

PRESS RELEASE

Magneti Marelli: technological presence at Auto Shanghai

The sixteenth edition of Auto Shanghai opens its doors from 22nd to 29th April in the new headquarters of the National Center for Exhibition and Convention. Magneti Marelli will be in the spotlight with the latest solutions in the field of sustainable mobility, connectivity and technological transfer from racing to production cars. The launch of Magneti Marelli social media channels in China on Weibo and WeChat platforms will also be highlighted

Magneti Marelli is present with its technologies in the largest Chinese show dedicated to the world of cars, Auto Shanghai - International Automobile & Manufacturing Technology Exhibition, where since 1985, and every two years, the world's leading manufacturers come together for one of the most important meetings in this industry.

Also this year, Magneti Marelli participates in the event with an exhibition that demonstrates the ability to supply the car makers all over the world, and highlights technological excellence in all business areas of the company: lighting, powertrain, electronic systems, suspensions, shock absorbers, plastic modules, exhaust systems, motorsport and aftermarket. For a dynamic view of the products, in addition, there will be special 3D glasses that allow you to enjoy with videos, images and textual information the technologies and optionals of Magneti Marelli.

The exhibition area extends on more than 300 square meters **in pavillion 5.2** (**stand 5B H515**) including a wall which incorporates the parabolic curve of the Formula 1 circuit in Shanghai and represents the strategic "From the track to the road" theme with the evolution of technologies that were developed as a technological bridge from the track to the production cars. Inside a "tunnel", many 3D videos explain dynamically the functioning of systems used in competitions such as the ERS H - K (Heat and Kinetic Energy Recovery System), the electro-actuated gearbox, telemetry and modular platform for connectivity. A driving simulator, moreover, will enable the visitors to test themselves on a Formula 1 circuit monitored via the Wintax telemetry system.

Many innovations regard the **lighting** section where the most significant news of Magneti Marelli Automotive Lighting are presented: the laser full beam module adopted on the new Audi R8, the full-LED Matrix Beam module adopted by Mercedes Benz (LED full beam with adaptive system for the guidance of the light beam through the LEDs' selective activation), and the Full LED intelligent projector developed with Audi for the Audi TT3, MY 2015, awarded the "Red Dot Best of the Best 2015" for high design quality. The contribution in terms of eco-sustainability is evidenced by the LED E-Light low beam recognized by the EU as "Eco-Innovation". Magneti Marelli Automotive Lighting also presented the electronic control systems (ECU for the management of the full-LED headlight) and the body computers.



Additionally, within a "dark room" you will see the various technologies of automotive lighting at work in an environment that recreates a road situation at night.

As regards **electronic systems**, the instrument panels are represented by a varied exposure of technologies developed in a "tailored" way. Among them that of Porsche Macan, which incorporates the traditional drawing of three circles with multifunction display that collects all the useful information to the pilot, Fiat 500 equipped with a 7" TFT display and Jeep Renegade, adopting the instrument panel developed by Magneti Marelli with various vehicle functions and infotainment integrated in the display.

Two multimedia totems introduce the area dedicated to the **infotainment** and **telematics** systems. The first represents the operation of the infotainment system with Genivi compliant software on automotive hardware in a Linux environment, while the second explains the operation of the telematic box with all the potential features that allow you to enable additional services related to **connectivity**. Services that can be carried out also thanks to the **Smart Antenna**, an "intelligent" antenna equipped with a modem capable of receiving and transmitting data from the car to operators of external services.

A large exhibition space has been dedicated to powertrain technologies with a spotlight on the direct-injection GDI (Gasoline Direct Injection) systems, the hydraulic actuators for the dual clutch gearbox and the hybrid-electric modules (power inverter and battery management system) with solutions of low voltage power with less than 16 kw, extremely flexible and easily applicable to internal combustion engines. The 48 Volts PERF.E.T (Performing and Efficient Transmission) hybrid system, also represents the ideal synthesis of the technology transfer process between the "racing" world and the "road". PERF.E.T. is a combination of two innovations tested at different times by Magneti Marelli on the most important tracks in the world: the electro-actuated gearbox and KERS (Kinetic Energy Recovery System for the F1). Magneti Marelli, indeed, has developed a solution for production cars that connects an electric generator to an automated manual transmission AMT: the electric engine produces torque during the gear shift and at the same time helps reduce fuel consumption. In the field of hybrid solutions, the Magneti Marelli motor generators are regarded as "best in class", thanks to their high flexibility, which allows their association with all of the various hybrid structures.

