

ITALDESIGN AUTOMOBILI SPECIALI ZEROUNO

AT A GLANCE

- **Only five units will be built by the end of 2017**
- **Racing car performance with type-approval for normal roads**
- **Modular chassis in carbon fibre and aluminium**
- **Ultra-lightweight bodywork entirely in carbon fibre**
- **Functional design to improve performances**
- **5.2 V10 naturally aspirated engine**
- **0-100 km/h in 3.2 seconds**
- **Top speed of 330 km/h**
- **Special packages are available for customising finish and performance**
- **Designed, engineered and produced by Italdesign**

Designed to be light

“**Lightweight**”. This was the starting concept that designers and engineers implemented for the *ZEROUNO* project. Right from the first styling draft, the Styling Centre and the Engineering Development Department implemented what is defined as *simultaneous engineering*, a work method developed and perfected by Italdesign way back at the end of the 1960s and constantly improved over the company's almost fifty-year history.

Designers and engineers work simultaneously to carry forward styling solutions and functional-feasibility checks until an **ideal compromise** is achieved that meets design and performance requirements alike.

Functional design has always distinguished projects set in motion and developed in Moncalieri: there are no styling proposals at Italdesign that do not also simultaneously embrace a technical solution.

“The development of the *ZEROUNO* was based on the know-how achieved in the designing of hundreds of cars in our 49-years history” **Antonio Casu, Chief Technical Officer**, said. “To reach the timing target we applied the latest CAx and Simulation Technologies. Styling has been integrated since the very beginning with early engineering and production processes. All this allowed us to produce a state-of-the-art car in terms of performance and safety.”

Limiting the final weight of the car as far as possible in order to ensure exceptional performances by equally emphasising the carbon fibre and aluminium chassis and the powerful **V10 5.2 naturally aspired engine** was the objective defined right from the start of this project.

This is why the **entire bodywork is in carbon fibre**. The same material is also generously used inside the cockpit; the state of the art in fibre layering technology, together with the skills of craftsmen during the finishing stages, combined to achieve a light weight - despite the car measuring 4847 mm in length and 1970 mm in width by 1204 mm in height.

“We put it our best skills into the production of the first car – **Massimo Bovi, Head of Pre-Series Center and Production**, added – using some of the finest productions methods and engaging our high skilled workers. At the same time we engaged deeply in the latest technologies in electric and electronics. Therefore this first car is showcasing our expertise gained in our history”.

“The Automobili Speciali *ZEROUNO* is an invitation to all of our clients to visit our facility, get to know our skills and take advantage of them - said **Massimo Martinotti, Head of Business Development**. “Our project witnesses what we can offer to OEMs worldwide besides our traditional services: namely the possibility to design and build for them Ultra Low Series models”.

Beauty is the beast

Simultaneous engineering is ideally expressed by the exterior design. These two souls live together in complete harmony and exemplify the car's character: racing performances with type-approval for driving on normal roads.

"The exterior is characterised by the two sides of the same coin," - said **Filippo Perini, Head of Innovation Design** at Italdesign: "Above the tornado line, surfaces are distinctly softer and smoother in keeping with the **Italian Gran Turismo tradition**. The lower part is modelled **by aerodynamics**. To achieve the performances we had in mind, we had to dare to go beyond all limits in styling and even from a purely technical points of view. The **outcome** ensures an extremely high impact without ever being **design for design's sake**".

Relying on Italdesign advanced **Virtual Reality Centre and the simulation techniques of Engineering**, the designers were able to identify the most aerodynamic technical and aesthetic solutions and test them immediately - even before starting work on building the car.

"We created the *ZEROUNO* to demonstrate the best skills of our 1,000 employees based on forty-nine years of experience to further develop this business in the future, using the best and fastest processes and collaboration models. Beside **offering these Ultra Low Series Programmes to all interested parties** we will continue this story and put every 18-24 months ambitious and innovative concepts in an Ultra Low Series on the road to drive innovation forward so it can be experienced in daily life and to demonstrate the state of the art in technology for our customers" stated **Jörg Astalosch, CEO Italdesign**.

