

Asahi Kasei Corp.
May 17, 2017

Completion of Asahi Kasei's drivable concept car AKXY™

Asahi Kasei and GLM Co., Ltd., an electric vehicle manufacturer, have completed a jointly developed concept car called AKXY™ showcasing a wide array of automotive-related materials and technologies from various Asahi Kasei businesses, focused on contribution to safety, comfort, and the environment.



AKXY™ exterior and interior

Size	Length 4,685 mm, width 1,813 mm, height 1,562 mm
Motor output	225 kW
Passenger capacity	3 passengers

1. About AKXY™

Asahi Kasei and GLM began discussions and planning for development of the concept car in 2015. The car utilizes the electric vehicle platform of GLM to achieve a drivable design. The concept car further heightens appeal to customers by having a design based on the SUV, which is popular around the world.

The name AKXY™ comes from Asahi Kasei X (multiplied by) You (the customer). By enabling many Japanese and overseas automobile manufacturers and parts manufacturers come directly into contact with Asahi Kasei's automotive-related materials, devices, and systems that are manifested in the concept car, we hope to further build and strengthen our relationship with customers in order to create new value for the future together.

AKXY™ is equipped with a wide variety of Asahi Kasei materials, components, and systems, numbering 27 products in all, most of them available for adoption in mass-produced vehicles, including engineering plastics to replace metal and enable vehicle weight reduction, artificial suede for seats with superior comfort, and an in-car communication system utilizing various speech-processing technology.

The car is additionally equipped with cutting-edge technology that has potential for commercialization in line with automotive industry trends for safe driving and accident prevention, including a contactless vital sign sensing system that is able to detect the pulse of drivers without

their being aware of it, and CO₂ sensors to monitor the in-car environment.

2. Moving forward

AKXY™ will be displayed at Automotive Engineering Exposition 2017 Yokohama, May 24–26, 2017, together with materials and devices not installed in the concept car, and models explaining internal structural components and parts. The concept car will also be displayed at Automotive Engineering Exposition 2017 Nagoya, June 28–30, 2017.

The Asahi Kasei Group will continue to deepen connections with automotive-related customers, and make comprehensive proposals of various key items in accordance with needs to heighten vehicle safety and comfort and contribute to the environment.

AKXY™ exterior and interior



List of Asahi Kasei products in AKXY™

	Portion of vehicle	Asahi Kasei product	Generic name
1	Head lamp cover	Organic/inorganic hybrid coating agent	Coating agent for plastics and glass
2	Lamp extension	Xyron™	Modified polyphenylene ether
3	Tire raw material	Tufdene™ S-SBR	Solution-polymerized styrene butadiene rubber
4	Tire cord	Leona™ filament	Nylon 66 filament yarn
5	Fender liner	Precise™	Spunbond synthetic continuous-filament nonwoven
6	Body paint raw material	Asahi Kasei Aluminium Paste™	Aluminum Paste
7	Body paint additive	Duranate™	HDI (hexamethylene diisocyanate)-based polyisocyanate
8	Tail lamp cover	Delpet™	Polymethyl methacrylate (PMMA)
9	Cockpit	WGF™	Film base reflective polarizer
10	Cockpit	Defroster sensor	-
11	System	Vital-sign sensing technology	-
12	System	Stand-alone voice command	-
13	System	Hands-free communication	-
14	System	In-car communication	-
15	System	CO ₂ sensor	-
16	A-pillar	Tuftec™	Hydrogenated styrenic thermoplastic elastomer (SEBS)
17	Interior decoration	Multicore POF™	Plastic optical fiber
18	Floor mat	Floor mat with PTT fiber	Floor mat
19	Connector/cable tie	Leona™	Polyamide resin (PA)
20	Speaker cover	Esterlloy™	ABS-based alloy resin
21	Car seat surface	Cubit™	3D knitting fabric
22	Headrest	MEF™	Moldable polyethylene foam
23	Seat skin	Lamous™	Microfiber artificial suede
24	Seat skin lining	Eltas™	Spunbond synthetic continuous-filament nonwoven
25	Inside door handle	Tenac™ metallic-colored & low-VOC grade	Polyacetal (POM) resin
26	Cup holders	SunForce™	Modified polyphenylene ether foam beads
27	LIB separator	Hipore™	Lithium-ion battery separator