

eSAFETY CHALLENGE

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I - Valeo at eSafety Challenge

PRESS RELEASE

Valeo is taking part in the the eSafety Challenge 2011 in Teesdorf (Austria) on May, 31st 2011. On this occasion, the Group is presenting a selection of its latest visibility and driving assistance technologies, including advanced lighting and detection systems.

In the area of lighting, the new Valeo camera-based lighting technology, BeamAtic® Premium, offers to the driver optimal visibility when driving in the dark without dazzling other road users. The system is showcased on an Audi A5 through a static demonstration. The front camera of BeamAtic® Premium can also be used for other applications such as Traffic Sign Recognition and LaneGuide™. The Group is also presenting Xenon Lighting that increases visibility by 30%. Xenon low-beam lights effectively illuminate the road up to 110 meters downroad, compared with only 80 meters for traditional (halogen) technologies.

In the field of detection systems, Valeo is presenting the Blind Spot Monitoring system, which ensures safe lane changes on various Ford models such as the Galaxy, the Mondeo and the C-Max. Thanks to a radar sensor on either side of the rear of the car, it detects any vehicle next to and behind it. In conjunction with Blind Spot Detection, the system offers in addition a cross traffic alert function which enables the driver to back out of a parking spot into traffic even when his or her view is obstructed. An icon warns the driver whether it is safe to reverse or not by assessing laterally approaching vehicles.

Another technology being presented on an Infiniti FX 30d, the camera-based LaneGuide™ system, alerts the driver if the vehicle unintentionally leaves the lane and assists by subtly pulling the car back into the lane. As mentioned before, the front camera can be used for additional applications such as BeamAtic® Premium.

For parking situations, Valeo presents the Park4U® system on a Ford Grand C-Max. It identifies suitable parking spaces and automatically steers the car into it while the driver keeps control by operating the accelerator and brake. The system includes front and rear park assist sensors that support the driver in making best use of the available space and can park in short parallel parking slots. For better visibility around the car when manoeuvring, Valeo presents the 360Vue® on a VW Touareg. It combines the images of four cameras positioned around the car and creates a virtual bird's eye view that gives to the driver a full 360 degree overview of the vehicle's surrounding at one glance.

As part of the eSafety Challenge, a night drive will take place on May, 30th after the evening ceremony for a first-hand experience on adaptive lighting technologies.

Valeo will present, with the Light Sight Safety members, the life-saving potential of the latest break-through adaptive lighting technologies such as BeamAtic® Premium on a VW Passat. The «Light.Sight.Safety» initiative from CLEPA is a coalition of several European automotive lighting companies that are committed to bring technological advancements to the automotive lighting market.

Valeo is an independent group, fully focused on the design, production and sale of components, integrated systems and modules for the automobile industry, mainly for the reduction of CO₂ emissions. Valeo ranks among the world's top automotive suppliers. The Group has 109 plants, 20 research centers, 38 development centers and 10 distribution platforms and employs 60,900 people in 27 countries worldwide.

For additional information, please contact:

Fabienne de Brébisson : +33 (0)1 40 55 20 65
Group Communications Director

For more information about the Valeo Group and its businesses, please visit www.valeo.com

I - Valeo at eSafety Challenge

PRESENTED TECHNOLOGIES

Comfort and Driving Assistance Systems

A new relationship with the vehicle and its environment

Drivers don't always have perfect visibility all around them. Obstacles often lurk in blind spots. Driving in a parking lot and manoeuvres such as reversing into a parking space or out of an angled parking space are always risky – especially when rear visibility is restricted. The increasing uses of concrete blocks or large stones that are invisible to the driver are also part of the problem. This issue is all the more serious for older drivers who, as time passes, may find it more difficult to perceive quickly and thoroughly what is happening around their vehicle. Perception can also be affected by time pressure, heavy traffic or other distractions.

Easy parking: The New Standard of Simplicity

Park4U® uses ultrasonic sensors located in the front and rear bumpers to precisely calculate the length of the parking slot available, and automatically manoeuvres the car into the slot.



The new version for parallel parking needs only 40 cm of clearance at either end of the vehicle to be able to park, a reduction of 43% compared to the first generation, made possible by a more sophisticated geometric calculation. In addition, steering assistance continues to help the driver until the vehicle is parked, however many manoeuvres may be necessary for a short parking slot.

Park4U® also allows the motorist to exit a parallel parking space, even if it is very tight (25 cm at either end). It assesses the space available in front and behind the vehicle, and calculates the most appropriate manoeuvre. The driver remains in control of the speed, but the system takes control of steering, as when parking. The system also detects the best moment to exit the parking space, and automatically deactivates to let the driver merge into the traffic.

Park assist systems make parking and reversing not only more convenient, but also safer. In 2008 Valeo's Park4U® system was awarded the "Genius" safety prize by Allianz Insurance for its role in reducing parking accidents, which account for a third of all car insurance claims made in Germany.



