



PRESS RELEASE

Magneti Marelli at the Paris Mondial de l'Automobile Motor Show 2014

Magneti Marelli Technologies in the spotlight in Paris with a significant presence of advanced lighting systems (adaptive laser and full-LED headlamps) on the various models on display.

A relevant presence also on the Fiat 500X in the powertrain, electronic systems, exhaust systems, plastic and suspension systems areas.

Lighting technologies, electronics, powertrain, components for exhaust and suspension systems: all the Magneti Marelli technological fields are applied to the most important innovations on display at the motor show that will close on 19th October in Paris.

One of the main novelties of the Paris show is the **Fiat 500X**, Fiat's new crossover that adopts many Magneti Marelli technologies.

The instrument cluster combines the best of digital and analog technology within three circular elements, arranged side by side in a single design element. At the centre is a colour TFT 3.5-inch digital display in the top of the range version. To the sides of the TFT, two "bargraphs" are clearly visible, which indicate the fuel level and the coolant liquid temperature level. The display shows, in addition to the speed in digital format, the information on the status of the vehicle, the on-board computer, the drive mode and the distribution of traction over the two axles. The panel is completed by two analogic side dials, each containing, respectively, the tachometer and the revolution counter.

Magneti Marelli for Fiat 500X also provides front lighting with halogen headlamps and optionally Xenon 25-Watt headlamps, a technology that represents an important development for the lighting system based on Xenon technology. The 25-Watt headlamp, compared to the traditional 35-Watt system, enables lower energy consumption whilst always ensuring excellent visibility. In addition, this model does not require the presence of the self-levelling system and headlamp washers, compulsory by law on the 35-Watts headlights.

For the new Fiat 500X Magneti Marelli also provides the suspension systems, the electronic engine control units (for 1.3 Diesel, 1.4 MultiAir and 1.6 petrol engines), motorised throttle (1.3 Diesel, 1.4 MultiAir and 1.6/2.0 petrol and Diesel), intake manifolds (1.4 MultiAir and 1.6/2.0 petrol and Diesel), PFI injectors (1.4 MultiAir and 1.6/2.0 petrol) and control unit and hydraulic kit for the DCT dual-clutch transmission (1.4 MultiAir). Particular attention has been devoted to the shock absorbers, to enable the compact crossover to optimally absorb the stresses of the road.

The technology of Automotive Lighting, the lighting division of Magneti Marelli, plays an important role in Paris, with a presence on the most prominent models on display. Among these the new **Audi R8 LMX** the first series production car in the world fitted with **Laser/LED high-beams**.

The blinkers, DRL and parking lights that make up the headlamp are based on light guide LED technology; the low-beam function is based on an evolution of the LED modules, but the real revolution is concentrated into the high-beam unit.

The driver can activate the laser high-beam that generates a cone of light with dual capacity with respect to the LED high beams and complies with the ECE requirements. Upon activation of the function, a camera monitors the driving conditions, recognising oncoming cars and those in front of the vehicle in order to avoid dazzle. If driving conditions so permit, and the car is travelling at a speed of more than 60km/h, the function is activated and the depth of illumination increases. The laser module for the high beam function has a light source of 2 mm² to produce a high-intensity light beam obtained thanks to the development of very high-precision optics. A phosphorus converter turns the laser beam into white light with a temperature of 5,500 degrees Kelvin - the ideal conditions for the human eye that allow the driver to recognise the contrast more easily and help prevent fatigue.

The technologies developed by Automotive Lighting are also adopted on the **Audi TT Roadster**, presented as a world premiere, with headlamps available in three versions: 25-Watt Xenon, e-light and matrix beam. In the most advanced version, the headlamp uses LED technology with "matrix beam", i.e. the light beam is electronically and adaptively operated and oriented. In fact, a management control unit handles the three reflectors which direct the light beam while a front camera provides information to the system on driving conditions and on the traffic proceeding in the opposite direction in order to avoid dazzle.

Particularly relevant is the impact of the lighting also on the high profile cars of **Mercedes-Benz**: full-LED headlamps for the new **Mercedes AMG GT** supercar and for **the Mercedes S500 Plug-In Hybrid** on which there are high-performance full-LED headlamps with adaptive functions; LED headlamps also for the world premiere **Mercedes B-Class** and adaptive LED headlamps for the new **Mercedes C 63 AMG**. Also on display at the show is the **C-Class** with headlamps available in three halogen versions, LED and adaptive LED.

Continuing with the lighting area, the Magneti Marelli Automotive Lighting headlamps are adopted on the **Audi A4** (Xenon and LED), on the **Honda Civic Type R** (halogen and LED) and on the **Peugeot 308 GTi** (full-LED). LED rear lamps for **Audi** (RS3, A4 Avant, Q7 and R8), **FORD** (S-Max MPV and Mondeo), **Honda Civic Type R**, **Hyundai i20**, **Peugeot 308 GTi** and **Volkswagen Passat**.

European premiere of the **Alfa Romeo 4C Spider** with Magneti Marelli technologies in many areas: lighting, electronic control unit, hydraulic kit and electro-hydraulic actuators of the dual-clutch transmission, suspension and exhaust systems.

A wide presence of Magneti Marelli technologies also in the area of electronic systems. On the new **MINI 5-door** there is the infotainment multimedia system, based on a concept of "open source" technology. The system offers a number of sophisticated features, including navigation, brilliant graphics, Internet access and in addition wireless connectivity, until now not available in entry-level systems. Still in the field of infotainment, the most significant innovation with respect to the Business navigation system adopted by **BMW** for the **Series 1, Series 2, X4 and X6** models consists of the graphic images, which now appear 10 times faster than before on the 6.5-inch control display. High-resolution maps, which now have

3D elements and animations, and a higher speed in the calculation of routes, characterise the improvements made possible by optimisation of the control unit technology. The new infotainment system uses the Magneti Marelli open platform to enable a wide range of applications of on-board vehicle telematics and connectivity. The features of the system include wireless connectivity, mobile office, navigation and advanced telematics.

Infotainment systems also for Peugeot, in particular for the **Peugeot 208 GTi**, the **308 GTi** and for the new **Peugeot 508**, which adopts a Magneti Marelli infotainment system with high-resolution (800x480 pixels) 7" touch screen display. The system brings together in a single interface functions such as radio, music, navigation, on-board computer and air conditioning.

Also noteworthy is the presence of Magneti Marelli technologies on the prestige models already launched such as the **Porsche Macan**, which adopts GDI injectors for the 3.0 V6 engine, and Magneti Marelli instrument panel, as well as the **Jeep Renegade**, present in Paris after the official launch. The Jeep Renegade adopts the new instrument panel developed by Magneti Marelli, which integrates several vehicle and infotainment functions within the display. In particular the colour TFT 7" version offers specific advanced feature display such as the "line departure warning" to maintain correct vehicle lane position, the "adaptive cruise control" with display of the distance from the vehicle in front, navigation with advanced instructions and "off road" functions such as automatic speed control on steep slopes. Also on the Jeep Renegade are the Magneti Marelli lighting systems, powertrain components, electronic systems, suspension systems and shock absorbers; plastic components and exhaust systems complete the presence.