Inspired by race cars

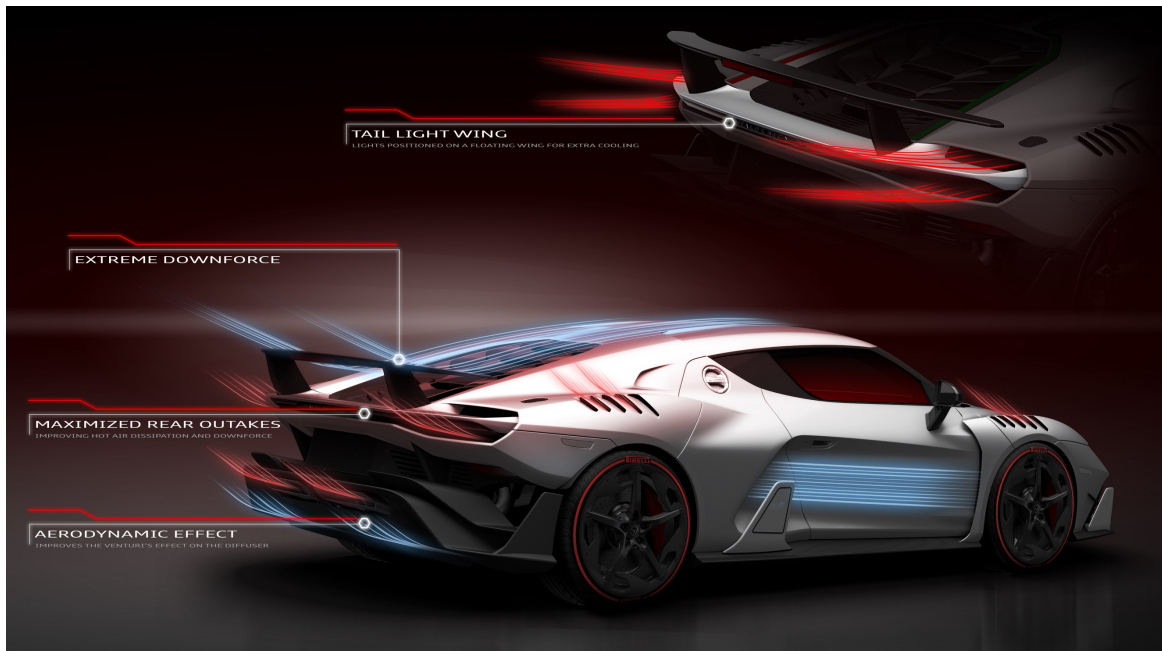
The setting at the front is inspired by the ultimate top-performance cars: single-seater racing cars. The characteristic feature of the nose is the **six-sided polygon** first seen in the GTZero concept-car in 2016 which will also be referenced again in future projects. Together with the two side air intakes, it ensures the optimum flow of intake air.

Potential lift effects caused by the intake of air through the central slot, as highlighted by simulated aerodynamic tests in the virtual reality centre, were eliminated thanks to an **aerodynamic solution** named **Y Duct®**.



The air enters the central intake, flows along a “Y-shaped” path and emerges from the two apertures inserted in the upper part of the bonnet, thereby generating **downforce**.

This aerodynamic flow is maximised by the rear spoiler's lower wings that increase the downforce.



The spoilers with overlapping wings that characterise the lower part of the car's design at the front and the rear alike are suspended and help create an additional aerodynamic load.

The slots on the front and rear wheel arches not only highlight ZEROUNO's rather aggressive looks but also help dissipate hot air.

The **lights** use Full LED technology and also perform an aerodynamic function since they are floating systems mounted inside the front and rear wings.

