

Press Information

Kyocera unveils Concept Car "Moeye"

Concept highlights changing relationship between people and automobiles; features futuristic "aerial" display and next-generation technologies for optical camouflage, audio, lighting, and fragrance

Kyoto/London, October 20th, 2020. Kyocera has developed the Concept Car II "Moeye," showcasing its unique technologies to optimize the driving experience by integrating the human senses of sight, sound, touch, and smell.



Kyocera Concept Car "Moeye"

"Moeye" Concept Car Overview

Anticipating continued advances in autonomous driving and Mobility as a Service (MaaS), Kyocera focused on the importance of the car's interior space to develop a futuristic cockpit that offers fresh innovations in a completely original vehicle design.

Through a collaboration with Prof. Masahiko Inami from University of Tokyo's Research Center for Advanced Science and Technology, Kyocera applied the unique optical camouflage technology to widen the passenger's field of vision by making part of the cockpit functionally transparent.

In addition, the Moeye concept is equipped with Kyocera's latest technologies to enhance both safety and comfort, two key automotive design priorities.



Technology Highlights

1. Visual Function and Elegance

I. Aerial display (Kyocera's original technology)



"Mobisuke" supports the passengers

The high-performance liquid crystal display projects images clearly. In addition, the original character "Mobisuke" realistically emerges from the space above the dashboard and to explain navigation instructions, etc. to passengers.

II. Optical camouflage technology





Camouflage technology of "Moeye"

The passenger sees a virtual 3D image of the road ahead projected onto the dashboard, rendering it functionally transparent via optical camouflage technology.



III. CERAPHIC LED lighting (Kyocera's original technology)¹



CERAPHIC LED lightning

Overhead and door lights provide biologically friendly illumination using Kyocera's original CERAPHIC LED lighting, which allows better spectrum customization and more subtle color expression than conventional LED technology. CERAPHIC can closely matchs the spectrum of natural sunlight and freely adjusts light in the morning and evening for a more comfortable mobility experience.

IV. "Kyoto Opal" jewelry (Kyocera's original technology)¹



Kyoto Opal

To expand the visual environment with beauty and elegance, Kyocera's proprietary Kyoto Opal is used in the interior door panels and a lab-grown gemstone is used in center console.

¹ "CERAPHIC" and "Kyoto Opal" are registered trademarks of Kyocera in Japan



2. Touch and Haptic Feedback Tactile Response Technology

HAPTIVITY® (Kyocera's original technology)2

The instrument panel and center console are equipped with Kyocera's patented <u>HAPTIVITY</u> tactile feedback technology. When you touch the panel, your fingertip pressure generates a tiny vibration simulating the tactile feeling of a physical button. HAPTIVITY revolutionizes the human-machine interface by allowing passengers to operate touch-panel instruments in a natural and intuitive manner that conventional touch-panel displays cannot emulate.

3. Audio Enhancement

Piezo-integrated vibration speaker (Kyocera's original technology)

The car features a vibration speaker using piezo elements which radiates sound throughout the cabin, creating a comfortable listening environment enjoyable to the ears. The headrest is also equipped with a vibration speaker to provide clear sound directly to the passenger.

4. Customizable cabin fragrance

Five types of fragrances are sprayed into the cabin, creating a comfortable space where you can enjoy choosing the fragrance according to your mood.

Designer's Intention

Comment from Ryuhei Ishimaru, President and Representative Director of Fortmarei Inc., lead designer of the Moeye concept car:

"Moeye's design theme is 'Time.' This concept car is designed to embody the history of the automobile from the 'traditional' to Kyocera's 'car of the future.' The exterior profile evokes a classic coupe, while the details and geometric form give a clear sense of the future. The interior, which incorporates cutting-edge technology, has new shapes and warm textures that remind one of the era of hand-built craftsmanship. The cockpit features a minimalist design with a futuristic feel suitable for experiencing virtual reality. You can feel the future emerge from automotive tradition in ways that engage more of the five human senses, rather than shape and design alone."

Comment from Masahiro Inagaki, Kyocera Corporation Senior Executive Officer, General Manager, Corporate R&D Group:

"Through Moeye, Kyocera has developed a surprising, exciting, and priceless new transportation experience with a futuristic cockpit and original vehicle design.

Kyocera combines a number of unique devices and technologies to create a concept car that

² "HAPTIVITY" is a registered trademark of Kyocera in Japan



entertains a variety of human senses - sight, touch, hearing, and scent.

We will continue research and development on devices and technologies that contribute to enhanced safety and comfort in the era of automated driving and MaaS."

Kyocera will continue to contribute to the realization of a safe, secure, and comfortable automotive society by developing unique devices and systems in the mobility segment to enable new automotive concepts and a better user experience.

For more information on Kyocera: www.kyocera.co.uk

About Kyocera

Headquartered in Kyoto, Japan, Kyocera Corporation is one of the world's leading manufacturers of fine ceramic components for the technology industry. The strategically important divisions in the Kyocera Group, which is comprised of 298 subsidiaries (as of March 31, 2020), are information and communications technologies, products which increase quality of life, and environmentally friendly products. The technology group is also one of the most experienced producers of smart energy systems worldwide, with more than 40 years of know-how in the industry.

The company is ranked #549 on Forbes magazine's 2020 "Global 2000" listing of the world's largest publicly traded companies. With a global workforce of over 75,500 employees, Kyocera posted sales revenue of approximately €13,33 billion in fiscal year 2019/2020. The products marketed by the company in Europe include printers, digital copying systems, semiconductor-, fine ceramic-, automotive-and electronic components as well as printing devices and ceramic kitchen products. The Kyocera Group has two independent companies in the United Kingdom: Kyocera Fineceramics Ltd. and Kyocera Document Solutions.

The company also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation — established by Kyocera founder Dr. Kazuo Inamori — to individuals worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (converted at approximately €828,000 per prize category).

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