



## **EVO37 - TECHNICAL INFO**

### **INTRODUCTION**

The EVO37 is a project by Kimera Automobili of Car Restomod aimed at the re-edition of a limited series of 37 examples built according to the philosophy of the original 1982 project, updated through the knowledge, materials, tools and technological applications of 2021 .

The car, conceptually, remains faithful and identical, with the sole addition of technical, structural, stylistic and functional references as a tribute to the subsequent cars of the group defined as "Martini Racing Team" (from the 037, then Delta S4 even to Delta Evo).

The philosophy is to maintain the essence and the soul of the old car by evolving it without upsetting it. The desired result is to create the EVO-lution of the 037.

The EVO37, like its Lancia 037 Rally progenitor, is a two-seats car, with a passenger cell derived from the Lancia Beta Montecarlo, front and rear tubular trellis frames, central engine and two-wheel drive on the rear axle. Each mechanical component of the EVO37 is revised and evolved according to the philosophy and principles of the Restomod project.

Kimera Automobili, which spent many years in the past restoring and building Lancia 037 and Delta S4 both Stradale and Group B, acquired and stored the intellectual property of all the main technical components (chassis templates, technical drawings, scans and cad projects, files production and printing, mathematics for the processing) which were the starting points for evolving the project of the Lancia 037 of 1982 into EVO37 of 2021.

### **SUPPLIERS AND DESIGNERS**

In order to faithfully maintain the technical concept, the same designers who gave life to the 1982 car were involved in the EVO37 project. They gave the main inputs and diagrams of the technical solutions adopted by the EVO37.

Kimera Automobili, in this project, brought to the same table the staff of the Lancia 037 with the technicians of some top Turin automotive companies.

Eng. Sergio Limone approved the overhaul of the chassis and the setting up of the car, Eng. Claudio Lombardi has completely overhauled the engine and the technicians Vittorio Roberti and Franco Innocenti have reconsidered the construction process and the materials of the car.

This glorious and legendary team supervises the EVO37 project and cooperates with a task force of companies such as Bonetto CV for the frame and chassis part and Italtecnica for the power unit part, while other excellent craftsmen and professionals in the automotive world, were entrusted with the construction and assembly of the bodywork and passenger compartment respectively. Maps, LAM Stile, Bellasi, CiElle Tronics, Sparco, Pakelo, Andreani - Ohlins, Brembo e Pirelli are some of the other excellences that gave life to this project.

### **CHASSIS**

The chassis has been completely revised and modified through the introduction of new attachments, geometries, materials and construction procedures. The Donor Car of the starting chassis frame for the passenger cage, exactly as it happened in '82 for the Lancia 037 Rally, is the Beta Montecarlo which therefore also becomes the donor of the circulation documents that will be updated and regularized for the technical changes made to end of the construction process.



A modern roll-bar will be applied to this central cage both in materials and in the construction procedure which will not be perceptible from inside the passenger compartment and will not reduce its comfort. The front and rear tubular frames in molybdenum chrome steel, properly worked according to modern technologies and processes will be anchored to the central cell of the EVO37, becoming a single new frame. This has been reconsidered and revised by Eng. Sergio Limone in some geometries and sizing to increase both torsional rigidity and adaptation to new chassis.

The wheel and steering arms, the hubs and the shock absorbers will have the advanced structural and technical setting of those used on the subsequent Lancia Delta S4 - Integrale but using modern CNC technologies they will be machined from solid and machined one by one, reaching a refinement technological and precision identical to those employed by the current Hyper Car.

## POWERTRAIN

The EVO37 engine designed by Eng. Claudio Lombardi, embodies all the philosophy and technological excellence, which gave the Turin brand the current unbeaten record of the World Rally Manufacturers Championships, revised and updated thanks to the modern applications. The displacement of the starting engine is the same as the last Lancia 037 group B racing, ie 2111 cm<sup>3</sup> which will be further expanded with the evolution of the Lancia Delta S4's dual volumetric-turbo supercharging scheme.

The modern reinterpretation and technological innovation of this scheme can be found in the introduction of the electronic management of the engine and supercharging (which for 037 and S4 was mechanical and pneumatic).

The structural body and the typical rotating lobes of the Lancia "Volumex" will in fact be the same, leaving the engine with the unmistakable hissing sound tone but the electric thrust will leave the engine free from the weight of the thrust on the compressor. Thus obtaining only the advantages of power at the bass. revs which, combined with the intervention of a powerful modern turbo, will guarantee the incredible power of 500 horsepower which, on the maximum evolution and configuration of the car, will give a weight / power ratio of 1 to 2 (one horsepower for every 2 kilograms vehicle weight).

The engine electrical system is managed by a modern electronic control unit that can be interfaced with a modern telemetry system while the gearbox is available in both sequential and manual configuration.

## BODYWORK

The unmistakable line of the Lancia 037, already conceptually revolutionary at the time of the 80s for the use of fiberglass, on the EVO37 is refined by a new and modern body in "combed" carbon fiber with the current and innovative techniques and worked in the most recent autoclaves.

The typical structure of the front and rear bonnets has been resumed and reworked allowing for a cleanliness of the lines and an increase in structural / functional solidity and perceived quality that reaches the standard of the typical latest modern cars.

The stylistic trait has been maintained even if modernized thanks to a slight reduction of the front and rear overhangs and an increase in the width of the carriageways obtained with a further reference to the Lancia Delta with the typical Y widening on the sides, above the wheels.

With the philosophical coherence of the modernization of the materials combined with the maintenance of the character of the mother car, the light and headlight package maintains the shapes, dimensions and proportions but is renewed in the materials by combining the latest LED technologies with both the constant characterization in DLR and for the night use in high beam and low beam phase.

The glance of the EV037 offers the pleasant solution of a car that has maintained its stage presence and its technical essence while radically renewing itself to be exactly its own contemporary re-edition.



Obviously, the desired color of the car can be chosen among a wide range of colors and customizations will also be made available in reference to the previous Lancia limited editions (Rosso 037 Stradale, Martini Livery, Bordaeux S4, Blu Lagos, Verde York, Giallo Ginestra, Grigio 16 valves, Pearly White, etc.)

## INTERIORS

The cockpit of the EVO37 maintains the same dashboard and central tunnel structure as the Lancia 037 Rally but is completely overturned in the refinement of materials and attention to detail.

The central dashboard remains flat and smooth but the current material is replaced with visible carbon fiber, covered in the edges with Alcantara or leather in line and a reference to the sporty Lancias of the 80s and 90s. In the central tunnel, the red buttons are used to configure the various electronic settings of the car in an analog way and there is also the central dashboard near the handbrake (which will be hydraulic as on rally racing cars).

All the instruments will be kept analog, designed with references to racing Lancias but will be rebuilt with modern materials and technology derived from watchmaking.

The seats will have the shape of those of the Delta S4, also in this case revised and available in Alcantara or Leather in combination with the dashboard and central tunnel. The seat belts have four attachment points, derived from and racing homologation.

The cockpit represents the excellence of the made in Italy style and the Turin automotive craftsmanship, typical of the best Italian sports cars.