The rear view highlights *ZEROUNO*'s "extreme" character - and the "**semi-naked**" styling is particularly evident: the taut, angular outlines of the spoilers reveal the tyres and, in the middle, the two 80 cm wide **laminar exhausts in titanium**, which are designed to accelerate the out-flow of exhaust gases.

Functional design applied to rims

Rims are usually noticed because of their generous dimensions and the aesthetic impact they have on the overall volume of the vehicle. This element was also specifically designed for *ZEROUNO* and is the equally the outcome of combined **styling and engineering**. Built in **aluminium** by the Italian company OZ, with a diameter of 20", rims were designed to extract the hot air generated by the powerful **carbon-ceramic** braking system with 8 pistons at the front and 6 at the rear. The structure is fitted with a **perimeter turbine in carbon fibre** that maximises the aerodynamic effect and the cooling of the breaking system.

Interior

In order to achieve a light weight designers and engineers also joined forces inside the cockpit. Since this car has type-approval for driving on public roads - it is consequently equipped with front and side airbags. Italdesign emphasised the use of material and on-board systems ensuring high performance and low weight. The interior of the car is simultaneously essential yet elegant, in keeping with the exterior: **carbon fibre** dominates the overall styling. **Door panels, dashboard and central tunnel** are all made exclusively with this material. The **digital cockpit** houses all the car's main controls. Three small monitors in the middle of the dashboard, on the other hand, control all air conditioning functions.

The dual-clutch 7 speed gearbox is controlled by classic paddles mounted behind the steering wheel.

Endless customisation

The five lucky owners of *ZEROUNO* will be able to **maximise the customisation of their cars** so that each one will be truly unique. Over and above finishing the bodywork with a colour specifically developed for the client, including **full carbon look**, Italdesign has also developed several **optional packages** involving the exterior and inside the cockpit.

The most extreme customisation is offered with the "Corsa" package, which boosts an accentuated aerodynamic layout dedicated to race track performance and is designed to ensure the performances and the handling of the car with special designed light weight side mirrors, carbon fibre monocoque seats frame, racing rear wing with central longitudinal fin, monodado rims and a dedicated sport, titanium made, muffler. The "Corsa" package will be for track use only.

Pirelli P-Zero

Not only was the *ZEROUNO*'s front design inspired by the single-seater racing cars, the tyres too have a direct motorsport link. Italdesign chose Formula 1's exclusive tyre supplier, Pirelli, to equip its first Automobili Speciali model. The engineers developed a dedicated version of the high-performing Pirelli tyres, the P Zero, in 245/30 R20 for the front and 305/30 R20 for the back.

Featuring High Working Range tread compounds, able to guarantee maximum grip in all conditions, *ZEROUNO*'s dedicated tyres belong to the new line of coloured tyres, premiered in Geneva by Pirelli. The new Pirelli tyres will be available in four different colors: white, red, yellow and metallic grey.

The special alliance with Roger Dubuis

The world launch of *ZEROUNO* involves an alliance between Italdesign and Geneva watchmaker Roger Dubuis, renowned for its avant-garde approach to design and engineering, to create an exclusive eight-piece, proudly Italian collection of the brand's iconic Excalibur Spider wrist watch. Produced in hi-tech and innovative materials such as carbon and ceramic, the **Excalibur Spider Italdesign Edition** perfectly represents the forward-looking attitude that ideally unites Italdesign and Roger Dubuis in their respective industries.

The notion of tailormade and handmade, the attention to detail, the choice of the best materials possible, fired by a combination of vast knowledge, comprehensive expertise, sophisticated research and innovative drive are the key elements shared by the *ZEROUNO* and the Excalibur Spider.

Powered by hand-wound Flying Tourbillon Skeleton Calibre RD505SQ, the Excalibur Spider Italdesign Edition with its cutting-edge materials and world-class design is no exception to these values and a magnificent symbol of a fruitful partnership to come.