The sporting nature of Magneti Marelli is presented in the **Motorsport** section, where technologies adopted in the most famous world championships are exposed. Among these, hydraulic actuators for gearbox and clutch, high pressure directinjection GDI systems, electronic control units, Wi-Fi telemetry with high-definition camera and energy storage systems such as the 90 kW KERS (Kinetic Energy Recovery System) and the 60kW HERS basins (Heat Energy Recovery System).



The presence of Magneti Marelli at Auto Shanghai is completed with the technologies adopted from the sections of **Suspension System** (focusing on composite materials), **Shock Absorber** (Lifter, an axle lifter for sports cars that makes it possible to overcome obstacles such as bumps or ramps without bumping the spoiler against the ground), **Exhaust System** (printed silencers with variable cross-sections and catalytic converters for naturally aspirated engines and turbo) and **Magneti Marelli Checkstar** that presents in the stand the aftermarket activities of Magneti Marelli in China with the new visual identity.

China is the largest and most rapidly growing automotive market in the world: over 23 million units, including cars and light commercial vehicles, were sold in this country in 2014 with an 8% increase compared to 2013 and expected values for 2015 that suggest a further increase of 7% bringing sales to almost 24 million (IHS 3/2015 source). Magneti Marelli marks a continuous growth trend in this market with a turnover of 409.8 million euro in 2014 (378 million/€ in 2013 and 287.4 million/€ in 2012).

This is a constant expansion scenario in which Magneti Marelli is present from 1996 with significant investment. It is worth mentioning the recent inauguration of a new factory in Xiaogan (Hubei) for lighting systems and for the renewal and extension of the historic Guangzhou (Guangdong) factory for the electronic systems. The new factories further strengthen the operating area in China, where Magneti Marelli works closely with the major car makers worldwide. In particular, Magneti Marelli has production facilities and R&D /Engineering Centres in Shanghai (Powertrain in JV with Shanghai Automobile Gear Works - SAGW - and Exhaust Systems), Foshan (Automotive Lighting), Wuhu (Automotive Lighting and Powertrain), Guangzhou (Electronic Systems), Hangzhou (Shock Absorbers in JV with Wanxiang Qianchao Company), Changsha (exhaust systems with Fiat/GAC), Changchun (Powertrain in JV with FUDI), Hefei (exhaust systems with JAC and Lingdatang), Foshan (Automotive Lighting), and Xiaogan (Automotive Lighting in JV with China South Industries Group Corporation - CSI).

Magneti Marelli, activity on Chinese Social Media

On the occasion of the Formula 1 Grand Prix in Shanghai the first post on the Chinese social media "Weibo" was launched: this is the beginning of a new development in social activity of Magneti Marelli at a global level. Even the official page of Magneti Marelli on "WeChat", the most popular social media in China with millions of users, has been renewed. The QR Code that contains the Magneti Marelli profile on WeChat is displayed on the inside of the stand, where the social activity of Magneti Marelli in China (Weibo, WeChat, Youku and Iquyi) are presented.

Through the two microblogging sites, Magneti Marelli will offer plenty of space to technologies manufactured and developed in China and will tell you with passion



and competence about the most important racing event in the world, proposing to fans exclusive analysis and insights on the world of racing: the social channels will be, therefore, a place of aggregation and sharing dedicated to enthusiasts of technological innovation and racing.

The two new channels are complemented by the other official profiles of Magneti Marelli social media, already active on Facebook, Twitter, Instagram and the important presence of the company on the web, which indicates the integrated approach to the world of social media and digital communication.

On the occasion of Auto Shanghai the new Chinese version of the Magneti Marelli's site was also inaugurated: http://www.magnetimarelli.com.cn

Magneti Marelli produces advanced systems and components for the automobile industry. With 89 production units, 12 R&D centres and 26 application centres in 19 countries, more than 38,000 employees and a turnover of 6,5 billion Euro in 2014, the Group supplies all the major carmakers in Europe, North and South America and the Far East. The business areas include Electronic Systems, Lighting, Motor Control, Suspension Systems and Shock Absorbers, Exhaust Systems, Aftermarket Parts & Services, Plastic Components and Modules, and Motorsport. Magneti Marelli is part of FCA.