360Vue®: A Revolutionary Way to View Total Vehicle Surroundings

Valeo's 360Vue® system offers total vision around the vehicle. Four miniature digital cameras (in the front and rear, and on the outside rear-view mirrors), linked to an image processing application, allow the system to display a single homogeneous view on a central screen. The processed image gives the driver the impression of seeing the vehicle and its environment from above. Manoeuvring in complex situations becomes safe and easy.



The driver may also select other views on the screen: for example, a wide-angle view of the area behind the vehicle is particularly useful when parking. Similarly, viewing the area in front of the vehicle is important at a blind junction or parking slot exit. The front camera image shows impending cross traffic which is particularly helpful when the driver's view is obstructed.

The system is also linked to ultrasonic sensors, which enable precise distances to be displayed on the image. Other lines become dynamic to illustrate the trajectory as soon as the driver begins the maneuver. Diagonal parking is made far simpler, allowing the driver to park in the narrowest of spaces.

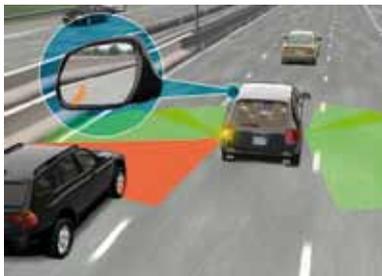
LaneGuide™ system: Keeping in Lane Has Never Been So Easy



The camera-based LaneGuide™ system, alerts the driver if the vehicle unintentionally leaves the lane and assists by subtly pulling the car back into the lane. The system uses a camera placed behind the windscreen, which tracks the road up to 30 meters ahead of the vehicle. These images are processed by an application monitoring the road markings of the lane in which the car is driving, and can calculate whether the vehicle will stay to its lane on the current trajectory.

If the calculations result in the risk of crossing the line, the driver is immediately informed. If the line has however been crossed, the LaneGuide™ system assists the driver by pulling the car back into the lane. The camera can detect both white and yellow line broken or unbroken. Its ability to operate at night or in fog provides it with an additional active safety advantage. The front camera can be used for additional applications such as BeamAtic® Premium or Traffic sign recognition.

Blind Spot Monitoring system: Your Sixth Sense When Being Overtaken



The Blind Spot Monitoring system ensures safe lane changes. Thanks to a radar sensor on either side of the rear of the car it detects any vehicle next to and behind it. The blind spot radar can establish the precise position of all obstacles in the adjacent lane. This information is then analyzed by an algorithmic program to determine the type of obstacle, its relative speed and direction.

Parked and oncoming vehicles are filtered out by the system. The intuitive warning symbol is easily understood and very reliable.

In conjunction with Blind Spot Detection, the Blind Spot Monitoring system offers in addition a cross traffic alert function which enables the driver to back out of a parking spot into traffic even when his or her view is obstructed. Radar sensors installed in the rear bumper monitor the traffic even while the vehicle is still in the parking space. The system registers the distance, direction and speed of approaching vehicles and determines whether they pose a danger for the driver exiting a parking space. If an approaching object is considered to be a danger, the driver is given an audible and/or visual signal to wait until the road is clear again.

Visibility Systems

The Breakthrough in Lighting Technologies



BeamATIC® Premium: Best Visibility with Glare-Free High Beam at Night

Despite the fact that traffic volume at night is much lower there is a relatively large risk for accidents and especially for fatalities. While high beam headlamps light the road more effectively than low beams, they must give way to low beams quickly as soon as another vehicle approaches. With the new BeamATIC®

Premium adaptive lighting system, maximum light is maintained everywhere except in the zone where the other vehicle is located. Visibility is therefore comparable to high beam, and other drivers are not dazzled. Automatic switching between high and low beams also improves driving comfort and safety.



In high beam mode, each of the headlamps generates a cone of light which lights up the entire road. When passing or overtaking another vehicle, the latter is detected and located by a camera equipped with a dedicated image processing software. The system then uses a mobile shield to cover the part of the beam occupied by the other vehicle, and tracks its trajectory. The vehicle passed or overtaken is therefore sheltered from the light, and its driver is never dazzled. From their viewpoint, the BeamATIC® Premium lights look just like low beams. For the

user, however, the road appears to be fully illuminated, as it would be with high beam headlamps.

Xenon lighting: Tame the Dark



Xenon lighting improves night vision on a very wide range of vehicles. Considering that accidents are three times more frequent at night, and it is vital to use the best lighting technology available. The light produced by Xenon lamps, which is similar to daylight, offers optimal visibility. A study conducted in Germany in 2007 by TÜV Rheinland concluded that if all vehicles were equipped with Xenon lighting, the number of deaths on the road at night could be cut by 18%.