COMPANY PROFILES

Italdesign

Italdesign is a service company providing design, engineering and production for the transportation industry, through to final testing and type-approval and support into Starting of Production and the design of complete business models. Italdesign is based in Moncalieri, Torino, Italy and today has premises of more than 50.000 squared meters, a full-scale design and engineering campus and a cutting edge development and prototyping centre. It has 1000 employees in Italy, Spain and abroad. Italdesign offers its services to all interested parties worldwide. In 2017 Italdesign launched as additional business, a dedicated unit to design, develop and produce ultra-limited vehicles for all OEMs worldwide. In 2016 and 2017, Italdesign was awarded Top Employer certification in Italy.

More information on: www.italdesign.it

Pirelli

Founded in 1872, Pirelli is a leading global tyre manufacturer with a distinctive focus on high-end segments, Premium tyres with the highest technological content. Partnering with the best prestige and premium car makers worldwide, Pirelli has a portfolio of more than 1,700 homologated tyres which fit the personality of each car model, designed and tested to achieve perfect driving. Present in 14 countries with 20 plants, Pirelli produces car, motorcycle, truck, bus and agricultural tyres; the Group has a wide commercial presence (more than 160 countries) with a balanced exposure to both mature and emerging markets. Pirelli is distinguished by a long industrial tradition, which combines a capacity for innovation with product quality and brand strength. This strength is further enhanced by Formula 1™, for which Pirelli is the exclusive tyre supplier since 2011 and for the three-year term 2017-2019.

In line with the 'green performance' strategy, Pirelli's research and development operates with ever increasing attention to products and services of high quality and technology and low environmental impact

OZ

Created in 1971, OZ is a legend in the motorsports industry thanks to over 45 years of success in motor-racing. OZ is one of Italy's front-runners in the world of wheels and is involved in many sectors such as motorsport (including F1, WRC, DTM, IndyCar winning over 150 awards to its name) as well as the after-sales market, motorbikes and OEM with customized projects for prestigious teams and constructors. All OZ wheels are designed, developed and tested in keeping with OZ's racing DNA, the utmost expression of technology and "winning attitude". At OZ, designing and producing a wheel, whether for competition or street use, means attention to detail – in the materials, the design and the production- in the pursuit of a singular aim: innovation.

Since 45 years, OZ collaborates with the most prestigious car makers and car designers such as Ferrari, Lamborghini, Aston Martin, Pininfarina, AMG, and Italdesign-Giugiaro to name but a few.

Roger Dubuis

Roger Dubuis has been at the forefront of contemporary Haute Horlogerie since 1995.

Its audacious creations, firmly anchored in the 21st century, embody substantial expertise expressed through the finest watchmaking mechanisms combined with powerful and daring designs.

The Roger Dubuis Excalibur and Velvet collections are distributed worldwide through an exclusive sales network and boutiques.

ITALDESIGN ZEROUNO

TECHNICAL DATA

DIMENSIONS	Length	4847 mm
	Height	1204 mm
	Width	1970 mm
	Wheelbase	2650 mm
	Fuel tank capacity	73 litres
Tyres	Pirelli P Zero	
	Front	245/30 R20
	Rear	305/30 R20
Brakes	carbon-ceramic	
	front	8 pistons
	rear	6 pistons

PERFORMANCES	Top speed	330 km/h
	0-100 km/h acceleration	3.2 sec

POWERTRAIN	Engine	V10, 5.2	naturally aspirated
	Gearbox	7 gears	dual clutch with controls on steering wheel
	Total power	610 Hp	(449 kW)
	Maximum torque	560 Nm	at 6500 rpm
DRIVE			4 wheel drive

Special thanks to technical partners: OZ, Pirelli, Bellasi, SFC Compositi.

Media contacts:

Franco Bay +39 3337897749
franco.bay@italdesign.it

Christian Bolognesi +39 3357275212
christian.bolognesi@italdesign.it