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Analysis on Xpeng's Layout in Electrification, Connectivity, Intelligence and Sharing, 2023

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Research on Xpeng's layout in electrification, connectivity, intelligence and sharing: in the innovation-driven rapid development, secured orders for 100 flying cars

NIO, Xpeng and Li Auto are among the fastest-moving automakers in the revolution of electrification, connectivity, intelligence and sharing, and Xpeng is more innovative and radical than NIO and Li Auto, leading to its lowest gross margin.

In NOA field, Xpeng and Huawei lead in China.

Xpeng's car models feature its leading intelligent driving system. According to Xpeng's official data, as of October 7, 2023, of the orders for 15,000 2024 G9 cars in total, the MAX edition equipped with XNGP, Xpeng's advanced intelligent driving system, as a standard configuration, swept more than 80%.

The following are the results of the First China Intelligent Driving Competition held by D1EV:

Shenzhen Urban NOA List: first place: Xpeng G6; second place: Avatr 11; third place: ARCFOX αS HI Edition; fourth place: AITO M5.

Shenzhen Highway NOA List: champion: ARCFOX αS; runner-up: AITO M5; third runner-up: Hyper GT.

Shanghai Urban NOA List: first place: Xpeng G6; second place: Jiyue 01; third place: ARCFOX αS HI Edition; fourth place: Avatr 11; fifth place: AITO M5.

Shanghai Highway NOA List: champion: AITO M5; runner-up: Xpeng G6; third runner-up: Neta S.

Guangzhou Highway NOA List: first place: Xpeng G6; second place: AITO M5; third place: Avatr 11.

It can be seen that the NOA of Xpeng G6 is in a leading position in China.

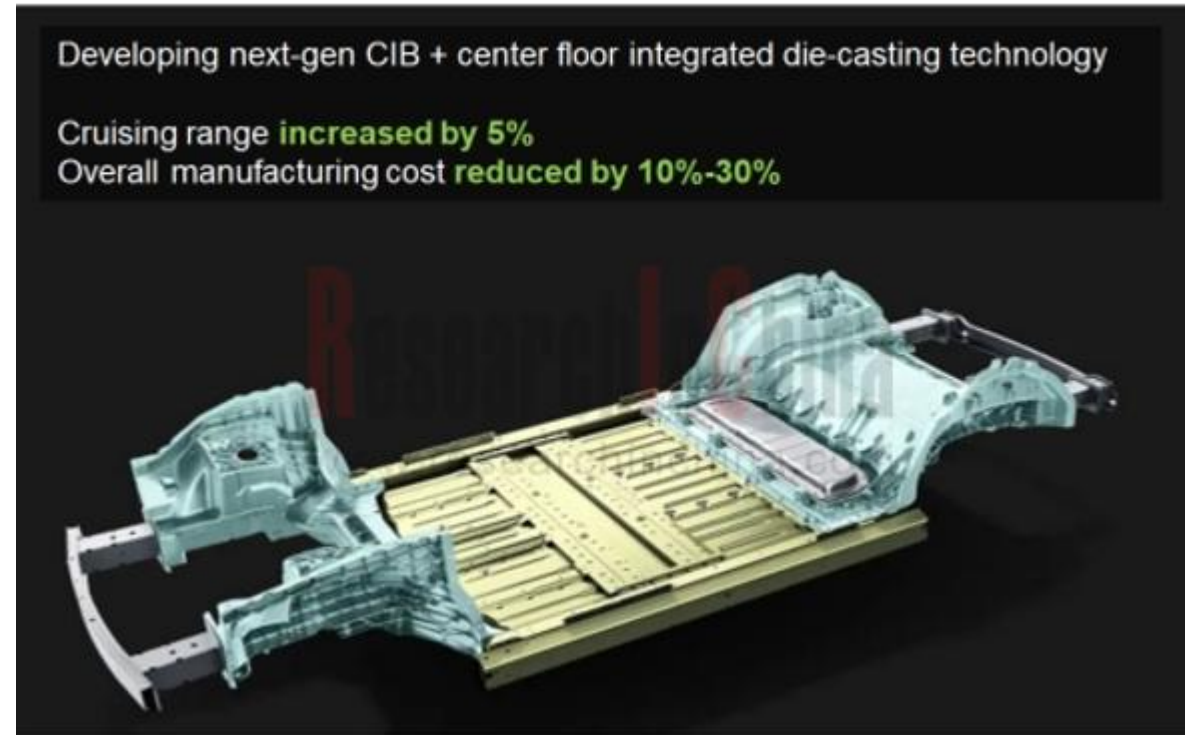


Xpeng is the first in China to use a 12000T ultra-large die-casting machine to realize CIB battery body integration design