Xenon low beams have a range of 110 meters, compared with 80 meters offered by conventional technologies, which corresponds to a gain of 30%. This gain jumps to up to 44% with Xenon bending lights.

Xenon lighting does not just contribute to increasing road safety: it saves up to 50% of electricity compared to Halogen lighting, or 1.3g of CO₂ per kilometer. Its bluish tint and visible lens offers designers great styling freedom, and the bulbs last as long as the vehicle itself.

II - Valeo Profile

PRESENTATION

Valeo is an independent group, fully focused on the design, production and sale of components, integrated systems and modules for the automobile industry, mainly for the reduction of CO₂ emissions. It is one of the world's leading automotive suppliers.

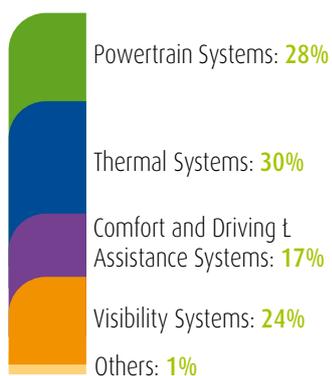
The Group has **109** plants, **20** research centers, **38** development centers and **10** distribution platforms, and employs **60,900** people in **27** countries worldwide.

Valeo applies its strategy in line with a policy of sustainable development.

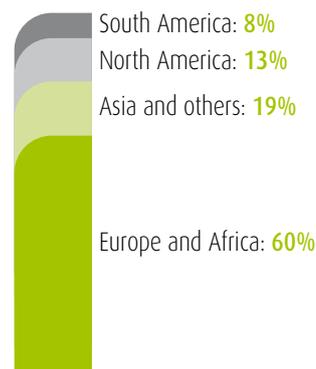
2010 Key Figures

Sales	9,632 millions euros
Sales by market	OEM: 83% Aftermarket: 17%
Operating margin	6,4%
Capital turnover	5
ROCE	32%
Net income	365 millions euros
R&D Costs	5,6% of net sales

Sales by Business Group



Sales by region



VALEO'S 4 BUSINESS GROUPS

Valeo's operational structure is organized around four Business Groups: Powertrain Systems; Thermal Systems; Comfort and Driving Assistance Systems; Visibility Systems.

The Business Groups, under the responsibility of the Group's Chief Operating Officer, are responsible for encouraging the growth and profitability of the Product Groups across all its markets.

Comfort and Driving Assistance Systems

1.7 billion euros in sales in 2010

10.699 employees

22 production sites

10 research centers

10 development centers

186 patents filed

Comfort and Driving Assistance Systems develops interface systems between the driver, the vehicle and its environment, helping to improve comfort and safety. These systems are thought to optimize the interaction of the driver with the vehicle by providing useful indications in real time (central console, intelligent key); by simplifying or automating certain maneuvers (parking, on board access, controls in the steering wheel); or again by alerting or even acting on the vehicle controls in case of danger or incorrect maneuvering. Sensors (radars, ultrasound, cameras) also allow for monitoring the driving environment.

The Group has four Product Groups: Driving assistance; Interior controls; Cabin electronics; Access mechanisms.

Visibility Systems

2.3 billion euros in sales in 2010

16.600 employees

35 production sites

6 research centers

24 development centers

116 patents filed

Providing perfect visibility on the road contributes to the safety of the driver and the passengers. Visibility Systems' task is to design and produce efficient and innovative systems which support the driver at all times, by day and by night.

Visibility Systems has three Product Groups: Lighting systems; Wiper systems; Wiper motors.

Powertrain Systems

2.7 billion euros in sales in 2010

14.800 employees

30 production sites

4 research centers

15 development centers

122 patents filed

Powertrain Systems combines all the activities related to powertrains. Its mission is to develop innovative solutions aimed at reducing fuel consumption and CO₂ emissions, without compromising on the pleasure and the dynamism of driving. These innovations cover a complete product range, from optimization of internal combustion engines to varyingly high electrification of cars, from Stop-Start to the electric car.

Powertrain Systems has five Product Groups: Electrical systems; Transmission systems; Engine management systems; Air circuit systems; Systems for hybrid and electric vehicles.

Thermal Systems

2.9 billion euros in sales in 2010

14.400 employees

36 production sites

4 research centers

11 development centers

191 patents filed

Thermal Systems develops systems designed to provide first, thermal energy management of the powertrain and second, comfort of each passenger for all phases of the vehicle's use. With the optimizations that they provide, these systems make a significant contribution:

- reducing fuel consumption and CO₂ emissions as well as pollutant gases and harmful particles in vehicles equipped with internal combustion engines;
- increasing range and battery life in hybrid and electric vehicles.

Thermal Systems has four Product Groups: Climate control systems; Powertrain thermal control systems; Compressors; Front end modules