

Fabrizio and Giorgetto Giugiaro will be at the Turin Motor Show.

The two world famous designers have created the Techrules REN, the Chinese 3-seater electric supercar, which was unveiled in Geneva in March. The car will make its Italian debut on the GFG Style stand in Turin before going into mass production.

“This is the first time we have taken part in this event, which we believe is interesting in terms of both the numbers and the quality. The “open and popular” formula is stimulating, and we are here above all to show our support for what we consider one of the world’s most outstanding car producing districts. We have involved other partners from Turin who have been a part of this project, from the fashion to the on-board electronics, the superb cutting-edge engineering and the prototyping,” said Fabrizio Giugiaro.

The car on display is a hypercar which anticipates the imminent debut of a new player in the automotive industry. The stylistic brief we received marked the start of our collaboration with the Chinese Techrules brand, which aims to mass produce very innovative cars using its own TREV (Turbine-Recharging Electric Vehicle) technology that employs turbines to supply the batteries through a generator. The Italian and Chinese technicians who are developing and refining this technology underlined the truly exceptional performance, consumption and emissions figures which could revolutionise the car market and mobility generally.

The design

The surprising exterior design of the Techrules Ren is clean, simple and modular; the lines faithfully reflect the car’s underlying structure, based on the consolidated stylistic principle that form must reflect function.

When they designed the Ren, the prime goal of Fabrizio and Giorgetto Giugiaro and their design team in Turin (GFG Style) was to achieve excellent aerodynamic efficiency. None of the surfaces was designed merely with style in mind: all the lines and the flow of the surfaces fulfil a precise aerodynamic purpose.

At the front, the large external air intakes divert the air to the wheel arches to cool the 380 mm carbon ceramic front brakes. The front light clusters, around the rims of the large front air intakes, feature LED laser technology and incorporate dynamic direction indicators.

The depth of the wheel arch just above the wheels is as small as possible to contain the front surface, with vertical side panels and tapered at the rear to reduce resistance. The side view of the car is flowing and simple and combines with the aerodynamic design elements to produce a pure, streamlined profile.

The styling of the interior is extremely original but functional, entirely in keeping with the car’s balanced proportions, and reflects its exclusive concept and the focus on aerodynamics. The small central polycarbonate canopy roof opens in a spectacular manner, lifting up and sliding towards

the rear, stopping behind the occupants.

The only decoration on the outside of the bodywork is a small cavity on each wing with the badge; but these too have a function of their own and a triple purpose. These sculpted units house the cameras that replace the rear-view mirrors, the loudspeakers that allow occupants to talk to people outside the car and the Ren emblem. Other important styling elements include the elegant multi-spoke 22-inch wheel rims whose design recalls the turbines of a jet engine, continuing the aeronautical theme.

The decisive and original exterior lines are completed by the transparent central section set between two opaque bodywork shells. This solution reveals the advanced technology and top quality components at the heart of the car, elements that were designed and developed by L.M. Gianetti, an international specialist in racing and sports cars. The underlying carbon fibre chassis, clearly visible under the solid polycarbonate shell, creates the impression of a dark central line.

At the rear, the spectacular turbines – one or two depending on the specific version – also emerge clearly from under the polycarbonate covering, as well as the protective cell, which emphasises the car's robust, safe nature. Even further to the rear, the 60-litre luggage compartment is visible, surrounded by the structure of the racing suspension with its various components, true jewels of engineering.

The third brake light seems to float above the rear part of the central canopy and it can be seen through the rear wings.

The rear end of the bodywork incorporates active rear spoilers that can deploy together or independently of each other to enhance the high-speed stability and the downforce, depending on the circumstances. These spoilers, borrowed from the racing world, are deployed at high speed by independent hydraulic actuators. A dedicated electronic control unit assesses various values – such as speed, acceleration, steering lock and braking force – to calculate the assistance demanded of the spoilers to optimise the car's performance. When they are retracted, only the very light shut lines hint at the presence of these aerodynamic elements.

