

How VinFast Forged an Armored EV and a New National Symbol

Category: Business

written by News Mall | November 6, 2025



Developed by **VinFast**, the country's young automaker, in partnership with INKAS of Canada, the Lac Hong 900 LX is both a symbol of industrial maturity and a technological milestone. It is Vietnam's first armored electric vehicle to earn VPAM VR7 certification, one of the world's most demanding ballistic protection standards.



Developed by VinFast, the country's young automaker, in partnership with INKAS of Canada, the Lac Hong 900 LX is both a symbol of industrial maturity and a technological milestone

The car was unveiled during Vietnam's 80th National Day celebrations in Hanoi. Two models stood at the center of the Vietnam Exposition Center – one pristine, the other scarred by testing. The second carried the marks of 440 live bullets and 11 controlled explosions, endured during testing at Germany's Beschussamt Ulm facility. The results confirmed that the vehicle could withstand fire from military-grade rifles such as the AK-47 and M14, and survive detonations from DM51 grenades and mines placed beneath its floor and roof.

Underneath nearly five tons of armor, two electric motors deliver a combined 455 horsepower and propel the vehicle from zero to 100 kilometers per hour in under ten seconds. Despite the weight, the Lạc Hồng remains composed and quiet, its dual-

motor layout providing balanced traction and stability. The run flat tires allow continued travel for up to 80 kilometers after being punctured, while optional systems, such as air filtration, automated fire suppression, satellite communication, and emergency sirens, enable the car to function as a true “mobile fortress.”

Meeting VR7 required more than adding armor. VinFast’s engineers redesigned the vehicle’s frame and battery enclosure to absorb shock without electrical failure, balancing structural rigidity and weight distribution through months of simulation and field testing.

Yet the Lac Hong 900 LX does not rely on technology alone. Its design carries deep cultural meaning. The grille pattern, inspired by Vietnam’s bamboo and Đông Sơn bronze drums, blends traditional motifs with modern geometry. A gold-plated Lạc bird, a national emblem, sits on the hood. Inside, Golden Nanmu wood, once used in imperial palaces, lines the cabin beside hand-stitched Nappa leather and 24-karat-gold-plated details. The rear lounge compartment, separated by a soundproof glass partition, features reclining seats with heating, cooling, and memory functions. Every surface, from air vents to door trims, reflects Vietnamese craftsmanship executed to international luxury standards.

Automotive experts in Vietnam regard the model as “a declaration of capability.” Achieving VPAM VR7 places VinFast’s creation alongside vehicles like the Mercedes-Maybach S600 Guard, BMW 7 Series Protection, and Cadillac One used by heads of state. According to Nguyễn Hoàng Lâm, a senior automotive safety researcher at the Vietnam Automobile Engineering Institute who has worked on crash-resistance and

certification programs, this level of compliance “demands precision only certain manufacturers can achieve.”

The armored version is derived from VinFast’s VF 9 SUV platform but heavily modified: its chassis extended by 20 centimeters and the third row removed to create a spacious executive cabin. Every section of the body, including door frames and roof joints, was re-engineered for load-bearing armor. The electric motors were recalibrated to handle the increased mass, while the 123-kWh battery pack was reinforced to resist deformation and thermal shock.

Beyond performance, the Lac Hong 900 LX reflects Vietnam’s expanding industrial ecosystem. The collaboration with INKAS brought global expertise in composite armor, while VinFast’s automated plant in Hải Phòng supplied precision assembly under strict digital monitoring.

Twelve units – two armored and ten standard – have been delivered to Vietnam’s Ministry of Foreign Affairs for official duties, marking the first time international dignitaries are transported in domestically produced vehicles built to global protection standards.

To observers, the Lac Hong 900 LX signals Vietnam’s growing self-confidence in advanced manufacturing. In less than a decade, VinFast has evolved from newcomer to an automaker capable of meeting the world’s strictest ballistic and electronic-safety benchmarks.

The achievement also mirrors a regional shift. Across Asia, countries such as India and Indonesia are strengthening their domestic EV sectors. Vietnam's success shows that with coordination, investment, and purpose, emerging economies can achieve technological parity faster than expected.

For VinFast, the armored EV is not an endpoint but a foundation. Its lessons in structural reinforcement, crash management, and secure energy storage will influence future consumer and commercial models. And by creating an armored electric vehicle that protects lives and reflects national identity, VinFast joins a rare group of Asian automakers shaping the next era of safe, sustainable mobility.

