was done and two were designs ready to go I started to design about 20 futuristic road cars. Eight were quickly produced for background cars."

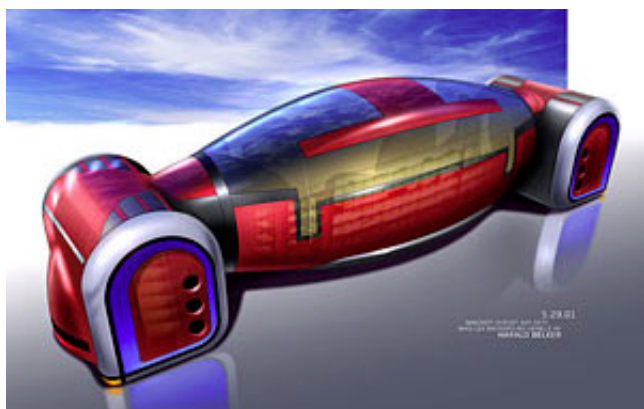
During production, Spielberg decided to add the twist in which Cruise's character leaves the Mag-Lev, fleeing his pursuers by driving to the country. Belker rejected the idea of a Mag-Lev pod going "off system." Instead, working with McDowell, Belker sketched out plans for another type of vehicle. He designed the red two seater coupe in just three weeks. After getting Spielberg's approval and running it by the designers at Lexus' Southern California design studio - the car company's logo appears on the vehicle - Belker turned it into reality.

Among the features: laser-guided cruise control, a carbon fiber and titanium composite chassis, retinal scan entry and a weather-sensitive response system (with tire tractions that adjust automatically to road conditions).

When he drafted the voice-activated, computer-controlled system, Belker curtailed the car's interior architecture. That left Cruise with little to do, so Belker added screens and other



Mag-Lev vehicle concept



features. "It's funny - you think future, so you minimize everything," he says. "But I forgot about the actors."

After one initial sketch and pricing and researching for a vendor to build it, there was just over 3 months to finish the vehicle, which left just 2 weeks to design it and at the same time build a 3D model. Paul Ozzimo did the 3D work and after 18 days the complete outer skin was finished, and 3 days later it was milled in full size. The vehicles were constructed by CTEK, a technology design and development firm based in Santa Ana, California.

"The surfaces and lines came out pretty nice. From that day on I sketched every morning on additional parts for the interior, which also had to be modeled in 3D and sent as digital files to CTEK by the next morning," says Belker.

Belker explains that the difficulty at this point was that the designs could not be too complicated, everything had to be reasonably easy to make. "For instance the wheels. I knew that they will have to be cast, I had to recognize draft angles. I ended up having two hours to design it, and by the next day the model was send off. The speed was mind bending, but it was a fun time. Naturally I would change a few things now, but it's all history and I am now working on another creation, not at the same speed but fast nevertheless."

"Without the backing of Lexus we could have never done it. They were great, supported us in everything we did and gave us complete design freedom".

Harald Belker studied at Art Center College of Design in Pasadena, graduating in 1990 with a degree in transportation design. He then worked for Porsche in Germany, before deciding to return to Los Angeles. Mercedes-Benz hired him for its Smart Car project at the company's advanced design studio in Irvine.

After four years, Belker quit to freelance. "When you come out of school, you think you can change the industry," he says. "I didn't want to become a manager; I just wanted to be the one who draws and comes up with new ideas."

Related sites:

Lexus movie site: www.lexus.com/minorityreport

Minority Report: www.minorityreport.com

Harald Belker: www.haraldbelker.com

CTEK: www.ctek-on-line.com