The turbine exhaust issues from large futuristic rear apertures, featuring LED lights that create a vivid star effect when they are lit. The rear lights and the original direction indicators remain hidden until they are lit, and they then surround the rear exhausts with an extraordinary stylistic effect that no other supercar can boast. There is also a fog light typical of a racing car at the centre of the rear panel, together with a third rear-view camera.

The Techrules Ren in detail

The top-of-the-range version of the Ren is powered by a 25 kWh battery and delivers a maximum of 960 kW (1305 bhp), with a range of 1,170 km on a full tank of 80 litres of diesel fuel (NEDC cycle). The very light chassis was designed and built by L.M. Gianetti, an international designer based in Turin, who specialises in sports and racing cars.

The modular layout, designed to enhance performance, allows the car to be configured with one, two or three polycarbonate cockpits depending on the driver's needs. When it is configured for three occupants, the two passengers sit comfortable on either side of the driver in a very sporty position. They have folding monitoring screens in front of them, and a communication system with loudspeakers and microphones built into each head restraint.

The Ren also stands out for its refined, exclusive interior, furnished with the best materials on the market today to create a luxury finish. The driver's wraparound cockpit and the passenger pod spaces are upholstered entirely in Italian leather and Alcantara for an even more enveloping sensation.

The exclusiveness is evident even in the unusual decision to upholster the seats with an extremely fine denim produced by PT (Pantaloni Torino), an international designer clothing company. The particular weave of the fabric was designed specially to offer the occupants the right feeling of support and to prevent occupants from sliding forwards when cornering or braking.

Production of the Ren is expected to start in 2018 but orders are already open. A limited number of track racing versions will be produced in Italy with the outstanding craftsmanship of L.M. Gianetti.

GFG STYLE IN BRIEF

GFG Style was created in 2015 out of the many years of experience in the field of car styling of its founders Giorgetto and Fabrizio Giugiaro.

Giorgetto is one of the world's most important and best known designers of cars, and not only cars, in the world, with over 50 years of activity behind him.

Fabrizio, who has been an architect and designer for more than 30 years, creates car design, industrial design, plans and projects for interior and exterior architecture for public and private clients.

They have been responsible for designing over 300 standard car models and more than 200 research prototypes. We can calculate that over 60 million standard production models have been created by their pencils for the world's most important car makers.

GFG Progetti has two premises in Moncalieri (Turin): its headquarters and an operational building.

The staff comprises designers, engineers, model makers and interior prototype makers.

The company can also draw on partnerships with the most important and most reliable suppliers to the motor industry in the Turin area.

In a short space of time it has become an attractive benchmark for worldwide car design, collaborating with several Asian and European car makers.

GFG's mission is to offer a wide range of specific services for the development of new vehicles and products. From styling to feasibility, model making and prototype development.

TECHRULES IN BRIEF

Techrules is a new automotive research and development company based in Beijing. The corporate purpose is to develop powertrain technologies that will make future generations of vehicles more efficient, friendlier to the environment, more user-friendly and able to offer the motorist a more enjoyable experience in the car. Techrules is a subsidiary of Txr-S, a research and development company as well as an investment company, which coordinates a number of affiliated companies developing new materials, structural elements, electromagnetic engineering, powertrain systems, bioenergy and aerospace.

TECHRULES Ren

Ownership

Techrules Automobile R&D Co., Ltd.

Electric supercar turbine-recharging vehicle/three-seater

1287 bhp

from 0 to 100 kph in 2.5 seconds

top speed 320 km/h

710-800 volt battery pack

powered by one 80 kw turbine and one 30 kw turbine

range of 1170 km with 80 litres of fuel

TREV technology

Carbon fiber chassis and body

Styling Concept design

Conceived and designed by Fabrizio and Giorgetto Giugiaro

aerospace-inspired design

expressed in 3-cockpit body

"jet fighter" opening

3 configurations: central driving position + 1 or 2 passengers

Built in the Turin Car District

Design: Fabrizio and Giorgetto Giugiaro

Denim and leather interiors in cooperation with PT Pantaloni Turin

Chassis and mechanicals: L.M. Gianetti

Prototyping and models: GFG Style and Superstile

On board infotainment-electronics: Bylogix

Seat belts: Sabelt

Tyres: Pirelli