Xpeng's integrated die-casting and CIB battery body integration design enhance chassis protection while saving vertical space, improving safety and riding comfort. The front and rear integrated aluminum die-casting technology has a torsional stiffness of up to 42,000N·m/deg, up 83%, and integrates 161 components, reducing the body weight by 17%.

He Xiaopeng, president and CEO of Xpeng, said that Xpeng now has the world's only 12000T ultra-large die-casting machine, and will soon expand a 16000T die-casting machine to support the production of larger die-cast parts. At present, Xpeng is developing CIB + center floor integrated die-casting technology, which can increase cruising range by 5% and lower overall manufacturing cost by 10%-30%.

At the Guangzhou factory, Xpeng and Guangdong Hongtu Technology adopted a new cooperation model of building "factory in factory" to speed up the application of integrated die-cast parts in automobiles. Guangdong Hongtu Technology has received the notifications of designating integrated die-cast products from multiple customers including Xpeng and other new energy vehicle brands and conventional automakers.



Xpeng has secured orders for 100 flying car

From 2013 to 2023, XPeng AeroHT, an arm of Xpeng, developed six generations of flying cars.

In October 2023, Xpeng AeroHT introduced two flying cars at Xpeng 1024 Tech Day: a split configuration and an air-ground integrated configuration. Wherein, the split configuration is named “Modular Flying Car”, consisting of two parts, air module and ground module which can automatically separate and combine.



On December 1, 2023, Jiaxing Nanhu District Road-Air Cooperative Three-Dimensional Transportation Industry Research Institute signed a reservation agreement with Xpeng AeroHT, planning to order 100 Modular Flying Cars used for comprehensive management of transportation such as highways and waterways, as well as flying camp experience and site connection transport.

To enhance flying car safety, Xpeng AeroHT independently developed the multi-parachute rescue system. In October 2023, this technology was installed on XPENG X2 and successfully completed a 50-meter ultra-low-altitude parachuting test, filling a gap in ultra-low-altitude rescues.

In early October 2023, the Ministry of Industry and Information Technology, the Ministry of Science and Technology, the Ministry of Finance, and the Civil Aviation Administration jointly issued the Outline for the Development of Green Aviation Manufacturing Industry (2023-2035), specifying the development timetable of eVTOL: by 2025, electric vertical take-off and landing (eVTOL) aircrafts will be piloted; by 2035, new energy aircrafts will become mainstream.

In the summary of Xpeng's development history in Electrification, Connectivity, Intelligence and Sharing, it can be seen that despite a very low gross margin, Xpeng has won recognition and support from all parties by virtue of its great innovation strength and leading technologies. For example, Volkswagen invested RMB5 billion in Xpeng.

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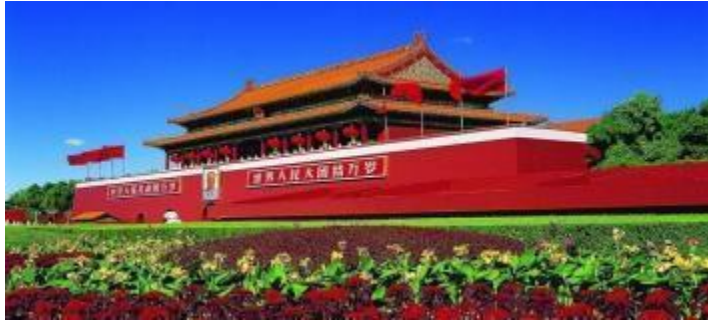
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