

Development of tires for EVs (Electric Vehicles)



Yokohama Rubber is continuously promoting technological development related to EVs under the themes of "driving pleasure and harmony with the environment" and "research and development of tires for electric vehicles."

We deliver tires for new vehicle equipped EVs, including our global flagship tire brand "ADVAN".

EVs have high torque, which requires tires to have the abrasion resistance to withstand this torque, and there are also requirements for quietness so as not to disturb the quiet running sound.

We are developing tires that meet these and other requirements.

Equipping on New EVs

(2022) Mercedes -AMG EQS 53 4MATIC + :
ADVAN Sport V107



(2022) TOYOTA bZ4X: ADVAN V61



(2022) SUBARU SOLTERRA: ADVAN V61



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(2022) MITSUBISHI eK cross EV: BluEarth-FE
AE30



(2022) Nissan sakura: BluEarth-FE AE30



TOPICS

The Global Flagship Tire ADVAN Sport V107

Products target three premium car categories: premium high-performance cars, premium high-performance SUVs and premium EVs. We have refined our tires through joint development with car manufacturers as well as at the Nürburgring circuit, to be called the most unforgiving test course in the world. We have already begun delivery for new vehicles, with a focus on special models for premium cars including the Mercedes AMG and BMW M, and will use this as a base of development for the size expansion of replacement market.



ADVAN
Sport V107

[ADVAN Sport V107 Special Website](#)



HAICoLab, the AI utilization concept conceived by Yokohama Rubber

In the development of tires for EVs, Yokohama Rubber utilizes HAICoLab, Yokohama Rubber's proprietary framework for utilizing AI, which aims to promote new discoveries and digital innovation through "inspiration and creativity unique to humans" and "collaboration with the vast data processing power of AI". In particular, to achieve the high quietness target required for EVs, evolutionary computation (genetic algorithm), one of the HAICoLab's technologies, was used to optimize the pitch array. We generate and collect virtual data from simulations in addition to real-world data, and apply the new insights gained through AI-based prediction, analysis, and exploration to innovations in tire technology development.

※An acronym for Humans and AI Collaborate for digital innovation.

