



## PRESS RELEASE

### **“red dot award: product design 2011” and Daimler “Special Award Innovation”: two outstanding awards for Automotive Lighting**

*Both awards go to the first intelligent all-LED headlight worldwide with adaptive light functions, developed for the new Mercedes-Benz CLS*

Automotive Lighting, the company of Magneti Marelli devoted to development and production of lighting systems and components for the automotive sector, has just received two important international awards which emphasize its technological excellence, know-how and innovation capability. In fact, the first intelligent all-LED headlight worldwide with adaptive light functions, developed for the Mercedes CLS, was awarded with the **“red dot award: product design 2011”** and the **Daimler “Special Award Innovation”**.

**Concerning the “red dot award: product design 2011”,** it is one of the most renowned international awards for product design that dates back to 1955. The Mercedes-Benz CLS headlamp was awarded with an “honourable mention” by the jury with its panel of highly respected experts. The red dot judges were impressed by the combination of high technology and attractive design to be found in the CLS all-LED headlight.

Designers and companies from 60 countries entered 4,433 products for the “red dot award: product design” this year.

The official awarding ceremony will be held at the Aalto Theatre in Essen, Germany, on July 4<sup>th</sup>, 2011. This is the second time since 2008 that Automotive Lighting has been recognized at the red dot awards for its outstanding designs.

At the same time, **within the ceremony for the best Daimler suppliers**, Automotive Lighting was given the **“Special Award Innovation”**, for developing the first intelligent all-LED headlight worldwide with adaptive light functions. Mr. Eugenio Razelli, CEO of Magneti Marelli and President of Automotive Lighting and Mr Khalid Qalam, Chief Technical & Marketing Officer of Automotive Lighting, were granted the prestigious “Special Award Innovation” for the all-LED headlamp of the all-new Mercedes-Benz CLS. Daimler presents this special award to suppliers who stand out as a result of especially groundbreaking ideas. The award ceremony took place in the context of the annual supplier conference “Daimler Key Supplier Meeting” held at the Mercedes-Benz branch in Stuttgart.

Every year, Daimler presents awards for outstanding achievements to 13 suppliers in various categories, with the addition of a special award for innovation. The best companies in quality, cost and supply as well as technology and innovation are singled out on the basis of a uniform system of assessment. Automotive Lighting was given the Special Award Innovation to mark its outstanding achievement. Thanks to its forward-looking light technology, the CLS high-performance headlight provides major safety and convenience. In addition, the designers made use of the potential of long-lasting LEDs to create an attractive brand-defining design.

**The ground-breaking new development of the Mercedes-Benz CLS all-LED headlight** is another milestone in the field of vehicle lighting. This intelligent headlamp concept features an array of exciting innovations which have already been patent registered.

In conjunction with the Mercedes design team, Automotive Lighting has created a unique style for this high-performance LED headlight.

The new all-LED headlight generation is the first to be equipped with all the adaptive lighting functions of current Xenon systems. Adapting the light beam to speed, road type and different weather conditions provides the driver with the best possible road lighting at night or under adverse weather conditions, increasing safety standards.

The engineers at Automotive Lighting and Mercedes-Benz have developed in a close cooperation a sophisticated modular actuating concept that includes a specific electronic control system for the headlamp that, after analyzing certain specific parameters coming from the car network, detects the driving situation and automatically selects the best light distribution from seven available options.

For example, when the driver is travelling on the road, a camera attached to the windscreen records the area ahead of the vehicle. Whenever light is detected in vehicles driving ahead or travelling in the other direction, the range of the headlights is automatically regulated and adjusted by the integrated control electronics. As the vehicle in front or the oncoming vehicle comes closer, the system will dip the light automatically in several stages. Once the distance increases again, illumination of the road is automatically increased. (Adaptive Cut-off-line) When the road is completely empty, the system will even switch directly into the high beam mode. (Full High Beam)

If the driver is travelling on a motorway, the system detects a high vehicle speed and steering wheel angle for a prolonged time, so it automatically activates the Motorway Light function, which selectively enhances the headlight range on the roadway on which the vehicle is travelling.

On bends, on the other hand, at lower speed, the road profile is illuminated by the fixed side beam of the Static Bend Light, while at higher speed, the Dynamic Curve Light module is activated; based on speed and steering angle parameters, this module activates a movable lens that points the light beam precisely according to the curve profile.

At night, the driver can activate the Night View Assist function. This allows constant driving with invisible high beam, even in dense oncoming traffic, without any dazzling. A multifunction display represents the previously invisible objects in shades of grey. This means that the driver can detect potential dangers like people and animals as well as obstacles such as shed loads, and react more quickly.

Lastly, under conditions of poor visibility, when the driver activates the rear fog light, the headlamp automatically widens the light beam to the outside by 8° and 0,57° down. The illumination of the left-hand edge of the road is improved (for right-hand traffic) and offers an increased lateral guidance. The self-glare in fog is reduced (Adverse Weather Light).

Moreover, depending on the loads being transported or the vehicle inclination, the automatic self-levelling system fitted inside the headlamp always allows for proper road illumination.

On the whole, 71 LEDs illuminate the road ahead: at 5,500 Kelvin, the bright light emitted by the durable LEDs is of a colour similar to that of daylight. The LED position lamp and a slim, stylish, curve light "eye", contribute to its appearance.

Automotive Lighting has repeatedly set new standards in lighting technology over the last few years. The first headlight worldwide to have an active infrared system was put to use in the Mercedes S-Class in 2005. Three years later came the “Adaptive Highbeam Assist”, also in the S-Class. Since 2010, Automotive Lighting has been supplying the first all-LED headlight with adaptive light function.

Some of Automotive Lighting's main achievements in the recent history of lighting, are the introduction of the first Xenon lights into the market in 1991, the dynamic Xenon curve light in 2003 and the first headlamp with active infrared module sold worldwide in 2005. As revolution in lighting technology, AL launched the first Full-LED headlamp in series production in 2008 covering all lighting functions in LED technology. The technological evolution resulting from LED and Xenon technologies has opened up new frontiers in terms of safety, reduced energy consumption and CO<sub>2</sub> emissions, as well as new possibilities for designers.

**Magneti Marelli** designs and produces advanced systems and components for the automotive industry. With its 77 production units, 11 R&D centres and 26 application centres in 18 countries, about 33,000 employees and a turnover of 5.4 billion Euros in 2010, the group supplies all the leading carmakers in Europe, North and South America and the Far East. Its business areas include: Electronic Systems, Lighting, Powertrain, Suspensions systems, and Shock absorbers Exhaust Systems, Aftermarket Parts & Services, Plastic Components and Modules, Motorsport. Magneti Marelli is part of Fiat Spa.

**Milan, 5 maggio 2011**